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NF VALIDATION
Validation of alternative analytical methods
Application in food microbiology

Summary report

Validation study according to the EN ISO 16140-2:2016

COMPASS® *Listeria* Agar

(Certificate number: BKR 23/02-11/02)

for the detection of *Listeria* spp. and *Listeria monocytogenes* in a broad range of foods and production environmental samples

Qualitative method

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This report consists of 223 pages, including 19 appendices.

Only copies including the totality of this report are authorised.

Competencies of the laboratory are certified by COFRAC accreditation for the analyses marked with the symbol◆.

Version 1

16 February 2024

Cancels and replaces the previous version

which must be returned to ADRIA or destroyed internally.

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The modifications are highlighted.

Quality Assurance documents related to this study can be consulted upon request from **BIOKAR DIAGNOSTICS**.

The technical protocol and the result interpretation were carried out according to the EN ISO 16140-2:2016 and the AFNOR technical rules (PR revision 7).

Validation protocols	▪ ISO 16140-1 (2016): Microbiology of the food chain - Method validation — *Part 1: Vocabulary* ▪ ISO 16140-2 (2016): Microbiology of the food chain - Method validation — *Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method* ▪ AFNOR technical rules (PR revision 7)
Reference method♦	ISO 11290-1 (May 2017): Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and other *Listeria* spp. - Part 1: detection method
Alternative method	**COMPASS® Listeria Agar (Detection method)**
Scope	> **Broad range of foods** > **Production environmental samples**
Certification organism	AFNOR Certification (http://nf-validation.afnor.org/)

♦ Analyses performed according to the COFRAC accreditation

1 INTRODUCTION

The initial validation study of COMPASS® Listeria Agar for detection of *Listeria monocytogenes* in a broad range of foods and environmental production samples was obtained in May 2007 for 24 h ± 2 h detection (certificate number: BKR 23/02-11/02).

A summary of the different studies is given below:

Date	Study	ISO method	Validation standard
May 2007	Initial validation study for detection of *Listeria monocytogenes*	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003)
September 2007	Extension for a new confirmation protocol, the CONFIRM'*L.mono* Agar.	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003)
September 2010	Renewal study without additional testing	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003) ISO 16140/A1 (2011)
2011	Extension study for detection of *Listeria* spp. Method comparison study	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003) ISO 16140/A1 (2011)
2013	Extension for a new confirmation protocol, the CONFIRM'*L.mono* broth	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003) ISO 16140/A1 (2011)
2014	Renewal study without additional testing	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003) ISO 16140/A1 (2011)
July 2019	Renewal study according to ISO 16140-2:2016	ISO 11290-1 (2017)	ISO 16140-2 (2016)
October 2019	Extension for a new enrichment protocol: pre-warmed Half Fraser (37°C) for 21 h ± 3 h at 37°C	ISO 11290-1 (2017)	ISO 16140-2 (2016)
October 2023	Renewal study	ISO 11290-1 (2017)	ISO 16140-2 (2016)

2 METHOD PROTOCOLS

2.1 Alternative method

2.1.1 Principle

COMPASS® *Listeria* Agar is a chromogenic selective agar plate. The method allows the detection of *Listeria monocytogenes* and other *Listeria* species after a one step selective enrichment protocol in Half-Fraser broth, streaking onto COMPASS® *Listeria*

Agar and incubation for 24 h ± 2 h at 37°C (it is possible to extend the incubation time until 48 h).
The characteristic colonies of *Listeria monocytogenes* and some *Listeria ivanovii strains* appears as blue to blue green colonies, surrounded with an opaque halo. The other *Listeria* species appears as blue to blue-green colonies without opaque halo. The characteristic colonies observed on the plates requires a confirmation step.

2.1.2 Protocol

The flow diagram of the alternative method is provided in **Appendix 1**.

The method consists in:

- An enrichment step, two protocols are available:
  - In Half-Fraser broth for **25 h ± 3 h** at **30°C** ± 1°C

  or
  - In **pre-warmed** Half-Fraser broth for **21 h ± 3 h** at **37°C** ± 1°C.

- Streaking 100 µl of the enriched sample onto COMPASS Listeria Agar, incubated for 24 h ± 2 h to 48 h at 37°C ± 1°C. The plates can be read after 22 h incubation time.

- The *Listeria* spp characteristic colonies are confirmed using:
  - The tests described in the standard CEN or ISO methods after purification step
  - Spot or streaking onto PALCAM plate incubated 24 h ± 3 h at 37°C ± 1°C
  - Identification using a *Listeria* biochemical gallery from an isolated colony without purification step

- The *Listeria monocytogenes* characteristic colonies are confirmed using:
  - The tests described in the standard CEN or ISO methods after purification step
  - The test CONFIRM'*L.mono* Agar (BM 139) from an isolated colony. Incubation for 24 h ± 3 h at 37°C ± 1°C
  - The test CONFIRM'*L.mono* broth (BM 162) from an isolated colony. Incubation 6 to 24 h at 37°C ± 1°C
  - The identification using a *Listeria* biochemical gallery from an isolated colony without purification step
  - Using any other certified NF Validation method with a different principle

2.1.3 Restriction

There is no restriction.

2.2 Reference method♦

The reference method used for the renewal and the extension studies was the ISO 11290-1 (May 2017): Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and other *Listeria* spp. - Part 1: detection method. The flow diagram is given in **Appendix 2**.

2.3 Study design

For the protocol with Half Fraser at 30°C, the study is **a paired study design** as the reference and the alternative methods have the same enrichment procedure.

For the protocol with Half Fraser at 37°C, the study is **an unpaired study design** as the reference and the alternative methods have different enrichment procedures.

3 INITIAL VALIDATION, EXTENSION/RENEWAL STUDIES: RESULTS

3.1 Method comparison study

The method comparison study is a study performed by the expert laboratory to compare the alternative method with the reference method.

The study was carried out on a diversity of samples and strains representative of agri-food products. This does not constitute an exhaustive list of the different matrices included in the scope.
For any comment on the alternative method, please contact AFNOR Certification at http://nf-validation.afnor.org/contact-2/.

♦ Analysis performed according to the COFRAC accreditation

3.1.1 Listeria spp. detection

3.1.1.1 Protocol: Half Fraser - 30°C

3.1.1.1.1 Sensitivity study

The sensitivity (SE) is the ability of the method to detect the analyte by either the reference or alternative method.

3.1.1.1.1.1 Number and nature of samples

Taking into account all the studies, 421 samples were tested providing 213 positive results and 208 negative results.

The distribution per tested category and type is given in Table 1.

Table 1 - Distribution per category and type

Category		Type		Positive	Negative	Total
1	Composite food	a	Cold catering dishes	7	13	20
		b	Hot catering dishes	10	10	20
		c	Pastries and egg products	13	7	20
			Total	30	30	60
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	23	9	32
		b	Catering meals and processed meat products	8	12	20
		c	Cured products (raw and cooked)	10	12	22
			Total	41	33	74
3	Dairy products	a	Raw milk cheeses	9	13	22
		b	Other raw milk products	13	8	21
		c	Heat treated products	11	9	20
			Total	33	30	63
4	Fishery products	a	Raw products (fresh, frozen)	10	10	20
		b	Smoked, marinated	7	13	20
		c	Catering dishes	24	18	42
			Total	41	41	82
5	Vegetables	a	Raw vegetables (fresh, frozen)	9	11	20
		b	Under modified atmosphere, pre-cooked vegetables	15	10	25
		c	Vegetables-based preparations / Processed vegetables	11	10	21
			Total	35	31	66
6	Environmental production samples	a	Process and cleaning water	9	11	20
		b	Dusts and residues	11	9	20
		c	Surface sampling	13	23	36
			Total	33	43	76
All categories				**213**	**208**	**421**

3.1.1.1.1.2 Artificial contamination of samples

The artificial contaminations are given in **Appendix 3**.

In 2011, artificial contaminations were performed using the spiking protocol or cross-contaminations. The injury was evaluated by proceeding to enumeration onto non-selective agar plate (TSYEA) and selective agar plate (PALCAM)
37 samples were contaminated; 29 gave a positive result by at least one of the methods.

In 2019, artificial contaminations were done by seeding protocol. 42 samples were inoculated; 33 gave a positive result by at least one of the methods.

The distribution of the positive samples per inoculation protocol and inoculation level is given in Table 2.

Table 2 - Distribution of the positive samples per inoculation protocol and inoculation level

	Naturally contaminated	Artificial contamination							Total
		Cross contamination	Spiking			Seeding			
			≤5	5<x ≤10	10<x≤30	≤3	3<x ≤10	10<x≤30	
Number of samples	151	3	0	17	9	23	10	0	213
%	70,9%	1,4%	0,0%	8,0%	4,2%	10,8%	4,7%	0,0%	100,0%

The percentage of artificially contaminated samples between 3 CFU (seeding) or 5 CFU (spiking) and 10 CFU is 12.7 % and meet the AFNOR Rules requirements.

The number of naturally contaminated samples represents 70.9 % of the total number of positive samples.

3.1.1.1.1.3 Repartition of the sample contamination

The repartition of the samples per target is given in Table 3.

Table 3 - Repartition of the sample contamination per target

A: *Listeria* spp B. *Listeria monocytogenes* C: mix

Category	A	B	C	Total A + C
1	9	12	9	18
2	17	14	10	27
3	10	16	7	17
4	9	18	14	23
5	14	16	5	19
6	14	10	9	23
Total	**73**	**86**	**54**	**127**

According to AFNOR rules, the number of samples contaminated with *Listeria* spp. other than *Listeria monocytogenes*, alone or mixed, must be comprised between 15 and 25 per category, which is the case for this study.

3.1.1.1.1.4 Protocols applied during the study

Incubation time

- Enrichment in Half Fraser: 22 h at 30°C

- Incubation of COMPASS *Listeria* Agar: 22 h and 48 h at 37°C ± 1°C

Confirmation

- Initial validation:
    * By spot on PALCAM plate from an isolated colony picked from COMPASS *Listeria* Agar; the plates were incubated for 24 h ± 2 h at 37°C ± 1°C
    * By using a *Listeria* biochemical gallery on a characteristic colony isolated on COMPASS Listeria Agar, without purification step
    * By the tests described in the ISO 11290-1 method after purification step on TSYEA plate
- Renewal:
    * By spot on PALCAM plate from an isolated colony picked from COMPASS *Listeria* Agar; the plates were incubated for 24 h ± 2 h at 37°C ± 1°C
    * By proceeding to a *Listeria* biochemical gallery on a characteristic colony isolated on COMPASS *Listeria* Agar, without purification step
    * By the tests described in the ISO 11290-1 method after purification step on TSYEA plate (Gram staining, catalase)

Enrichment storage

- Initial validation and renewal study: storage of Half Fraser for 72 h at 5°C ± 3°C.

3.1.1.1.1.5 Test results

Raw data per category are given in **Appendix 4**.

A summary of the results obtained per category is given in Table 4 (incubation of COMPASS *Listeria* Agar for 22 h at 37°C) and Table 5 (incubation of COMPASS *Listeria* Agar for 48 h).

Table 4 - Incubation for 22 h at 37°C

		COMPASS *Listeria spp* 22h						
Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods	28	29	0	2	0	1	60
2	Meat products	37	31	1	3	0	2	74
3	Dairy products	32	30	0	0	1	0	63
4	Fishery products	41	39	0	0	0	2	82
5	Vegetables	35	29	0	0	0	2	66
6	Environmental production samples	30	43	1	2	0	0	76
Total		**203**	**201**	**2**	**7**	**1**	**7**	**421**

* PPNA not included ** PPND not included

Table 5 - Incubation for 48 h at 37°C

		COMPASS *Listeria* spp 48 h						
Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods	28	28	0	1	1	2	60
2	Meat products	39	30	1	1	0	3	74
3	Dairy products	32	28	0	0	1	2	63
4	Fishery products	41	40	0	0	0	1	82
5	Vegetables	35	28	0	0	0	3	66
6	Environmental production samples	32	43	1	0	0	0	76
Total		**207**	**197**	**2**	**2**	**2**	**11**	**421**

* PPNA not included ** PPND not included

3.1.1.1.1.6 Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (FPR)

The calculations are given in Tables 6 (incubation for 22 h) and 7 (incubation for 48 h).

Table 6 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation for 22 h

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE alt %	SE ref %	RT %	FPR %
1	Composite foods	a	Cold catering dishes	6	12	0	1	0	1	85,7	100,0	95,0	7,7
		b	Hot catering dishes	10	10	0	0	0	0	100,0	100,0	100,0	0,0
		c	Pastries and egg products	12	7	0	1	0	0	92,3	100,0	95,0	0,0
			Total	**28**	**29**	**0**	**2**	**0**	**1**	**93,3**	**100,0**	**96,7**	**3,3**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	22	8	1	0	0	1	100,0	95,7	96,9	11,1
		b	Catering meals and processed meat products	7	11	0	1	0	1	87,5	100,0	95,0	8,3
		c	Cured products (raw and cooked)	8	12	0	2	0	0	80,0	100,0	90,9	0,0
			Total	**37**	**31**	**1**	**3**	**0**	**2**	**92,7**	**97,6**	**94,6**	**6,1**
3	Dairy products	a	Raw milk cheeses	8	13	0	0	1	0	88,9	100,0	95,5	7,7
		b	Other raw milk products	13	8	0	0	0	0	100,0	100,0	100,0	0,0
		c	Heat treated products	11	9	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**32**	**30**	**0**	**0**	**1**	**0**	**97,0**	**100,0**	**98,4**	**3,3**
4	Fishery products	a	Raw products (fresh, frozen)	10	10	0	0	0	0	100,0	100,0	100,0	0,0
		b	Smoked, marinated	7	13	0	0	0	0	100,0	100,0	100,0	0,0
		c	Catering dishes	24	16	0	0	0	2	100,0	100,0	100,0	11,1
			Total	**41**	**39**	**0**	**0**	**0**	**2**	**100,0**	**100,0**	**100,0**	**4,9**
5	Vegetables	a	Raw vegetables (fresh, frozen)	9	10	0	0	0	1	100,0	100,0	100,0	9,1
		b	Under modified atmosphere, pre-cooked vegetables	15	10	0	0	0	0	100,0	100,0	100,0	0,0
		c	Vegetables-based preparations / Processed vegetables	11	9	0	0	0	1	100,0	100,0	100,0	10,0
			Total	**35**	**29**	**0**	**0**	**0**	**2**	**100,0**	**100,0**	**100,0**	**6,5**
6	Environmental production samples	a	Process and cleaning water	9	11	0	0	0	0	100,0	100,0	100,0	0,0
		b	Dusts and residues	9	9	1	1	0	0	90,9	90,9	90,0	0,0
		c	Surface sampling	12	23	0	1	0	0	92,3	100,0	97,2	0,0
			Total	**30**	**43**	**1**	**2**	**0**	**0**	**93,9**	**97,0**	**96,1**	**0,0**
All categories				**203**	**201**	**2**	**7**	**1**	**7**	**96,2**	**99,1**	**97,6**	**3,8**

* PPNA not included

** PPND not included

Table 7 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation for 48 h

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE_{alt} %	SE_{ref} %	RT %	FPR %
1	Composite foods	a	Cold catering dishes	6	12	0	1	0	1	85,7	100,0	95,0	7,7
		b	Hot catering dishes	10	9	0	0	0	1	100,0	100,0	100,0	10,0
		c	Pastries and egg products	12	7	0	0	1	0	92,3	100,0	95,0	14,3
			Total	**28**	**28**	**0**	**1**	**1**	**2**	**93,3**	**100,0**	**96,7**	**10,0**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	22	8	1	0	0	1	100,0	95,7	96,9	11,1
		b	Catering meals and processed meat products	8	10	0	0	0	2	100,0	100,0	100,0	16,7
		c	Cured products (raw and cooked)	9	12	0	1	0	0	90,0	100,0	95,5	0,0
			Total	**39**	**30**	**1**	**1**	**0**	**3**	**97,6**	**97,6**	**97,3**	**9,1**
3	Dairy products	a	Raw milk cheeses	8	11	0	0	1	2	88,9	100,0	95,5	23,1
		b	Other raw milk products	13	8	0	0	0	0	100,0	100,0	100,0	0,0
		c	Heat treated products	11	9	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**32**	**28**	**0**	**0**	**1**	**2**	**97,0**	**100,0**	**98,4**	**10,0**
4	Fishery products	a	Raw products (fresh, frozen)	10	10	0	0	0	0	100,0	100,0	100,0	0,0
		b	Smoked, marinated	7	13	0	0	0	0	100,0	100,0	100,0	0,0
		c	Catering dishes	24	17	0	0	0	1	100,0	100,0	100,0	5,6
			Total	**41**	**40**	**0**	**0**	**0**	**1**	**100,0**	**100,0**	**100,0**	**2,4**
5	Vegetables	a	Raw vegetables (fresh, frozen)	9	10	0	0	0	1	100,0	100,0	100,0	9,1
		b	Under modified atmosphere, pre-cooked vegetables	15	10	0	0	0	0	100,0	100,0	100,0	0,0
		c	Vegetables-based preparations / Processed vegetables	11	8	0	0	0	2	100,0	100,0	100,0	20,0
			Total	**35**	**28**	**0**	**0**	**0**	**3**	**100,0**	**100,0**	**100,0**	**9,7**
6	Environmental production samples	a	Process and cleaning water	9	11	0	0	0	0	100,0	100,0	100,0	0,0
		b	Dusts and residues	10	9	1	0	0	0	100,0	90,9	95,0	0,0
		c	Surface sampling	13	23	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**32**	**43**	**1**	**0**	**0**	**0**	**100,0**	**97,0**	**98,7**	**0,0**
All categories				**207**	**197**	**2**	**2**	**2**	**11**	**98,1**	**99,1**	**98,6**	**6,3**

* PPNA not included

** PPND not included

A summary of the results is given in Table 8.

Table 8 – Summary of results

		22 h	48 h
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA+PD)}{(PA+ND+PD)} \times 100\,\%$	96,2 %	98,1 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA+ND)}{(PA+ND+PD)}\ x\ 100\ \%$	99,1 %	99,1 %
Relative trueness	$RT = \frac{(PA+NA)}{N} \times 100\,\%$	97,6 %	98,6 %
False positive ratio for the alternative method* **FP = PPNA + PPND**	$FPR = \frac{(FP)}{NA} \times 100\,\%$	3,8 %	6,3 %

With *ND = ND + PPND* *NA = NA + PPNA*

3.1.1.1.1.7 Analysis of discordant results

The negative deviations are given in Table 9 and the positive deviations in Table 10.

Table 9 – Negative deviations

Year of analysis	Sample No	Product (French)	Product (English name)	Artificial contamination		Reference method: ISO 11290-1♦						Alternative method : COMPASS Listeria agar Half Fraser for 22h at 30°C							Category	Type
				Strain	Inoculation level (CFU/sample)	Fraser		Half Fraser		Confirmation	Final result	COMPASS *Listeria* Agar			Final result *Listeria* spp		Agreement			
						O&A	Palcam	O&A	Palcam			22 h	48h	API Listeria	22 h	48 h	22 h	48 h		
2019	355	Sandwich jambon crudités œuf	Sandwich (ham, vegetable and egg)	/	/	st	st	H+	+	*L.monocytogenes*	+	st	st	/	-	-	ND	ND	1	a
2011	1042	Rouleau de pâte brisée	Pastry roll	/	/	1H+	-	H+	-	*L.monocytogenes*	+	-	H-d(1col)	/	-	-	ND	PPND	1	c
2011	571	Nuggets de dinde	Turkey nuggets	/	/	-	-	H-	+	*L.innocua*	+	-	H-d	*L.innocua*	-	+	ND	PA	2	b
2018	8719	Chorizo	Chorizo	/	/	-	st	H-	+	*L.welshimeri*	+	st	H-d	*L.welshimeri*	-	+	ND	PA	2	c
2018	8723	Chipolatas	Chipolatas	/	/	st	st	H-	+	*L.welshimeri*	+	st	st	/	-	-	ND	ND	2	c
2011	**1335**	**Tomme au lait cru**	Raw milk cheese (Tomme)	*L.innocua* 913	20,2	H-	-	H-	+	*L.innocua*	+	H-d	H-d	/	-	-	PPND	PPND	3	a
2019	**526**	**Déchets mêlée de jambon végétal**	Vegetable ham scraps	*L.seeligeri* Ad1754	0,4	H-	+	H-	+	*L.seeligeri*	+	-	H-	*L.seeligeri*	-	+	ND	PA	6	b
2011	911	Chiffonnette dessus tapis lave poisson	Wipe on top of fish washer	/	/	H-	-	H-	-	*L.innocua*	+	-	H-	*L.innocua*	-	+	ND	PA	6	c

Table 10 – Positive deviations

Year of analysis	Sample No	Product (French)	Product (English name)	Artificial contamination		Reference method: ISO 11290-1♦						Alternative method: COMPASS Listeria agar Half Fraser for 22h at 30°C							Category	Type
				Strain	Inoculation level (CFU/sample)	Fraser		Half Fraser		Confirmation	Final result	COMPASS *Listeria* Agar			Final result *Listeria* spp.		Agreement			
						O&A	Palcam	O&A	Palcam			22 h	48h	API Listeria	22 h	48 h	22 h	48 h		
2011	433	Viande de bœuf	Beef meat	/	/	-	-	-	-	/	-	H+ 1col	H+ 1col	*L.monocytogenes*	+	+	PD	PD	2	a
2019	356	Déchets farine de blé noir	Buckwheat flour waste	/	/	dni/-	+(1col)	H-d(3col)	+	NC on TSYEA	-	H-	H-ni	*L.innocua*	+	+	PD	PD	6	b

♦ Analyses performed according to the COFRAC accreditation

Negative deviations:

8 negative deviations were observed after 22 h of incubation of COMPASS *Listeria* Agar. For 4 of these samples, characteristic colonies were present after 48 h of incubation and were identified to *L. innocua*, *L. welshimeri* and *L. seeligeri*.
For 4 samples (355, 1042, 8723, 1335), very few or no colonies were present on reference method agars from Half Fraser indicating low contamination of the samples.
The negative deviations concern 6 naturally contaminated samples and 2 artificially contaminated samples.

Positive deviations:

Two positive deviations were observed; the presence of *Listeria monocytogenes* was detected for one sample and the presence of *Listeria innocua* for the second sample. These are 2 naturally contaminated samples.

The analyses of discordant results according to the EN ISO 16140-2:2016 is the following (See Table 11 for 22 h incubation time and Table 12 for 48 h incubation time).

Table 11 – Analysis of discordant results – Incubation for 22 h

Category		Type		N+	ND	PPND	PD	Paired study (ND+PPND)-PD	Paired study AL	Paired study (ND+PPND)+PD	Paired study AL
1	Composite foods	a	Cold catering dishes	7	1	0	0				
		b	Hot catering dishes	10	0	0	0				
		c	Pastries and egg products	13	1	0	0				
			Total	30	2	0	0	2	3	2	6
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	23	0	0	1				
		b	Catering meals and processed meat products	8	1	0	0				
		c	Cured products (raw and cooked)	10	2	0	0				
			Total	41	3	0	1	2	3	4	6
3	Dairy products	a	Raw milk cheeses	9	0	1	0				
		b	Other raw milk products	13	0	0	0				
		c	Heat treated products	11	0	0	0				
			Total	33	0	1	0	1	3	1	6
4	Fishery products	a	Raw products (fresh, frozen)	10	0	0	0				
		b	Smoked, marinated	7	0	0	0				
		c	Catering dishes	24	0	0	0				
			Total	41	0	0	0	0	3	0	6
5	Vegetables	a	Raw vegetables (fresh, frozen)	9	0	0	0				
		b	Under modified atmosphere, pre-cooked vegetables	15	0	0	0				
		c	Vegetables-based preparations / Processed vegetables	11	0	0	0				
			Total	35	0	0	0	0	3	0	6
6	Environmental production samples	a	Process and cleaning water	9	0	0	0				
		b	Dusts and residues	11	1	0	1				
		c	Surface sampling	13	1	0	0				
			Total	33	2	0	1	1	3	3	6
All categories				**213**	**7**	**1**	**2**	**6**	**6**	**10**	**16**

Table 12 – Analysis of discordant results – Incubation for 48 h

Category		Type		N+	ND	PPND	PD	Paired study (ND+PPND)-PD	Paired study AL	Paired study (ND+PPND)+PD	Paired study AL
1	Composite foods	a	Cold catering dishes	7	1	0	0				
		b	Hot catering dishes	10	0	0	0				
		c	Pastries and egg products	13	0	1	0				
			Total	30	1	1	0	2	3	2	6
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	23	0	0	1				
		b	Catering meals and processed meat products	8	0	0	0				
		c	Cured products (raw and cooked)	10	1	0	0				
			Total	41	1	0	1	0	3	2	6
3	Dairy products	a	Raw milk cheeses	9	0	1	0				
		b	Other raw milk products	13	0	0	0				
		c	Heat treated products	11	0	0	0				
			Total	33	0	1	0	1	3	1	6
4	Fishery products	a	Raw products (fresh, frozen)	10	0	0	0				
		b	Smoked, marinated	7	0	0	0				
		c	Catering dishes	24	0	0	0				
			Total	41	0	0	0	0	3	0	6
5	Vegetables	a	Raw vegetables (fresh, frozen)	9	0	0	0				
		b	Under modified atmosphere, pre-cooked vegetables	15	0	0	0				
		c	Vegetables-based preparations / Processed vegetables	11	0	0	0				
			Total	35	0	0	0	0	3	0	6
6	Environmental production samples	a	Process and cleaning water	9	0	0	0				
		b	Dusts and residues	11	0	0	1				
		c	Surface sampling	13	0	0	0				
			Total	33	0	0	1	-1	3	1	6
All categories				**213**	**2**	**2**	**2**	**2**	**6**	**6**	**16**

The observed values for ((ND+PPND)-PD) and (ND+PPND+PD) meet the acceptability limit for each individual category and for all the combined categories whatever the tested incubation times (22h and 48h).

3.1.1.1.1.8 Half Fraser broth storage

Half Fraser broths of the positive and discordant samples were stored for 72 h at 5°C ± 3°C.

Six changes were observed (See Table 13).

Table 13 – Evolution of the results after Half Fraser storage

Year of analysis	Sample No	Product (French)	Product (English name)	COMPASS Listeria Agar			Category	Type
				22h	48h	After Half Fraser storage		
2011	433	Viande de bœuf	Beef meat	PD	PD	NA	2	a
2011	571	Nuggets de dinde	Turkey nuggets	ND	PA	PA	2	b
2018	8719	Chorizo	Chorizo	ND	PA	PA	2	c
2018	8723	Chipolatas	Chipolatas	ND	ND	PA	2	c
2019	**526**	**Déchets mêlée de jambon végétal**	Vegetable ham scraps	ND	PA	PA	6	b
2011	911	Chiffonnette dessus tapis lave poisson	Wipe on top of fish washer	ND	PA	PA	6	c

The analysis of discordant results after storage is given in Table 14.

Table 14 – Analysis of discordant results after Half Fraser storage for 72 h at 5°C ± 3°C

								Paired study			
Category		Type		N+	ND	PPND	PD	(ND+PPND) -PD	AL	(ND+PPND) +PD	AL
1	Composite foods	a	Cold catering dishes	7	1	0	0				
		b	Hot catering dishes	10	0	0	0				
		c	Pastries and egg products	13	0	1	0				
			Total	30	1	1	0	2	3	2	6
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	22	0	0	0				
		b	Catering meals and processed meat products	8	0	0	0				
		c	Cured products (raw and cooked)	10	0	0	0				
			Total	40	0	0	0	0	3	0	6
3	Dairy products	a	Raw milk cheeses	8	0	1	0				
		b	Other raw milk products	13	0	0	0				
		c	Heat treated products	11	0	0	0				
			Total	32	0	1	0	1	3	1	6
4	Fishery products	a	Raw products (fresh, frozen)	10	0	0	0				
		b	Smoked, marinated	7	0	0	0				
		c	Catering dishes	24	0	0	0				
			Total	41	0	0	0	0	3	0	6
5	Vegetables	a	Raw vegetables (fresh, frozen)	9	0	0	0				
		b	Under modified atmosphere, pre-cooked vegetables	15	0	0	0				
		c	Vegetables-based preparations / Processed vegetables	11	0	0	0				
			Total	35	0	0	0	0	3	0	6
6	Environmental production samples	a	Process and cleaning water	9	0	0	0				
		b	Dusts and residues	11	0	0	1				
		c	Surface sampling	13	0	0	0				
			Total	33	0	0	1	-1	3	1	6
All categories				**211**	**1**	**2**	**1**	**2**	**6**	**4**	**16**

The observed values for ((ND+PPND)-PD) and (ND+PPND+PD) meet the acceptability limit for each individual category and for all the combined categories.

3.1.1.1.1.9 Comparison of different confirmation protocols

The tests of the reference method were applied (Gram, catalase, API *Listeria*) as well as spot confirmation on PALCAM agar. No discordant result was observed between the tests applied.

3.1.1.1.2 Relative level of detection

The relative level of detection is the level of detection at P = 0.50 (LOD_{50}) of the alternative (proprietary) method divided by the level of detection at P = 0.50 (LOD_{50}) of the reference method.

The RLOD is defined as the ratio of the alternative and reference methods:

$$RLOD = \frac{LOD_{Alt.}}{LOD_{Ref.}}$$

3.1.1.1.2.1 Protocol

In the initial validation study, five matrix/strain pairs were tested (see Table 15). A composite salad inoculated with *Listeria welshimeri* Ad1175 was tested for the renewal study to represent the composite food category.

Table 15 - Defined (matrix/strain) pairs for the RLOD determination

Category	Matrix	Strain	Origin	Protocol applied after inoculation and before analysis
Composite foods	Mixed salad	*L. welshimeri* Ad1175	Cantonese rice	48 h at 5°C ± 3°C
Meat products	Rillettes	*L. monocytogenes* 1/2 V2/124	Pork	/
Dairy products	Fresh goat cheese	*L. ivanovii* Ad991	Raw milk cheese	/
Fishery products	Smoked salmon	*L. innocua* 1	Smoked salmon	/
Vegetables	Green beans	*L. monocytogenes* 1/2 1011/410	Broccoli	/
Environmental production samples	Water process	*L. monocytogenes* 877/113	Environment (surface)	/

For the initial validation, 6 replicates were tested per inoculation rate. Samples were inoculated individually with a bacterial suspension. A minimum of 4 inoculation levels were tested.

For the renewal study, the protocol described in ISO 16140-2:2016 was applied:

- A negative control: 5 samples,
- A low contamination level providing fractional recovery data, with 20 replicates,
- A high contamination level, with 5 replicates.

A total flora count of the matrix was performed for the initial validation and for the renewal studies.

3.1.1.1.2.2 Calculation and interpretation

The raw data are given in **Appendix 5**.

The RLOD calculations were performed using the Excel spreadsheet available at http://standards.iso.org/iso/16140 - RLOD (clause 5-1-4-2 Calculation and interpretation of RLOD) version 15.08.2015. The RLOD are given in Table 16.

Table 16 - Presentation of RLOD before and after confirmation of the alternative method results

Name	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value	AL
Deli salad (Piémontaise) / *L. welshimeri* Ad1175	1,000	0,477	2,097	0,000	0,370	0,000	1,000	
Rillettes / *L. monocytogenes* V2/124	1,000	0,446	2,240	0,000	0,403	0,000	1,000	
Fresh goat cheese / *L. ivanovii* Ad991	1,000	0,422	2,371	0,000	0,432	0,000	1,000	
Smoked salmon / *L. innocua* 1	1,000	0,406	2,462	0,000	0,450	0,000	1,000	1,5
Frozen green beans / *L. monocytogenes* 1011/1410	1,000	0,446	2,240	0,000	0,403	0,000	1,000	
Process water / *L. monocytogenes* 877/113	1,000	0,344	2,903	0,000	0,533	0,000	1,000	
Combined results	**1,000**	**0,714**	**1,400**	**0,000**	**0,168**	**0,000**	**1,000**	

The RLOD values (using the confirmed alternative method results) meet the acceptability limit of 1.5 for paired studies.

The $LOD_{50\,\%}$ calculations according to Wilrich & Wilrich POD-LOD calculation program - version 11, 2022-10-12 test are given in Table 17.

Table 17 –LOD_{50} results

Category	Matrix/strain pairs	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich[1]	
		Reference method	Alternative method
1	Deli salad (Piémontaise) / *L. welshimeri* Ad1175	1.3 [0.7; 2.2]	1.3 [0.7; 2.2]
2	Rillettes / *L. monocytogenes* V2/124	0.6 [0.4; 1.2]	0.6 [0.4; 1.2]
3	Fresh goat cheese / *L. ivanovii* Ad991	0.8 [0.4; 1.5]	0.8 [0.4; 1.5]
4	Smoked salmon / *L. innocua* 1	0.2 [0.1; 0.4]	0.2 [0.1; 0.4]
5	Frozen green beans / *L. monocytogenes* 1011/1410	0.3 [0.1; 0.5]	0.3 [0.1; 0.5]
6	Process water / *L. monocytogenes* 877/113	0.7 [0.4; 1.2]	0.7 [0.4; 1.2]
	Combined results	**0.6 [0.5; 0.8]**	**0.6 [0.5; 0.8]**

The LOD_{50} varies from 0.2 to 1.3 CFU/25 g for the alternative and the reference methods.

3.1.1.1.3 Inclusivity / Exclusivity (Extension study, 2011)

The results from the extension study performed in 2007 were used:

- 153 *Listeria monocytogenes* strains, 22 *Listeria innocua* strains, 15 *Listeria ivanovii* strains, *9 Listeria seeligeri* strains, 4 *Listeria welshimeri* and 2 *Listeria grayi* strains were tested in the inclusivity part. In order to complete the study, one *Listeria ivanovii sp londoniensis* strain was tested.

- 54 strains were tested in exclusivity.

Raw data are given in **Appendix 6**.

[1] Wilrich, C., and P.-Th. Wilrich: Estimation of the POD function and the LOD of a qualitative microbiological measurement method. AOAC International **92** (2009) 1763 - 1772.

- **Inclusivity:** 152 out of 153 *L. monocytogenes* strains gave characteristic colonies on COMPASS® *Listeria* Agar. One strain (*Listeria monocytogenes* 6072) did not grow on the medium.
  Tests performed on this same strain in 2011 showed very weak growth on COMPASS® *Listeria* Agar after 24 h of incubation (micro-colonies with a large opaque halo) and the presence of characteristic colonies after 48 h of incubation.
  All strains of *Listeria* spp. other than *Listeria monocytogenes* gave characteristic blue colonies with or without halo on COMPASS® *Listeria* Agar.

- **Exclusivity:** none of tested strains gave characteristic colonies on COMPASS® *Listeria* Agar.

3.1.1.2 Protocol: Half Fraser - 37°C

3.1.1.2.1 Sensitivity study

3.1.1.2.1.1 Number and nature of samples

415 samples were analysed providing 206 positive results and 209 negative results for 22 h incubation of COMPASS *Listeria* agar, and 208 positive and 207 negative results for 48 h incubation. The distribution of samples by category and type is given in Table 15.

Table 18 - Distribution per tested category and type

Category		Type		COMPASS *Listeria* Agar - 22h			COMPASS *Listeria* Agar 48 h		
				Positive	Negative	Total	Positive	Negative	Total
1	Composite foods	a	Cold catering dishes	11	9	20	11	9	20
		b	Hot catering dishes	13	10	23	13	10	23
		c	Pastries and egg products	15	11	26	15	11	26
			Total	39	30	69	39	30	69
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	15	10	25	15	10	25
		b	Catering meals and processed meat products	10	11	21	10	11	21
		c	Cured products (raw and cooked)	13	9	22	13	9	22
			Total	38	30	68	38	30	68
3	Dairy products	a	Raw milk cheeses	9	12	21	9	12	21
		b	Other raw milk products	15	7	22	16	6	22
		c	Heat treated products	10	12	22	10	12	22
			Total	34	31	65	35	30	65
4	Fishery products	a	Raw products (fresh, frozen)	13	17	30	13	17	30
		b	Smoked, marinated	8	12	20	8	12	20
		c	Catering dishes	11	16	27	11	16	27
			Total	32	45	77	32	45	77
5	Vegetables	a	Raw vegetables (fresh, frozen)	11	15	26	11	15	26
		b	Under modified atmosphere, pre-cooked vegetables	10	13	23	10	13	23
		c	Vegetables-based preparations / Processed vegetables	11	11	22	11	11	22
			Total	32	39	71	32	39	71
6	Production environmental samples	a	Process and cleaning water	9	12	21	9	12	21
		b	Dusts and residues	14	7	21	15	6	21
		c	Surface sampling	8	15	23	8	15	23
			Total	31	34	65	32	33	65
All categories				**206**	**209**	**415**	**208**	**207**	**415**

3.1.1.2.1.2 Artificial contamination of samples

Artificial contaminations were done by seeding protocol. The artificial contaminations are given in **Appendix 7**.

114 samples were contaminated; 102 gave a positive result by one and/or the other method.

The repartition of the positive samples per inoculation protocol and inoculation level is given in Table 16.

Table 19 - Repartition of the positive samples per inoculation protocol and inoculation level

	Naturally contaminated	Artificial contamination (CFU/sample)			Total
		Seeding			
		≤3	3<x≤10	10<x≤30	
Number of samples	106	76	26	0	208
%	51,0%	36,5%	12,5%	0,0%	100,00%

The percentage of artificially contaminated samples between 3 and 10 CFU/sample is 12.5%.

The number of naturally contaminated samples represents 51.0% of the total number of positive samples.

3.1.1.2.1.3 Distribution of sample contamination

The distribution of samples per target is given in Table 17.

Table 20 - Distribution of sample contamination by target

A: *Listeria* spp B. *Listeria monocytogenes* C: mix

Category	A	B	C	Total A + C
1	9	21	9	18
2	5	21	12	17
3	6	18	11	17
4	11	15	6	17
5	8	17	7	15
6	14	14	4	18
Total	**53[2]**	**106[1]**	**49**	**102**

According to AFNOR rules, the number of samples contaminated with *Listeria* spp. other than *Listeria monocytogenes*, alone or in mixture, must be between 15 and 25 per category, which is the case for this study.

3.1.1.2.1.4 Protocols applied during the study

> ***Incubation time***

- Enrichment in Half Fraser: 18 h at 37°C

[2] 48 h

- Incubation of COMPASS *Listeria* Agar: 22 h and 48 h at 37°C ± 1°C

Confirmation

- By spot or streaking onto PALCAM plates
- By proceeding to a *Listeria* biochemical gallery on a characteristic colony isolated on COMPASS Listeria Agar, without purification step
- By the tests described in the ISO 11290-1 method after purification step on TSYEA plate (Gram staining, catalase)

Enrichment storage

In agreement with the AFNOR technical committee, storage of Half Fraser for 72 h at 5°C ± 3°C was not tested for this extension study, as the enrichment broth was identical to that used for the initial validation.

3.1.1.2.1.5 Test results

Raw data are given in **Appendix 8**. The results are given in Table 18 (incubation of COMPASS *Listeria* Agar for 22 h) and Table 19 (incubation of COMPASS *Listeria* Agar for 48 h).

Table 21 - Incubation 22 h

		COMPASS *Listeria* Agar - 22h						
Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods	27	29	6	6	0	1	69
2	Meat products	30	30	4	4	0	0	68
3	Dairy products	25	30	5	4	0	1	65
4	Fishery products	20	45	5	7	0	0	77
5	Vegetables	22	35	4	6	0	4	71
6	Environmental production samples	24	34	2	5	0	0	65
All categories		**148**	**203**	**26**	**32**	**0**	**6**	**415**

* PPNA not included

** PPND not included

Table 22 - Incubation 48 h

		COMPASS *Listeria* Agar - 48 h						
Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods	27	28	6	6	0	2	69
2	Meat products	30	30	4	4	0	0	68
3	Dairy products	25	28	6	4	0	2	65
4	Fishery products	21	45	5	6	0	0	77
5	Vegetables	22	39	4	5	1	0	71
6	Environmental production samples	25	33	3	4	0	0	65
All categories		**150**	**203**	**28**	**29**	**1**	**4**	**415**

* PPNA not included ** PPND not included

3.1.1.2.1.6 Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (FPR)

The calculations are presented in Table 20 (incubation for 22 h) and Table 21 (incubation for 48 h).

Table 23 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation 22 h

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE_{alt} %	SE_{ref} %	RT %	FPR %
1	Composite foods	a	Cold catering dishes	3	8	4	4	0	1	63,6	63,6	60,0	11,1
		b	Hot catering dishes	9	10	2	2	0	0	84,6	84,6	82,6	0,0
		c	Pastries and egg products	15	11	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**27**	**29**	**6**	**6**	**0**	**1**	**84,6**	**84,6**	**82,6**	**3,3**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	12	10	1	2	0	0	86,7	93,3	88,0	0,0
		b	Catering meals and processed meat products	10	11	0	0	0	0	100,0	100,0	100,0	0,0
		c	Cured products (raw and cooked)	8	9	3	2	0	0	84,6	76,9	77,3	0,0
			Total	**30**	**30**	**4**	**4**	**0**	**0**	**89,5**	**89,5**	**88,2**	**0,0**
3	Dairy products	a	Raw milk cheeses	4	12	3	2	0	0	77,8	66,7	76,2	0,0
		b	Other raw milk products	13	7	1	1	0	0	93,3	93,3	90,9	0,0
		c	Heat treated products	8	11	1	1	0	1	90,0	90,0	90,9	8,3
			Total	**25**	**30**	**5**	**4**	**0**	**1**	**88,2**	**85,3**	**86,2**	**3,2**
4	Fishery products	a	Raw products (fresh, frozen)	10	17	2	1	0	0	92,3	84,6	90,0	0,0
		b	Smoked, marinated	5	12	1	2	0	0	75,0	87,5	85,0	0,0
		c	Catering dishes	5	16	2	4	0	0	63,6	81,8	77,8	0,0
			Total	**20**	**45**	**5**	**7**	**0**	**0**	**78,1**	**84,4**	**84,4**	**0,0**
5	Vegetables	a	Raw vegetables (fresh, frozen)	6	11	2	3	0	4	72,7	81,8	80,8	26,7
		b	Under modified atmosphere, pre-cooked vegetables	7	13	2	1	0	0	90,0	80,0	87,0	0,0
		c	Vegetables-based preparations / Processed vegetables	9	11	0	2	0	0	81,8	100,0	90,9	0,0
			Total	**22**	**35**	**4**	**6**	**0**	**4**	**81,3**	**87,5**	**85,9**	**10,3**
6	Environmental production samples	a	Process and cleaning water	8	12	0	1	0	0	88,9	100,0	95,2	0,0
		b	Dusts and residues	10	7	2	2	0	0	85,7	85,7	81,0	0,0
		c	Surface sampling	6	15	0	2	0	0	75,0	100,0	91,3	0,0
			Total	**24**	**34**	**2**	**5**	**0**	**0**	**83,9**	**93,5**	**89,2**	**0,0**
All categories				**148**	**203**	**26**	**32**	**0**	**6**	**84,5**	**87,4**	**86,0**	**2,9**

* PPNA not included

** PPND not included

Table 24 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation 48 h

Categorie		Type		PA	NA*	PD	ND**	PPND	PPNA	SE $_{alt}$ %	SE $_{ref}$ %	RT %	FPR %
1	Composite foods	a	Cold catering dishes	3	8	4	4	0	1	63,6	63,6	60,0	11,1
		b	Hot catering dishes	9	9	2	2	0	1	84,6	84,6	82,6	10,0
		c	Pastries and egg products	15	11	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**27**	**28**	**6**	**6**	**0**	**2**	**84,6**	**84,6**	**82,6**	**6,7**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	12	10	1	2	0	0	86,7	93,3	88,0	0,0
		b	Catering meals and processed meat products	10	11	0	0	0	0	100,0	100,0	100,0	0,0
		c	Cured products (raw and cooked)	8	9	3	2	0	0	84,6	76,9	77,3	0,0
			Total	**30**	**30**	**4**	**4**	**0**	**0**	**89,5**	**89,5**	**88,2**	**0,0**
3	Dairy products	a	Raw milk cheeses	4	11	3	2	0	1	77,8	66,7	76,2	8,3
		b	Other raw milk products	13	6	2	1	0	0	93,8	87,5	86,4	0,0
		c	Heat treated products	8	11	1	1	0	1	90,0	90,0	90,9	8,3
			Total	**25**	**28**	**6**	**4**	**0**	**2**	**88,6**	**82,9**	**84,6**	**6,7**
4	Fishery products	a	Raw products (fresh, frozen)	10	17	2	1	0	0	92,3	84,6	90,0	0,0
		b	Smoked, marinated	5	12	1	2	0	0	75,0	87,5	85,0	0,0
		c	Catering dishes	6	16	2	3	0	0	72,7	81,8	81,5	0,0
			Total	**21**	**45**	**5**	**6**	**0**	**0**	**81,3**	**84,4**	**85,7**	**0,0**
5	Vegetables	a	Raw vegetables (fresh, frozen)	6	15	2	2	1	0	72,7	81,8	80,8	6,7
		b	Under modified atmosphere, pre-cooked vegetables	7	13	2	1	0	0	90,0	80,0	87,0	0,0
		c	Vegetables-based preparations / Processed vegetables	9	11	0	2	0	0	81,8	100,0	90,9	0,0
			Total	**22**	**39**	**4**	**5**	**1**	**0**	**81,3**	**87,5**	**85,9**	**2,6**
6	Environmental production samples	a	Process and cleaning water	8	12	0	1	0	0	88,9	100,0	95,2	0,0
		b	Dusts and residues	11	6	3	1	0	0	93,3	80,0	81,0	0,0
		c	Surface sampling	6	15	0	2	0	0	75,0	100,0	91,3	0,0
			Total	**25**	**33**	**3**	**4**	**0**	**0**	**87,5**	**90,6**	**89,2**	**0,0**
All categories				**150**	**203**	**28**	**29**	**1**	**4**	**85,6**	**86,5**	**86,0**	**2,4**

* PPNA not included

** PPND not included

A summary of the results is given in Table 25.

Table 25 – Summary of results

		22 h	48 h
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\,\%$	84,5 %	85,6 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)}\ x\ 100\ \%$	87,4 %	86,5 %
Relative trueness	$RT = \frac{(PA + NA)}{N} \times 100\,\%$	86,0 %	86,0 %
False positive ratio for the alternative method* **FP = PPNA + PPND**	$FPR = \frac{(FP)}{NA} \times 100\,\%$	2,9 %	2,4 %

With *ND = ND + PPND* *NA = NA + PPNA*

3.1.1.2.1.7 Analysis of discordant results

The negative deviations are given in Table 26 and the positive deviations in Table 27.

Table 26 – Negative deviations

Sample No	Product (French)	Product (English name)	Artificial contamination		ISO 11290-1♦	Alternative method: COMPASS *Listeria* Agar									Category	Type
						Half Fraser pre-warmed at 37°C then incubated at 37°C for 18 h										
						COMPASS *Listeria* Agar		Confirmations		Final result L.spp		Agreement 22 H	Agreement 48 H	Subculture in Fraser 1 on negative samples		
			Strain	Inoculation level (CFU/sample)	*Listeria* spp	22 h	48 h	Palcam	API Listeria	22 h	48 h					
180	Salade pamplemousse	Grapefruit salad	/	/	*L.monocytogenes*	st	-			-	-	ND	ND	-	1	a
723	**Sandwich thon œuf**	**Tuna and egg sandwich**	*L.seeligeri* Ad2635	4,0	*L.seeligeri*	st	-			-	-	ND	ND	-	1	a
725	**Sandwich jambon Emmental**	**Emmental ham sandwich**	*L.monocytogenes* Ad270	1,8	*L.monocytogenes*	-	-			-	-	ND	ND	-	1	a
727	**Sandwich jambon Emmental**	**Ham and Emmental sandwich**	*L.monocytogenes* Ad271	2,8	*L.monocytogenes*	st	-			-	-	ND	ND	-	1	a
8617	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad2154	1,6	*L.monocytogenes*	st	-			-	-	ND	ND	-	1	b
529	**Couscous trois viandes**	**Couscous with three meats**	*L.monocytogenes* Ad1494	1,0	*L.monocytogenes*	st	st			-	-	ND	ND	-	1	b
8696	Viande rouge surgelée	Frozen red meat	/	/	*L.monocytogenes/ L.innocua*	st	-			-	-	ND	ND	-	2	a
8714	Côte de porc thym romarin	Pork chop with thyme and rosemary	/	/	*L.monocytogenes*	st	-			-	-	ND	ND	-	2	a
347	Merguez	Merguez	/	/	*L.monocytogenes*	st	-			-	-	ND	ND	-	2	c
349	Lardons fumés cuits	Cooked smoked bacon	/	/	*L.monocytogenes*	st	st			-	-	ND	ND	-	2	c
83	**Camembert au lait cru**	**Camembert (raw milk cheese)**	*L.monocytogenes* Ad2858	2,2	*L.monocytogenes*	-	-			-	-	ND	ND	-	3	a
731	**Coulommiers au lait cru**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad977	1,8	*L.monocytogenes*	st	-			-	-	ND	ND	-	3	a
1202	Lait cru fermier	Raw milk from farm	/	/	*L.innocua*	-	-			-	-	ND	ND	-	3	b
537	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	*L.monocytogenes* Ad2603	0,6	*L.monocytogenes*	st	st			-	-	ND	ND	-	3	c
4078	Barquette de pavé de saumon	Tray of salmon steaks	/	/	*L.monocytogenes*	st	-			-	-	ND	ND	-	4	a
4176	**Emincés de saumon fumé aux 5 baies fumés au bois de hêtre**	**Smoked salmon slices with 5 berries smoked in beech wood**	*L.monocytogenes* Ad1412 +*L.welshimeri* Ad1669	2,0	*L.welshimeri*	st	-			-	-	ND	ND	-	4	b
4180	**Filets de maquereaux fumés au bois de hêtre au poivre**	**Smoked mackerel fillets with beech wood and pepper**	*L.innocua* Ad1674	1,8	*L.innocua*	st	st			-	-	ND	ND	-	4	b
4086	Pavé de colin napolitain précuit	Pre-cooked Neapolitan hake steak	/	/	*L.monocytogenes*	st	-			-	-	ND	ND	-	4	c
4089	Portion de colin sauce brésilienne	Portion of hake with Brazilian sauce	/	/	*L.innocua*	st	st			-	-	ND	ND	-	4	c
4558	Pavé de colin	Hake steak	/	/	*L.innocua*	-	H-(1)	+	*L.innocua*	-	+	ND	PA	-	4	c
5039	Verrine de saumon	Salmon verrine	/	/	*L.innocua*	-	H-d	-	*cocci*	-	-	ND	ND	-	4	c
95	**Mélange de jeunes pousses**	**Mixed baby leaves**	*L.monocytogenes* Ad2643	1,4	*L.monocytogenes*	-	H+d/H-d	-	NC on TSYEA	-	-	ND	PPND	-	5	a
2184	Maïs doux en grains	Sweet corn kernels	/	/	*L.monocytogenes*	st	st			-	-	ND	PPND	-	5	a
3349	**Poivron jaune**	Yellow bell pepper	*L.seeligeri* Ad1293	2,8	*L.seeligeri*	st	st			-	-	ND	ND	-	5	a
8348	Mélange de légumes	Mixed vegetables	/	/	*L.monocytogenes*	-	-			-	-	ND	ND	-	5	b
2191	Mélange trois poivrons	Three Pepper Mix	/	/	*L.monocytogenes*	st	-			-	-	ND	ND	-	5	c
2192	Julienne de légumes	Vegetable julienne	/	/	*L.innocua*	-	-			-	-	ND	ND	-	5	c
2938	Eau de rinçage (abattoir porcs)	Rinsing water (pig slaughterhouse)	/	/	*L.welshimeri*	-	-			-	-	ND	ND	-	6	a
524	**Déchets découpe poisson**	Fish cutting waste	*L.monocytogenes* Ad2599	1,2	*L.monocytogenes*	st	-			-	-	ND	ND	-	6	b
526	**Déchets mêlée de jambon végétal**	**Vegetable ham mix waste**	*L.seeligeri* Ad1754	0,4	*L.seeligeri*	-	H-d	+	*L.seeligeri*	-	+	ND	PA	*L.seeligeri*	6	b
2197	Chiffonnette avant nettoyage (Tapis lattes Abattoir Carnés)	Rinsing cloth before cleaning (Slaughterhouse meat)	/	/	*L.innocua*	st	-			-	-	ND	ND		6	c
2941	Chiffonnette avant nettoyage (fabrication mousse de foie mélangeur)	Rinse cloth before cleaning (production of liver mousse mixer)	/	/	*L.innocua*	-	-			-	-	ND	ND		6	c

♦ Analyses performed according to the COFRAC accreditation

Table 27 – Positive deviations

Sample No	Product (French)	Product (English name)	Artificial contamination		ISO 11290-1♦	Alternative method : COMPASS *Listeria* Agar								Category	Type
						Half Fraser pre-warmed at 37°C then incubated at 37°C for 18 h									
						COMPASS *Listeria* Agar		Confirmations		Final result L.spp		Agreement 22 H	Agreement 48 h		
			Strain	Inoculation level (CFU/sample)	*Listeria* spp	22 h	48 h	Palcam	API Listeria	22 h	48 h				
181	Sandwich jambon cheddar	Ham and cheddar sandwich	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	a
724	**Sandwich thon œuf**	**Tuna and egg sandwich**	*L.monocytogenes* Ad1186	2,0	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	a
726	**Sandwich jambon Emmental**	**Ham and Emmental sandwich**	*L.monocytogenes* Ad271	2,8	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	a
3515	Salade thon riz	Tuna and rice salad	/	/	-	H-d	H-d	+d	*L.grayi*	+	+	PD	PD	1	a
8616	**Pizza jambon fromage**	**Ham and cheese pizza**	*L.monocytogenes* Ad1494	2,4	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	b
531	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad669	0,6	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	b
8698	Viande rouge surgelée	Frozen red meat	/	/	-	H-	H-	+	*L.welshimeri*	+	+	PD	PD	2	a
8327	Saucisse fumée	Smoked sausage	/	/	-	H-	H-	+	*L.welshimeri*	+	+	PD	PD	2	c
1107	Lardons cuits fumés	Cooked and smoked bacon	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	2	c
1108	Farce à légumes	Vegetable stuffing	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	2	c
84	**Emmental français au lait cru**	**Emmental (raw milk cheese)**	*L.monocytogenes* Ad1785	1,4	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	a
1193	Fromage au lait cru de vache	Raw cow milk cheeese	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	a
532	**Brie de Meaux au lait cru**	**Brie de Meaux (raw milk cheese)**	*L.monocytogenes* Ad1236	0,6	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	a
734	**Beurre cru demi-sel**	**Raw semi-salted butter**	*L.monocytogenes* Ad977	1,8	-	-	H+d	+	*L.monocytogenes*	-	+	NA	PD	3	b
735	**Beurre cru demi-sel**	**Raw semi-salted butter**	*L.monocytogenes* Ad1205	0,8	-	H+dni	H+dni	+	*L.monocytogenes*	+	+	PD	PD	3	b
2335	**Lait frais demi-écrémé pasteurisé**	**Fresh semi-skimmed pasteurized milk**	*L.monocytogenes* Ad610 + *L.welshimeri* Ad1667	1,4	-	H-	H-	+	*L.welshimeri*	+	+	PD	PD	3	c
4077	Barquette de pavé de saumon	Tray of salmon steak	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	4	a
4170	**Pavé de saumon**	**Salmon steak**	*L.monocytogenes* Ad1279 + *L.innocua* Ad1233	0,6	-	H+/H-	H+/H-	+/+	*L.monocytogenes/L.innocua*	+	+	PD	PD	4	a
5182	Saumon fumé élevé en Norvège	Smoked salmon raised in Norway	/	/	-	H+(2)	H+	+	*No identification by API colony on RLM and by PCR*	+	+	PD	PD	4	b
4087	Poisson blanc gratiné au fromage	White fish with cheese au gratin	/	/	-	H+	H+/H-d	+	*L.monocytogenes*	+	+	PD	PD	4	c
4088	Pavé poisson blanc thym citron	White fish steak with lemon thyme	/	/	-	H-	H-	+	*L.innocua*	+	+	PD	PD	4	c
3350	**Poivron jaune**	**Yellow bell pepper**	*L.welshimeri* Ad1668	3,4	-	H-	H-	+	*L.welshimeri*	+	+	PD	PD	5	a
2182	Maïs doux en grains	Sweet corn in kernels	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	5	a
195	Légumes vapeurs (haricots, courgettes, poivrons)	Steamed vegetables (beans, zucchini, peppers)			-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	5	b
2928	Crudités mélange chou rouge, carottes, choux blancs	Raw vegetables (red cabbage, carrots, white cabbage)	/	/	-	H+/H-	H+/H-	+/+	*L.monocytogenes/L.innocua*	+	+	PD	PD	5	b
525	**Déchets poisson**	**Fish waste**	*L.monocytogenes* Ad2599	1,2	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	6	b
527	**Déchets veggie**	**Veggie waste**	*L.seeligeri* Ad1754	0,4	-	-	H-d	+	*L.seeligeri*	-	+	NA	PD	7	b
528	**Déchets veggie**	**Veggie waste**	*L.monocytogenes* Ad2643	1,0	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	6	b

♦ Analyses performed according to the COFRAC accreditation

Negative deviations

32 negative deviations were observed after 22 h of incubation of COMPASS *Listeria* Agar. For two samples (526: Waste; 4558: Hake) more or less characteristic colonies were observed on the agars after 48 h of incubation, they were identified respectively to *Listeria seeligeri* and *Listeria innocua*. 18 deviations concern naturally contaminated samples and 14 artificially contaminated samples. These deviations are probably related to the fact that this is an unpaired study.

Positive deviations

26 positive deviations were observed after 22 h of incubation of COMPASS *Listeria* Agar; they concern 12 artificially contaminated samples and 14 naturally contaminated samples. 18 samples were contaminated with *Listeria monocytogenes*, two with a mixture of *Listeria monocytogenes* and *Listeria* spp. and six with *Listeria* spp.

2 additional positive deviations were obtained after a 48 h incubation of COMPASS *Listeria* Agar (Sample 734: raw butter, 527: Veggie waste).

No samples in negative agreement after 48 h of incubation were confirmed positive after subculture for 24 h in Fraser 1.

The analyses of discordant results according to the EN ISO 16140-2:2016 is the following: Table 28 (Incubation for 22 h) and Table 29 (Incubation for 48 h).

Table 28 – Analysis of discordant results – Incubation 22 h

Category		Type		N+	ND	PPND	PD	(ND+PPND)-PD	AL
1	Composite foods	a	Cold catering dishes	11	4	0	4		
		b	Hot catering dishes	13	2	0	2		
		c	Pastries and egg products	15	0	0	0		
			Total	39	6	0	6	0	3
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	15	2	0	1		
		b	Catering meals and processed meat products	10	0	0	0		
		c	Cured products (raw and cooked)	13	2	0	3		
			Total	38	4	0	4	0	3
3	Dairy products	a	Raw milk cheeses	9	2	0	3		
		b	Other raw milk products	15	1	0	1		
		c	Heat treated products	10	1	0	1		
			Total	34	4	0	5	-1	3
4	Fishery products	a	Raw products (fresh, frozen)	13	1	0	2		
		b	Smoked, marinated	8	2	0	1		
		c	Catering dishes	11	4	0	2		
			Total	32	7	0	5	2	3
5	Vegetables	a	Raw vegetables (fresh, frozen)	11	3	0	2		
		b	Under modified atmosphere, pre-cooked vegetables	10	1	0	2		
		c	Vegetables-based preparations / Processed vegetables	11	2	0	0		
			Total	32	6	0	4	2	3
6	Environmental production samples	a	Process and cleaning water	9	1	0	0		
		b	Dusts and residues	14	2	0	2		
		c	Surface sampling	8	2	0	0		
			Total	31	5	0	2	3	3
All categories				**206**	**32**	**0**	**26**	**6**	**6**

Table 29 – Analysis of discordant results – Incubation 48 h

Category		Type		N+	ND	PPND	PD	(ND+PPND)-PD	AL
1	Composite foods	a	Cold catering dishes	11	4	0	4		
		b	Hot catering dishes	13	2	0	2		
		c	Pastries and egg products	15	0	0	0		
			Total	39	6	0	6	0	3
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	15	2	0	1		
		b	Catering meals and processed meat products	10	0	0	0		
		c	Cured products (raw and cooked)	13	2	0	3		
			Total	38	4	0	4	0	3
3	Dairy products	a	Raw milk cheeses	9	2	0	3		
		b	Other raw milk products	16	1	0	2		
		c	Heat treated products	10	1	0	1		
			Total	35	4	0	6	-2	3
4	Fishery products	a	Raw products (fresh, frozen)	13	1	0	2		
		b	Smoked, marinated	8	2	0	1		
		c	Catering dishes	11	3	0	2		
			Total	32	6	0	5	1	3
5	Vegetables	a	Raw vegetables (fresh, frozen)	11	2	1	2		
		b	Under modified atmosphere, pre-cooked vegetables	10	1	0	2		
		c	Vegetables-based preparations / Processed vegetables	11	2	0	0		
			Total	32	5	1	4	2	3
6	Environmental production samples	a	Process and cleaning water	9	1	0	0		
		b	Dusts and residues	15	1	0	3		
		c	Surface sampling	8	2	0	0		
			Total	32	4	0	3	1	3
All categories				**208**	**29**	**1**	**28**	**2**	**6**

The calculated values for ((ND+PPND)-PD) meet the acceptability limit (AL) for each individual category and for all categories combined regardless of the incubation time tested (22h and 48 h).

3.1.1.2.1.8 Comparison of different confirmation protocols

Typical colonies observed on COMPASS *Listeria* Agar were confirmed by spot onto PALCAM plates, the tests described in ISO11290-1 and by biochemical gallery on isolated colony without purification step.

The results observed by all tests were concordant except for the strain isolated from sample 5182 which could not be identified by API *Listeria* gallery. The colony was confirmed as *Listeria monocytogenes* by PCR test and by streaking onto RAPID'*L.mono* agar.

3.1.1.2.2 Relative level of detection

3.1.1.2.2.1 Protocol

6 matrix/strain pairs were tested (See Table 30).

Table 30 - Defined (matrix/strain) pairs for the RLOD determination

Category	Matrix	Strain	Origin	Protocol applied after inoculation and before analysis
Composite foods	Mixed salad	*L. welshimeri* Ad1175	Cantonese rice	48 h à 5°C ± 3°C
Meat products	Rillettes	*L. monocytogenes* Ad669	Pork	48 h à 5°C ± 3°C
Dairy products	Raw milk	*L. ivanovii* Ad991	Raw milk cheese	48 h à 5°C ± 3°C
Fishery products	Smoked salmon	*L. innocua* Ad1674	Smoked salmon	48 h à 5°C ± 3°C
Vegetables	Frozen zucchini	*L. seeligeri* Ad1754	Zucchini cubes	- 20°C, 2 weeks
Environmental production samples	Rinsed water	*L. monocytogenes* Ad551	Environment (pastry)	48 h at 5°C ± 3°C

The protocol described in ISO 16140-2:2016 was applied:

- A negative control: 5 samples,
- A low contamination level providing fractional recovery data, with 20 replicates,
- A high contamination level, with 5 replicates.

A total flora count of the matrix was performed.

3.1.1.2.2.2 Calculation and interpretation

The raw data are given in **Appendix 9**. **The results obtained for 22 h and 48 h incubation times were the same.**

The RLOD calculations were performed using the Excel spreadsheet available at http://standards.iso.org/iso/16140 - RLOD (clause 5-1-4-2 Calculation and interpretation of RLOD) version 15.08.2015 using data from the 2011 extension study. The RLOD are given in Table 31.

Table 31 - Presentation of RLOD before and after confirmation of the alternative method results

Matrix/strain pairs	RLOD	RLODL	RLODU	b=ln (RLOD)	sd(b)	z-Test statistic	p-value
Mixed salad / *L.welshimeri* Ad1175	1,410	0,650	3,057	0,344	0,387	0,888	0,374
Rillettes / *L.monocytogenes* Ad669	0,724	0,296	1,769	-0,323	0,447	0,723	1,531
Raw milk / *L.ivanovii* Ad991	1,249	0,550	2,835	0,222	0,410	0,542	0,588
Smoked salmon/ *L.innocua* Ad1674	0,828	0,270	2,537	-0,189	0,560	0,337	1,264
Frozen zucchini slices / *L.monocytogenes* Ad1672	0,602	0,269	1,350	-0,507	0,404	1,257	1,791
Rinsed water/ *L.monocytogenes* Ad551	1,000	0,403	2,480	0,000	0,454	0,000	1,000
Combined results	**0,998**	**0,721**	**1,382**	**-0,002**	**0,163**	**0,013**	**1,010**

The RLOD values meet the acceptability limit of 1.5 for a paired study.

The $LOD_{50\,\%}$ calculations according to Wilrich & Wilrich POD-LOD calculation program - version 11, 2022-10-12 test are given in Table 32.

Table 32 –LOD_{50} results

Category	Matrix/strain pairs	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich[3]	
		Reference method	Alternative method
1	Mixed salad / *L.welshimeri* Ad1175	1.3 [0.7; 2.2]	1.9 [1.0; 3.4]
2	Rillettes / *L.monocytogenes* Ad669	1.0 [0.5; 1.9]	0.7 [0.4; 1.3]
3	Raw milk / *L.ivanovii* Ad991	0.7 [0.4; 1.3]	0.9 [0.5; 1.7]
4	Smoked salmon/ *L.innocua* Ad1674	0.9 [0.4; 1.7]	0.7 [0.4; 1.4]
5	Frozen zucchini slices / *L.monocytogenes* Ad1672	0.9 [0.5; 1.5]	0.5 [0.3; 1.0]
6	Rinsed water/ *L.monocytogenes* Ad551	0.9 [0.5; 1.7]	0.9 [0.5; 1.7]
Combined results		**0.9 [0.7; 1.2]**	**0.9 [0.7;1.2]**

The LOD_{50} varies from 0.9 CFU/25 g to 1.3 CFU/25 g for the reference method and from 0.5 log CFU/25 g to 1.9 CFU/25 g for the alternative method whatever the incubation time of the COMPASS *Listeria* agar (22h or 48h).

[3] Wilrich, C., and P.-Th. Wilrich: Estimation of the POD function and the LOD of a qualitative microbiological measurement method. AOAC International **92** (2009) 1763 - 1772.

3.1.2 Listeria monocytogenes detection

3.1.2.1 Protocol: Half Fraser - 30°C

3.1.2.1.1 Sensitivity study

3.1.2.1.1.1 Number and nature of samples

Taking into account all the studies, 461 samples were tested giving 209 positive and 252 negative results after 22 h of incubation and 212 positive and 249 negative results after 48 h of incubation (see Table 33).

Table 33 - Distribution per tested category and type

Category		Type		22 h			48 h		
				Positive	Negative	total	Positive	Negative	total
1	Composite foods	a	Cold catering dishes	13	11	24	13	11	24
		b	Hot catering dishes	8	12	20	8	12	20
		c	Pastries and egg products	11	10	21	11	10	21
			Total	32	33	65	32	33	65
2	Meat products	a	Raw meat products (with frozen, not frozen, seasoned)	22	17	39	23	16	39
		b	Catering meals and processed meat products	11	16	27	13	14	27
		c	Cured products (raw and cooked)	9	18	27	9	18	27
			Total	42	51	93	45	48	93
3	Dairy products	a	Raw milk cheeses	10	15	25	10	15	25
		b	Other raw milk products	11	9	20	11	9	20
		c	Heat treated products	10	11	21	10	11	21
			Total	31	35	66	31	35	66
4	Fishery products	a	Raw products (fresh, frozen)	11	12	23	11	12	23
		b	Smoked, marinated	12	22	34	12	22	34
		c	Catering dishes	7	14	21	7	14	21
			Total	30	48	78	30	48	78
5	Vegetables	a	Raw vegetables (fresh, frozen)	10	15	25	10	15	25
		b	Under modified atmosphere, pre-cooked vegetables	13	8	21	13	8	21
		c	Vegetables-based preparations / Processed vegetables	8	12	20	8	12	20
			Total	31	35	66	31	35	66
6	Environmental production samples	a	Process and cleaning water	7	13	20	7	13	20
		b	Dusts and residues	9	11	20	9	11	20
		c	Surface sampling	27	26	53	27	26	53
			Total	43	50	93	43	50	93
All categories				**209**	**252**	**461**	**212**	**249**	**461**

3.1.2.1.1.2 Artificial contamination of samples

Artificial contaminations were performed by spiking or cross-contaminations. Injury was evaluated by enumeration on non-selective medium (TSYEA) and selective medium (PALCAM). The strains used, as well as the injury applied, are given in **Appendix 10**.

51 samples were contaminated; 43 were positive by at least one method.

The distribution of positive samples by type of contamination and level of inoculation is given in Table 34.

Table 34 - Repartition of the positive samples per inoculation protocol and inoculation level

	Naturally contaminated	Artificial contamination							Total
		Cross contamination	Spiking			Seeding			
			≤5	5<x≤10	10<x≤30	≤3	3<x≤10	10<x≤30	
Number of samples	93	5	30	14	6	45	19	0	212
%	43,9%	2,4%	14,2%	6,6%	2,8%	21,2%	9,0%	0,0%	100,0%

The percentage of artificially contaminated samples between 3 CFU (seeding) or 5 CFU (spiking) and 10 CFU is 15.6%.

The number of naturally contaminated samples represents 43.9 % of the total number of positive samples.

3.1.2.1.1.3 Protocols applied during the study

> ***Incubation time***

- Enrichment in Half Fraser:
  - * Enrichment in Half-Fraser: 22 h at 30°C
  - * Renewal: 22 h at 30°C

- COMPASS Listeria Agar incubation:
  - * Enrichment in Half-Fraser: 22h and 48 h at 37°C ± 1°C
  - * Renewal: 22 h and 48 h at 37°C ± 1°C

- ***Confirmation***

- Initial validation: by the tests described in the ISO method after purification on TSYEA agar

- Renewal:
    * by performing a biochemical *Listeria* gallery from a characteristic colony isolated on COMPASS *Listeria* Agar without purification step
    * by the tests described in the ISO 11290-1 (2017) method: β-haemolysis, biochemical tests after purification step

- ***Enrichment storage***

Half Fraser broth storage was not tested during the initial validation for *Listeria monocytogenes* detection. The AFNOR Technical Committee agreed that this should also be the case for the renewal. Note that storage of broths for 72 h at 5°C ± 3°C is allowed in ISO 11290-1.

3.1.2.1.1.4 Test results

The raw data are given in **Appendix 11**.

3.1.2.1.1.5 Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (FPR)

Calculations are given in Table 35 (incubation 22 h) and 36 (incubation 48 h).

Table 35 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation 22 h

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE_{alt} %	SE_{ref} %	RT %	FPR%
1	Composite foods	a	Cold catering dishes	12	11	0	1	0	0	92,3	100,0	95,8	0,0
		b	Hot catering dishes	8	12	0	0	0	0	100,0	100,0	100,0	0,0
		c	Pastries and egg products	11	9	0	0	0	1	100,0	100,0	100,0	10,0
			Total	**31**	**32**	**0**	**1**	**0**	**1**	**96,9**	**100,0**	**98,5**	**3,0**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	22	17	0	0	0	0	100,0	100,0	100,0	0,0
		b	Catering meals and processed meat products	11	16	0	0	0	0	100,0	100,0	100,0	0,0
		c	Cured products (raw and cooked)	9	17	0	0	0	1	100,0	100,0	100,0	5,6
			Total	**42**	**50**	**0**	**0**	**0**	**1**	**100,0**	**100,0**	**100,0**	**2,0**
3	Dairy products	a	Raw milk cheeses	6	15	1	3	0	0	70,0	90,0	84,0	0,0
		b	Other raw milk products	11	9	0	0	0	0	100,0	100,0	100,0	0,0
		c	Heat treated products	9	11	1	0	0	0	100,0	90,0	95,2	0,0
			Total	**26**	**35**	**2**	**3**	**0**	**0**	**90,3**	**93,5**	**92,4**	**0,0**
4	Fishery products	a	Raw products (fresh, frozen)	11	12	0	0	0	0	100,0	100,0	100,0	0,0
		b	Smoked, marinated	12	22	0	0	0	0	100,0	100,0	100,0	0,0
		c	Catering dishes	7	14	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**30**	**48**	**0**	**0**	**0**	**0**	**100,0**	**100,0**	**100,0**	**0,0**
5	Vegetables	a	Raw vegetables (fresh, frozen)	10	15	0	0	0	0	100,0	100,0	100,0	0,0
		b	Under modified atmosphere, pre-cooked vegetables	11	8	0	2	0	0	84,6	100,0	90,5	0,0
		c	Vegetables-based preparations / Processed vegetables	7	12	1	0	0	0	100,0	87,5	95,0	0,0
			Total	**28**	**35**	**1**	**2**	**0**	**0**	**93,5**	**96,8**	**95,5**	**0,0**
6	Environmental production samples	a	Process and cleaning water	7	13	0	0	0	0	100,0	100,0	100,0	0,0
		b	Dusts and residues	9	11	0	0	0	0	100,0	100,0	100,0	0,0
		c	Surface sampling	27	26	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**43**	**50**	**0**	**0**	**0**	**0**	**100,0**	**100,0**	**100,0**	**0,0**
All categories				**200**	**250**	**3**	**6**	**0**	**2**	**97,1**	**98,6**	**98,0**	**0,8**

* PPNA not included

** PPND not included

Table 36 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation 48 h

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE_{alt} %	SE_{ref} %	RT %	FPR %
1	Composite foods	a	Cold catering dishes	12	11	0	1	0	0	92,3	100,0	95,8	0,0
		b	Hot catering dishes	8	12	0	0	0	0	100,0	100,0	100,0	0,0
		c	Pastries and egg products	11	9	0	0	0	1	100,0	100,0	100,0	10,0
			Total	**31**	**32**	**0**	**1**	**0**	**1**	**96,9**	**100,0**	**98,5**	**3,0**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	22	16	1	0	0	0	100,0	95,7	97,4	0,0
		b	Catering meals and processed meat products	11	14	2	0	0	0	100,0	84,6	92,6	0,0
		c	Cured products (raw and cooked)	9	17	0	0	0	1	100,0	100,0	100,0	5,6
			Total	**42**	**47**	**3**	**0**	**0**	**1**	**100,0**	**93,3**	**96,8**	**2,1**
3	Dairy products	a	Raw milk cheeses	7	15	1	2	0	0	80,0	90,0	88,0	0,0
		b	Other raw milk products	11	9	0	0	0	0	100,0	100,0	100,0	0,0
		c	Heat treated products	9	11	1	0	0	0	100,0	90,0	95,2	0,0
			Total	**27**	**35**	**2**	**2**	**0**	**0**	**93,5**	**93,5**	**93,9**	**0,0**
4	Fishery products	a	Raw products (fresh, frozen)	11	12	0	0	0	0	100,0	100,0	100,0	0,0
		b	Smoked, marinated	12	22	0	0	0	0	100,0	100,0	100,0	0,0
		c	Catering dishes	7	14	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**30**	**48**	**0**	**0**	**0**	**0**	**100,0**	**100,0**	**100,0**	**0,0**
5	Vegetables	a	Raw vegetables (fresh, frozen)	10	15	0	0	0	0	100,0	100,0	100,0	0,0
		b	Under modified atmosphere, pre-cooked vegetables	11	8	0	2	0	0	84,6	100,0	90,5	0,0
		c	Vegetables-based preparations / Processed vegetables	7	12	1	0	0	0	100,0	87,5	95,0	0,0
			Total	**28**	**35**	**1**	**2**	**0**	**0**	**93,5**	**96,8**	**95,5**	**0,0**
6	Environmental production samples	a	Process and cleaning water	7	13	0	0	0	0	100,0	100,0	100,0	0,0
		b	Dusts and residues	9	11	0	0	0	0	100,0	100,0	100,0	0,0
		c	Surface sampling	27	26	0	0	0	0	100,0	100,0	100,0	0,0
			Total	**43**	**50**	**0**	**0**	**0**	**0**	**100,0**	**100,0**	**100,0**	**0,0**
All categories				**201**	**247**	**6**	**5**	**0**	**2**	**97,6**	**97,2**	**97,6**	**0,8**

* PPNA not included ** PPND not included

A summary of the results is given in Table 37.

Table 37 – Summary of results

		22 h	48 h
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA+PD)}{(PA+ND+PD)} \times 100\,\%$	97,1 %	97,6 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA+ND)}{(PA+ND+PD)}\ x\ 100\,\%$	98,6 %	97,2 %
Relative trueness	$RT = \frac{(PA+NA)}{N} \times 100\,\%$	98,0 %	97,6 %
False positive ratio for the alternative method* FP = PPNA + PPND	$FPR = \frac{(FP)}{NA} \times 100\,\%$	0,8 %	0,8 %

With ND = ND + PPND NA = NA + PPNA

3.1.2.1.1.6 Analysis of discordant results

The negative deviations are given in Table 38 and the positive deviations in Table 39.

Table 38 – Negative deviations

Year	Sample No	Product (French)	Product (English name	Artificial contamination		Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser for 22h at 30°C								Category	Type
				Strain	Inoculation level (CFU/sample)	Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
						O&A	PALCAM	O&A	PALCAM			22 h	48h	Tests ISO 11290-1 2005	β hae-molysis	API Listeria	22 h	48 h	22 h	48 h		
2019	355	Sandwich jambon crudités œuf	Sandwich (ham, vegetables, egg)	/	/	st	st	H+	+	*L.monocytogenes*	+	st	st	/	/	/	-	-	ND	ND	1	a
2019	**83**	**Camembert au lait cru**	**Camembert (raw milk cheese)**	*L.monocytogenes* Ad2858	2,2	-	-	H+	+	*L.monocytogenes*	+	st	-	/	/	/	-	-	ND	ND	3	a
2019	**1180**	**Coulommiers au lait cru**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad1201	3,0	st	st	H+	+	*L.monocytogenes*	+	st	H+ (1col)	/	+	*L.monocytogenes*	-	+	ND	PA	3	a
2019	**1182**	**Emmental français au lait cru**	**Emmental (raw milk cheese)**	*L.monocytogenes* Ad1205	5,2	-	st	H+ (2col)	+	*L.monocytogenes*	+	-	-	/	/	/	-	-	ND	ND	3	a
2007	73	Carottes en rondelles	Sliced carrots	/	/	-	-	+	+	*L.monocytogenes*	+	-	-	/	/	/	-	-	ND	ND	5	b
2007	**186**	**Carottes rondelles**	**Sliced carrots**	*L.monocytogenes* 1016/1413		-	-	+	+	*L.monocytogenes*	+	-	-	/	/	/	-	-	ND	ND	5	b

Table 39 – Positive deviations

Year	Sample No	Product (French)	Product (English name	Artificial contamination		Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser for 22h at 30°C								Category	Type
				Strain	Inoculation level (CFU/sample)	Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
						O&A	PALCAM	O&A	PALCAM			22 h	48h	β hae-molysis	API Listeria		22 h	48 h	22 h	48 h		
2007	2653	Escalope de veau hachée	Minced veal cutlet	/	/	-	+	-	+	-	-	-	+2col	/	/		+	+	PD	PD	2	a
2007	2662	Paupiettes	Paupiettes	/	/	-	+	-	+	-	-	-	+ 1col	/	/		+	+	PD	PD	2	b
2007	2718	Roti de veau Orloff	Roast veal Orloff	/	/	-	+	-	+	-	-	-	+2col	/	/		+	+	PD	PD	2	b
2019	**1183**	**Brie de Meaux au lait cru**	**Brie de Meaux (raw milk cheese)**	*L.monocytogenes* Ad1205	5,2	-	-	-	-	/	-	H+(3col)	H+(3col)	+	*L.monocytogenes*		+	+	PD	PD	3	a
2019	**737**	**Cousteron**	**Cousteron**	*L.monocytogenes* Ad977	1,8	st	st	st	st	/	-	H+(1col)	H+(1col)	+	*L.monocytogenes*		+	+	PD	PD	3	c
2007	2618	Farine de blé noir	Buckwheat flour	/	/	-	+	-	+	-	-	+	+	/	/		+	+	PD	PD	5	c

♦ Analyses performed according to the COFRAC accreditation

Negative deviations:

6 negative deviations were observed; they concerned 2 naturally contaminated samples and 4 artificially contaminated samples. For one sample (1180: Raw milk cheese), a characteristic colony appeared on COMPASS *Listeria* Agar after 48h of incubation. For all samples with negative deviations, characteristic colonies were only observed in the reference method after isolation from Fraser broth. The samples were probably very weakly contaminated.

Positive deviations:

6 positive deviations were observed; four were from naturally contaminated samples and two from artificially contaminated samples. The volume of Half Fraser broth used for streaking onto COMPASS *Listeria* Agar (100 µL) is greater than that used for streaking on reference method agars (2 X 10 µL) which likely allowed recovery of *Listeria monocytogenes* strains present at a low rate in the primary enrichment.

The discordant analysis according to ISO 16140-2 (2016) is given in Table 40 for 22 h of incubation and Table 41 for 48 h of incubation.

Table 40 – Analysis of discordant results – Incubation 22 h

Category		Type		N+	ND	PPND	PD	Paired study (ND+PPND)-PD	Paired study AL	Paired study (ND+PPND)+PD	Paired study AL
1	Composite foods	a	Cold catering dishes	13	1	0	0				
		b	Hot catering dishes	8	0	0	0				
		c	Pastries and egg products	11	0	0	0				
			Total	32	1	0	0	1	3	1	6
2	Meat products	a	Raw meat products (frozen, not frozen, seasoned)	22	0	0	0				
		b	Catering and processed meat products	11	0	0	0				
		c	Cured products (raw and cooked)	9	0	0	0				
			Total	42	0	0	0	0	3	0	6
3	Dairy products	a	Raw milk cheeses	10	3	0	1				
		b	Other raw milk products	11	0	0	0				
		c	Heat treated products	10	0	0	1				
			Total	31	3	0	2	1	3	5	6
4	Fishery products	a	Raw products (fresh, frozen)	11	0	0	0				
		b	Smoked, marinated	12	0	0	0				
		c	Catering dishes	7	0	0	0				
			Total	30	0	0	0	0	3	0	6
5	Vegetables	a	Raw vegetables (fresh, frozen)	10	0	0	0				
		b	Under modified atmosphere, pre-cooked vegetables	13	2	0	0				
		c	Vegetables-based preparations / Processed vegetables	8	0	0	1				
			Total	31	2	0	1	1	3	3	6
6	Environmental production samples	a	Process and cleaning water	7	0	0	0				
		b	Dusts and residues	9	0	0	0				
		c	Surface sampling	27	0	0	0				
			Total	43	0	0	0	0	3	0	6
All categories				**209**	**6**	**0**	**3**	**3**	**6**	**9**	**16**

Table 41 – Analysis of discordant results – Incubation 48 h

Category		Type		N+	ND	PPND	PD	Paired study (ND+PPND)-PD	Paired study AL	Paired study (ND+PPND)+PD	Paired study AL
1	Composite foods	a	Cold catering dishes	13	1	0	0				
		b	Hot catering dishes	8	0	0	0				
		c	Pastries and egg products	11	0	0	0				
			Total	32	1	0	0	1	3	1	6
2	Meat products	a	Raw meat products (frozen, not frozen, seasoned)	23	0	0	1				
		b	Catering and processed meat products	13	0	0	2				
		c	Cured products (raw and cooked)	9	0	0	0				
			Total	45	0	0	3	-3	3	3	6
3	Dairy products	a	Raw milk cheeses	10	2	0	1				
		b	Other raw milk products	11	0	0	0				
		c	Heat treated products	10	0	0	1				
			Total	31	2	0	2	0	3	4	6
4	Fishery products	a	Raw products (fresh, frozen)	11	0	0	0				
		b	Smoked, marinated	12	0	0	0				
		c	Catering dishes	7	0	0	0				
			Total	30	0	0	0	0	3	0	6
5	Vegetables	a	Raw vegetables (fresh, frozen)	10	0	0	0				
		b	Under modified atmosphere, pre-cooked vegetables	13	2	0	0				
		c	Vegetables-based preparations / Processed vegetables	8	0	0	1				
			Total	31	2	0	1	1	3	3	6
6	Environmental production samples	a	Process and cleaning water	7	0	0	0				
		b	Dusts and residues	9	0	0	0				
		c	Surface sampling	27	0	0	0				
			Total	43	0	0	0	0	3	0	6
All categories				**212**	**5**	**0**	**6**	**-1**	**6**	**11**	**16**

The calculated values for ((ND+PPND)-PD) and for ND+PPND+PD meet the acceptability limit (AL) for each individual category and for all categories combined regardless of the incubation time tested (22h and 48h).

3.1.2.1.2 Relative level of detection

3.1.2.1.2.1 Protocol

In the initial validation study, five matrix/strain pairs were tested (see Table 42). Since a fifth food category is required for "All Products" validation, a mixed salad inoculated with *Listeria monocytogenes* Ad494 was tested for the renewal study to represent the composite food category.

Table 42 - Defined (matrix/strain) pairs for the RLOD determination

Category	Matrix	Strain	Origin	Protocol applied after inoculation and before analysis
Composite foods	Mixed salad	*L. monocytogenes* Ad494	Deli salad (Piémontaise)	48 h at 5°C ± 3°C
Meat products	Rillettes	*L. monocytogenes* V2/124	Pork	/
Dairy products	Raw milk	*L. monocytogenes* 153	Raw milk cheese	/
Fishery products	Smoked salmon	*L. monocytogenes* BR2	Environment (salmon)	/
Vegetables	Green beans	*L. monocytogenes* 1011/1410	Broccolis	/
Environmental production samples	Process water	*L. monocytogenes* 877/113	Environment (surface)	/

For the initial validation, 6 replicates were tested per inoculation rate. Samples were inoculated individually with a bacterial suspension. A minimum of 4 inoculation levels were tested.
For the renewal study, the protocol described in ISO 16140-2:2016 was applied:

- A negative control: 5 samples,
- A low contamination level providing fractional recovery data, with 20 replicates,
- A high contamination level, with 5 replicates.

A total flora count of the matrix was performed for the initial validation and for the renewal studies.

3.1.2.1.2.2 Calculation and interpretation

The raw data are given in **Appendix 12**.

The RLOD calculations were performed using the Excel spreadsheet available at http://standards.iso.org/iso/16140 - RLOD using data from the 2011 extension study. The RLOD are given in Table 43.

Table 43 - Presentation of RLOD before and after confirmation of the alternative method results

Matrix/strain pairs	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value	AL
Deli salad (Piémontaise) / *L.monocytogenes* Ad494	1,000	0,420	2,383	0,000	0,434	0,000	1,000	1,5
Rillettes / *L.monocytogenes* V2/124	1,000	0,446	2,240	0,000	0,403	0,000	1,000	
Raw milk / *L.monocytogenes* 153	1,179	0,439	3,169	0,165	0,494	0,334	0,739	
Smoked salmon / *L.monocytogenes* BR32	1,000	0,406	2,462	0,000	0,450	0,000	1,000	
Frozen green beans / *L.monocytogenes* 1011/1410	1,000	0,446	2,240	0,000	0,403	0,000	1,000	
Process water / *L.monocytogenes* 877/113	1,000	0,344	2,903	0,000	0,533	0,000	1,000	
Combined results	**1,027**	**0,690**	**1,528**	**0,027**	**0,199**	**0,135**	**0,893**	

The RLOD values meet the acceptability limit of 1.5 for a paired study.

The $LOD_{50\,\%}$ calculations according to Wilrich & Wilrich POD-LOD calculation program - version 11, 2022-10-12 test are given in Table 44.

Table 44 –LOD_{50} results

Category	Matrix/strain pairs	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich[4]	
		Reference method	Alternative method
1	Deli salad (Piémontaise /) *L.monocytogenes* Ad494	0.8 [0.4; 1.4]	0.6 [0.3; 0.9]
2	Rillettes / *L.monocytogenes* V2/124	0.6 [0.4; 1.2]	0.6 [0.4; 1.2]
3	Raw milk / *L.monocytogenes* 153	0.4 [0.2; 0.6]	0.4 [0.2; 0.7]
4	Smoked salmon / *L.monocytogenes* BR32	0.9 [0.6; 1.5]	0.9 [0.6; 1.5]
5	Frozen green beans / *L.monocytogenes* 1011/1410	0.3 [0.1; 0.5]	0.3 [0.1; 0.5]
6	Process water / *L.monocytogenes* 877/113	0.7 [0.4; 1.2]	0.7 [0.4; 1.2]
	Combined results	**0.6 [0.5; 0.8]**	**0.6 [0.5; 0.7]**

The LOD_{50} varies from 0.3 to 0.9 CFU/25 g for the reference and the alternative methods.

3.1.2.1.3 Inclusivity and exclusivity

The inclusivity is the ability of the alternative method to detect the target analyte from a wide range of strains. The exclusivity is the lack of interference from a relevant range of non-target strains of the alternative method.

Several inclusivity/exclusivity studies were performed:

Year	Study	Strains
2007 (May)	Initial validation *L. monocytogenes*	50 *L. monocytogenes* 30 non-target strains
2007 (September)	Extension CONFIRM' *L.mono Agar*	153 *L. monocytogenes* 106 non-target strains
2011	Extension *L.*spp	Data from 2007+ 1 *L.ivanovii*
2013	Extension CONFIRM' *L.mono broth*	100 *Listeria monocytogenes* 70 non-target strains (35 *Listeria spp.)*

[4] Wilrich, C., and P.-Th. Wilrich: Estimation of the POD function and the LOD of a qualitative microbiological measurement method. AOAC International **92** (2009) 1763 - 1772.

3.1.2.1.3.1 Initial validation-2007

Protocols

- **Inclusivity**: Fifty strains of *Listeria monocytogenes* were thawed and grown in Brain-heart infusion (BHI) broth at 37°C. Strains were inoculated at a rate of 10 to 100 cells per 225 ml in Half Fraser broth. The complete COMPASS® *Listeria* Agar protocol was then applied.

- **Exclusivity**: Thirty negative strains were thawed and cultured in BHI at 37°C. Strains were then inoculated at 10^5 CFU/ml in nutrient broth. The full protocol of the alternative method was then applied.

Results

Raw data are given in **Appendix 13**.

- **Inclusivity**: all the *Listeria monocytogenes* strains gave typical blue colonies with a halo of opacification.

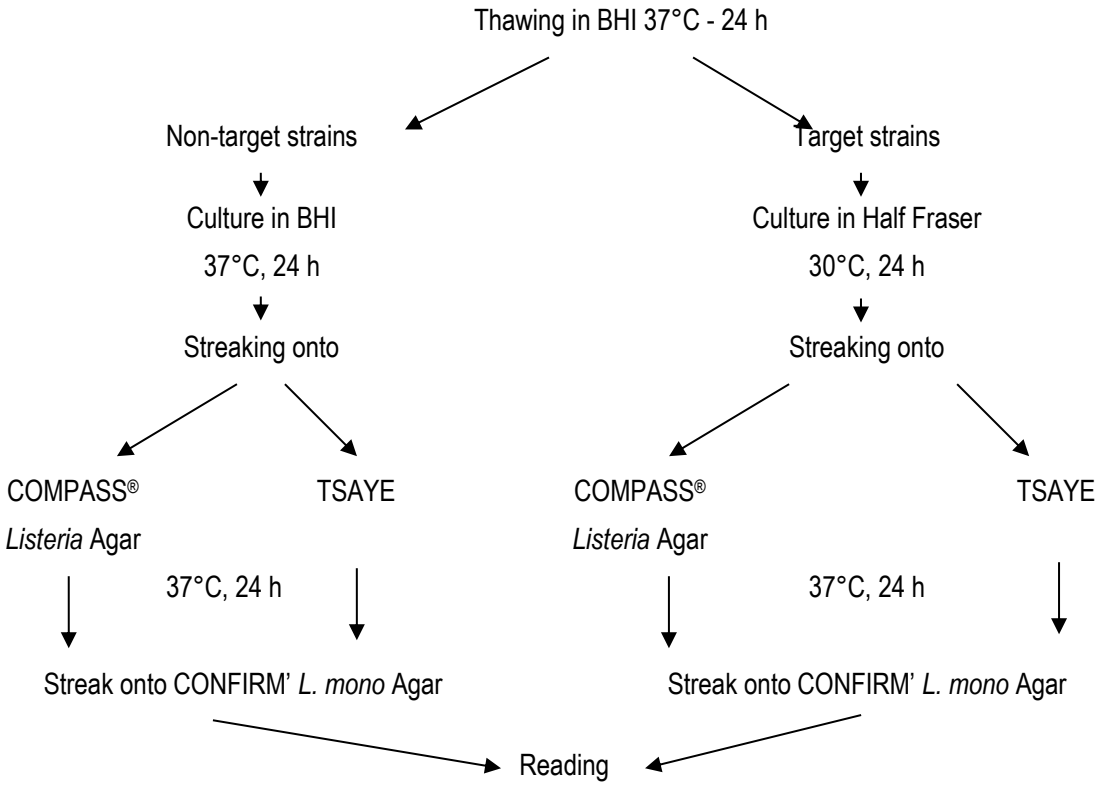
- **Exclusivity**: among the thirty strains tested, only the *L. ivanovii* strains gave blue colonies with an opacifying halo after 24 h of incubation. It can be noted however that the halos were smaller than those obtained with *Listeria monocytogenes* strains.

3.1.2.1.3.2 Extension study for CONFIRM'L.mono Agar (2007)

153 target strains and 106 non-target strains were tested.

Protocol

The protocol is given below:



In case of discrepancy with the expected result, the confirmation protocol of the reference method was applied, i.e. Gram staining, Catalase, haemolysis, CAMP Test, fermentation of rhamnose and xylose.

> *Results*

- **Target strains**

Raw data are given in **Appendix 14**.

Out of 153 *Listeria monocytogenes* strains tested, 152 gave a characteristic blue colony with an opacification halo on COMPASS® *Listeria* Agar. All these strains gave a characteristic reaction on CONFIRM' *L. mono* Agar.

Listeria monocytogenes 6072 did not grow on COMPASS® *Listeria* Agar from Half Fraser broth. Growth was obtained on CONFIRM' *L. mono* Agar from a TSYEA colony. An opacification halo was obtained with a negative Rhamnose test. This strain isolated onto ALOA and OCLA gave a characteristic reaction. The strain gave a positive Rhamnose test in API *Listeria* gallery and in tube. The identification to the species *Listeria monocytogenes* was confirmed.

- **Non-target strains**

106 strains were tested.

22 tested *Listeria innocua* strains gave non-characteristic colonies on COMPASS® *Listeria* Agar and on CONFIRM' *L. mono* Agar.

Out of 15 *Listeria ivanovii* strains tested, 14 gave blue colonies with halo on COMPASS® *Listeria* Agar. These strains gave a negative reaction on CONFIRM'*L. mono* Agar (Rhamnose -), except for *L. ivanovii* Ad616 which gave a weak positive Rhamnose reaction and *L. ivanovii* Ad648 which gave a characteristic reaction on CONFIRM'*L. mono* Agar. The *Listeria ivanovii* Ad662 strain did not give an opacification halo on COMPASS® *Listeria* Agar even after 48 hours of incubation. This strain did not grow on CONFIRM'*L. mono* Agar.
The 9 *Listeria seeligeri* strains and 2 *Listeria grayi* strains tested gave negative reactions on both COMPASS® *Listeria* Agar and CONFIRM' *L. mono* Agar.

Out of the 21 *Bacillus cereus* strains tested, 12 gave an opacification halo on COMPASS® *Listeria* Agar with or without growth (5 strains). The same phenomenon was observed on CONFIRM'*L.mono* agar, but with a negative Rhamnose test.

The other *Bacillus* species tested did not give any characteristic reaction, neither on COMPASS® *Listeria* Agar, nor on CONFIRM'*L. mono* Agar. The same result was observed for *Enterococcus*, *Lactococcus* and *Streptococcus* strains tested, which did not grow or show a characteristic reaction on COMPASS® *Listeria* Agar.

> ***Conclusion***

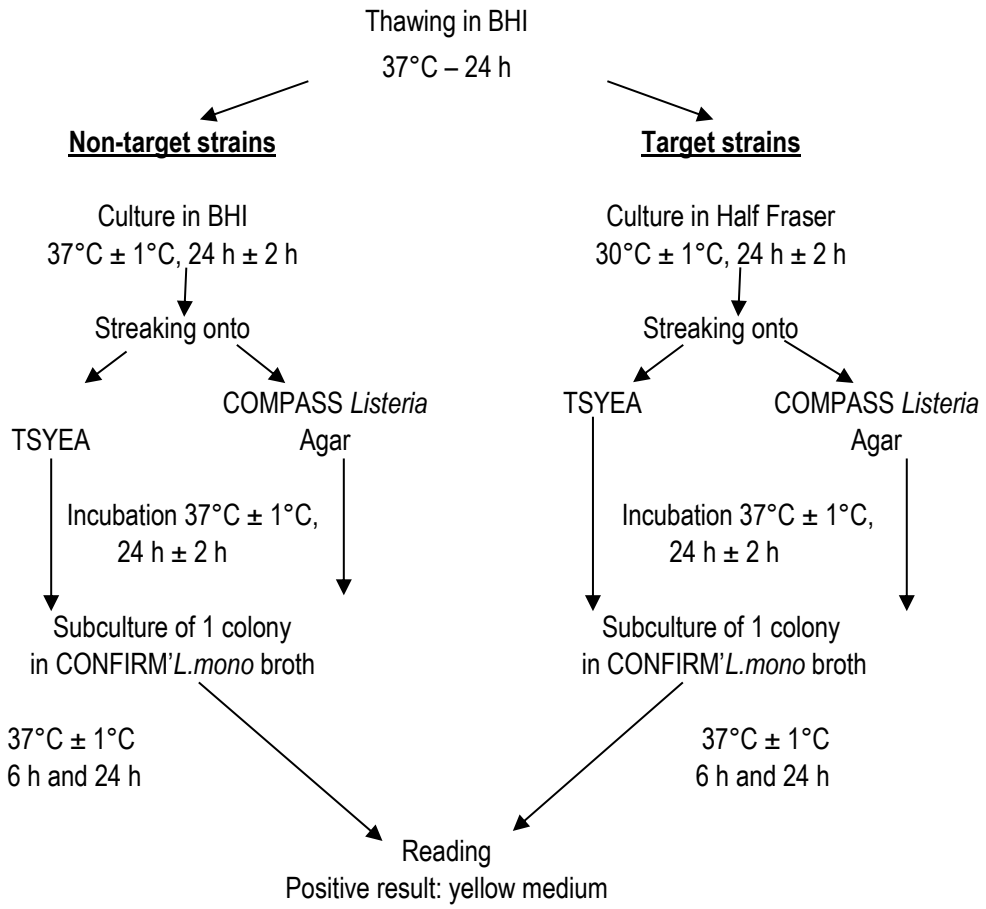
- **Inclusivity**: 152 out of 153 *L. monocytogenes* strains tested showed a characteristic reaction on both COMPASS® *Listeria* Agar and CONFIRM' *L.mono* Agar.

- **Exclusivity**: the CONFIRM'*L. mono* Agar test allows to exclude all strains of *Listeria ivanovii* or *B. cereus* that may have shown a more or less characteristic reaction on COMPASS® *Listeria* Agar.

3.1.2.1.3.3 Extension study for CONFIRM'L.mono broth - 2013

> ***Protocol***

The study was therefore completed by testing 100 target strains and 70 non-target strains using the following protocol:



Results

Raw data are given in **Appendix 15**.

- **Inclusivity:** For the CONFIRM'*L.mono* broth confirmatory test, 145 strains tested gave a positive result (yellow colour change) after 6 h incubation at 37°C.
  For *Listeria monocytogenes* strains 7711/7516, A00C036, Ad235, Ad626 and A00C054, the indicator change was weaker (brown color) at 6 h. For 3 of these, continued incubation up to 24 h resulted in a positive test.
  However, for *Listeria monocytogenes* strains 7711/7516 and A00C054, the test remained questionable. Identical results were obtained using TSYEA.

- **Exclusivity:** among the 70 strains tested, only the 20 *Listeria ivanovii* strains gave typical colonies with halo on COMPASS® *Listeria* Agar; all these strains gave a negative CONFIRM'*L.mono* test (after 6 h and 24 h of incubation).

3.1.2.2 Protocol: Half Fraser - 37°C

3.1.2.2.1 Sensitivity study

3.1.2.2.1.1 Number and nature of samples

447 samples were analyzed, providing 186 positive and 261 negative results after 22h incubation and 188 positive and 257 negative results after 48h incubation.

The distribution of samples by category and type is given in Table 45 (22 h incubation and 48 h incubation).

Table 45 - Distribution per tested category and type

Category		Type		COMPASS *Listeria* Agar - 22h			COMPASS *Listeria* Agar 48h		
				Positive	Negative	Total	Positive	Negative	Total
1	Composite foods	a	Cold catering dishes	8	12	20	8	12	20
		b	Hot catering dishes	11	10	21	11	10	21
		c	Pastries and egg products	11	11	22	11	11	22
			Total	30	33	63	30	33	63
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	10	12	22	10	12	22
		b	Catering meals and processed meat products	10	13	23	10	13	23
		c	Cured products (raw and cooked)	11	9	20	11	9	20
			Total	31	34	65	31	34	65
3	Dairy products	a	Raw milk cheeses	10	12	22	10	12	22
		b	Other raw milk products	14	8	22	15	7	22
		c	Heat treated products	7	13	20	7	13	20
			Total	31	33	64	32	32	64
4	Fishery products	a	Raw products (fresh, frozen)	9	22	31	9	22	31
		b	Smoked, marinated	12	26	38	12	26	38
		c	Catering dishes	13	30	43	13	30	43
			Total	34	78	112	34	78	112
5	Vegetables	a	Raw vegetables (fresh, frozen)	11	15	26	11	15	26
		b	Under modified atmosphere, pre-cooked vegetables	8	14	22	8	14	22
		c	Vegetables-based preparations / Processed vegetables	11	12	23	12	11	23
			Total	30	41	71	31	40	71
6	Environmental production samples	a	Process and cleaning water	12	12	24	12	12	24
		b	Dusts and residues	9	12	21	9	12	21
		c	Surface sampling	9	18	27	9	18	57
			Total	30	42	72	30	42	72
All categories				**186**	**261**	**447**	**188**	**259**	**447**

3.1.2.2.1.2 Artificial contamination of samples

Artificial contaminations were done by seeding protocol. The artificial contaminations are presented in **Appendix 16**.

135 samples were contaminated; 95 and 97 were positive by at least one method after 22 and 48 h of incubation of COMPASS *Listeria* Agar, respectively.

The distribution of positive samples per type of contamination and level of inoculation is given in Table 46.

Table 46 - Repartition of the positive samples per inoculation protocol and inoculation level

	Naturally contaminated	Artificial contamination (CFU/sample)			Total
		Seeding			
		≤3	3<x≤10	10<x≤30	
Number of samples	91	66	31	0	188
%	48,4%	35,1%	16,5%	0,0%	100,00%

The percentage of artificially contaminated samples between 3 and 10 CFU/sample is 16.5%.

The number of naturally contaminated samples represents 48.4% of the total number of positive samples.

3.1.2.2.1.3 Protocols applied during the study

> ***Incubation time***

- Enrichment in Half Fraser: 18 h at 37°C
- COMPASS *Listeria* Agar incubation: 22 h and 48 h at 37°C ± 1°C

> ***Confirmation***

- by performing a *Listeria* biochemical gallery from a characteristic colony isolated on COMPASS Listeria Agar without purification step;
– by the tests described in the ISO 11290-1 (2017) method: β-haemolysis, biochemical tests after purification step.

Enrichment storage

Half Fraser broth storage was not tested during the initial validation for *Listeria monocytogenes* detection. The AFNOR Technical Committee agreed that this should also be the case for the extension.

3.1.2.2.1.4 Test results

Raw data are given in **Appendix 17**. The results per category are given in Table 47 (22 h incubation) and Table 48 (48 h incubation).

Table 47 - Incubation for 22 h at 37°C

		COMPASS *Listeria* Agar - 22h						
Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods	17	33	8	5	0	0	63
2	Meat products	24	34	2	5	0	0	65
3	Dairy products	17	33	8	6	0	0	64
4	Fishery products	22	78	6	6	0	0	112
5	Vegetables	20	41	5	4	0	0	71
6	Environmental production samples	23	42	6	1	0	0	72
All categories		**123**	**261**	**35**	**27**	**1**	**0**	**447**

* PPNA not included ** PPND not included

Table 48 - Incubation for 48 h

		COMPASS *Listeria* Agar - 48 h						
Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods	17	33	8	5	0	0	63
2	Meat products	24	34	2	5	0	0	65
3	Dairy products	17	32	9	6	0	0	64
4	Fishery products	22	78	6	6	0	0	112
5	Vegetables	20	40	6	5	0	0	71
6	Environmental production samples	23	42	6	1	0	0	72
All categories		**123**	**259**	**37**	**28**	**0**	**0**	**447**

* PPNA not included ** PPND not included

3.1.2.2.1.5 Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (FPR)

The calculations are presented in Table 49 (22 h incubation) and Table 50 (48 h incubation).

Table 49 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation 22 h

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE alt %	SE ref %	RT %	FPR %
1	Composite foods	a	Cold catering dishes	2	12	4	2	0	0	75,0	50,0	70,0	0,0
		b	Hot catering dishes	6	10	3	2	0	0	81,8	72,7	76,2	0,0
		c	Pastries and egg products	9	11	1	1	0	0	90,9	90,9	90,9	0,0
			Total	**17**	**33**	**8**	**5**	**0**	**0**	**83,3**	**73,3**	**79,4**	**0,0**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	7	12	0	3	0	0	70,0	100,0	86,4	0,0
		b	Catering meals and processed meat products	10	13	0	0	0	0	100,0	100,0	100,0	0,0
		c	Cured products (raw and cooked)	7	9	2	2	0	0	81,8	81,8	80,0	0,0
			Total	**24**	**34**	**2**	**5**	**0**	**0**	**83,9**	**93,5**	**89,2**	**0,0**
3	Dairy products	a	Raw milk cheeses	5	12	3	2	0	0	80,0	70,0	77,3	0,0
		b	Other raw milk products	8	8	3	3	0	0	78,6	78,6	72,7	0,0
		c	Heat treated products	4	13	2	1	0	0	85,7	71,4	8485,02	0,0
			Total	**17**	**33**	**8**	**6**	**0**	**0**	**80,6**	**74,2**	**78,1**	**0,0**
4	Fishery products	a	Raw products (fresh, frozen)	5	22	3	1	0	0	88,9	66,7	87,1	0,0
		b	Smoked, marinated	11	26	1	0	0	0	100,0	91,7	97,4	0,0
		c	Catering dishes	6	30	2	5	0	0	61,5	84,6	83,7	0,0
			Total	**22**	**78**	**6**	**6**	**0**	**0**	**82,4**	**82,4**	**89,3**	**0,0**
5	Vegetables	a	Raw vegetables (fresh, frozen)	7	15	2	2	0	0	81,8	81,8	84,6	0,0
		b	Under modified atmosphere, pre-cooked vegetables	4	14	2	1	1	0	75,0	75,0	81,8	7,1
		c	Vegetables-based preparations / Processed vegetables	9	12	1	1	0	0	90,9	90,9	91,3	0,0
			Total	**20**	**41**	**5**	**4**	**1**	**0**	**83,3**	**83,3**	**85,9**	**2,4**
6	Environmental production samples	a	Process and cleaning water	10	12	2	0	0	0	100,0	83,3	91,7	0,0
		b	Dusts and residues	6	12	2	1	0	0	88,9	77,8	85,7	0,0
		c	Surface sampling	7	18	2	0	0	0	100,0	77,8	92,6	0,0
			Total	**23**	**42**	**6**	**1**	**0**	**0**	**96,7**	**80,0**	**90,3**	**0,0**
All categories				**123**	**261**	**35**	**27**	**1**	**0**	**84,9**	**81,2**	**85,9**	**0,4**

* PPNA not included

** PPND not included

Table 50 - Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – Incubation 48 h

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE_{alt} %	SE_{ref} %	RT %	FPR %
1	Composite foods	a	Cold catering dishes	2	12	4	2	0	0	75,0	50,0	70,0	0,0
		b	Hot catering dishes	6	10	3	2	0	0	81,8	72,7	76,2	0,0
		c	Pastries and egg products	9	11	1	1	0	0	90,9	90,9	90,9	0,0
			Total	**17**	**33**	**8**	**5**	**0**	**0**	**83,3**	**73,3**	**79,4**	**0,0**
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	7	12	0	3	0	0	70,0	100,0	86,4	0,0
		b	Catering meals and processed meat products	10	13	0	0	0	0	100,0	100,0	100,0	0,0
		c	Cured products (raw and cooked)	7	9	2	2	0	0	81,8	81,8	80,0	0,0
			Total	**24**	**34**	**2**	**5**	**0**	**0**	**83,9**	**93,5**	**89,2**	**0,0**
3	Dairy products	a	Raw milk cheeses	5	12	3	2	0	0	80,0	70,0	77,3	0,0
		b	Other raw milk products	8	7	4	3	0	0	80,0	73,3	68,2	0,0
		c	Heat treated products	4	13	2	1	0	0	85,7	71,4	84,2	0,0
			Total	**17**	**32**	**9**	**6**	**0**	**0**	**81,3**	**71,9**	**76,5**	**0,0**
4	Fishery products	a	Raw products (fresh, frozen)	5	22	3	1	0	0	88,9	66,7	87,1	0,0
		b	Smoked, marinated	11	26	1	0	0	0	100,0	91,7	97,4	0,0
		c	Catering dishes	6	30	2	5	0	0	61,5	84,6	83,7	0,0
			Total	**22**	**78**	**6**	**6**	**0**	**0**	**82,4**	**82,4**	**89,3**	**0,0**
5	Vegetables	a	Raw vegetables (fresh, frozen)	7	15	2	2	0	0	81,8	81,8	84,6	0,0
		b	Under modified atmosphere, pre-cooked vegetables	4	14	2	2	0	0	75,0	75,0	81,8	0,0
		c	Vegetables-based preparations / Processed vegetables	9	11	2	1	0	0	91,7	83,3	87,0	0,0
			Total	**20**	**40**	**6**	**5**	**0**	**0**	**83,9**	**80,6**	**84,5**	**0,0**
6	Environmental production samples	a	Process and cleaning water	10	12	2	0	0	0	100,0	83,3	91,7	0,0
		b	Dusts and residues	6	12	2	1	0	0	88,9	77,8	85,7	0,0
		c	Surface sampling	7	18	2	0	0	0	100,0	77,8	92,6	0,0
			Total	**23**	**42**	**6**	**1**	**0**	**0**	**96,7**	**80,0**	**90,3**	**0,0**
All category				**123**	**259**	**37**	**28**	**0**	**0**	**85,1**	**80,3**	**85,5**	**0,0**

* PPNA not included

** PPND not included

A summary of the results is given in Table 51.

Table 51 – Summary of results

		22 h	48 h
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\,\%$	84,9 %	85,1 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)}\ x\ 100\,\%$	81,2 %	80,3 %
Relative trueness	$RT = \frac{(PA + NA)}{N} \times 100\,\%$	85,9 %	85,5 %
False positive ratio for the alternative method* **FP = PPNA + PPND**	$FPR = \frac{(FP)}{NA} \times 100\,\%$	0,4 %	0,0 %

With *ND = ND + PPND* *NA = NA + PPNA*

3.1.2.2.1.6 Analysis of discordant results

The negative deviations are given in Table 52 and the positive deviations in Table 53.

Table 52 – Negative deviations

Sample N°	Product (French)	Product (English name)	Artificial contamination		Reference method: ISO 11290-1♦	Alternative method: COMPASS *Listeria* Agar									Category	Type
						Half Fraser pre-warmed at 37°C, incubated for 18 h at 37°C										
						COMPASS *Listeria* Agar		Confirmations		Final result *L.monocytogenes*		Agreement 22 H	Agreement 48 H	Subculture in Fraser 1 on negative samples		
			Strain	Inoculation level (CFU/sample)	*L.monocy-togenes*	22 h	48 h	β haemolyse	API Listeria	22 h	48 h					
725	**Sandwich jambon Emmental**	**Emmental ham sandwich**	*L.monocytogenes* Ad270	1,8	+	-	-			-	-	**ND**	**ND**	**-**	1	a
180	Salade pamplemousse	Grapefruit salad	/	/	+	st	-			-	-	**ND**	**ND**	**-**	1	a
8617	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad2154	1,6	+	st	-			-	-	**ND**	**ND**	**-**	1	b
529	**Couscous 3 viandes**	**Couscous 3 meats**	*L.monocytogenes* Ad1494	1,0	+	st	st			-	-	**ND**	**ND**	**-**	1	b
8625	**Flan**	Flan	*L.monocytogenes* JL2862 +*L.innocua* Ad644	1,0+1,4	+	H-	H-	+	*L.innocua*	-	-	**ND**	**ND**	**-**	1	c
8696	Viande rouge surgelée	Frozen red meat	/	/	+	st	-			-	-	**ND**	**ND**	**-**	2	a
8714	Côte de porc thym romarin	Pork chop with thyme and rosemary	/	/	+	st	-			-	-	**ND**	**ND**	**-**	2	a
3137	Viande de lièvre	Hare meat	/	/	+	-	-			-	-	**ND**	**ND**	-	2	a
347	Merguez	Merguez	/	/	+	st	-			-	-	**ND**	**ND**	**-**	2	c
349	Lardons fumés cuits	Cooked smoked bacon	/	/	+	st	st			-	-	**ND**	**ND**	**-**	2	c
8348	Mélange de légumes	Mixed vegetables	/	/	+	-	-			-	-	**ND**	**ND**	**-**	5	b
83	**Camembert au lait cru**	**Camembert (raw milk cheese)**	*L.monocytogenes* Ad2858	2,2	+	-	-			-	-	**ND**	**ND**	**-**	3	a
731	**Coulommiers au lait cru**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad977	1,8	+	st	-			-	-	**ND**	**ND**	**-**	3	a
536	**Lait cru fermier**	**Raw milk from farm**	*L.monocytogenes* Ad1236	0,6	+	H-	H-	-	*L.innocua*	-	-	**ND**	**ND**	**-**	3	b
1201	Lait cru fermier	Raw milk from farm	/	/	+	H-	H-	**-**	*L.innocua*	-	-	**ND**	**ND**	**-**	3	b
1206	Beurre cru	Raw butter	/	/	+	H-	H-	**-**	*L.innocua*	-	-	**ND**	**ND**	**-**	3	b
537	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	*L.monocytogenes* Ad2603	0,6	+	st	st			-	-	**ND**	**ND**	**-**	3	c
4078	Barquette de pavé de saumon	Tray of salmon steaks	/	/	+	st	-			-	-	**ND**	**ND**	-	4	a
4086	Pavé de colin napolitain pré-cuit	Pre-cooked Neapolitan hake steak	/	/	+	st	-			-	-	**ND**	**ND**	-	4	c
4181	**Tielles Sétois**	**Tielles Sétois**	*L.monocytogenes* Ad1279+ *L.innocua* Ad1674	0,8	+	H-	H-	+	*L.innocua*	-	-	**ND**	**ND**	-	4	c
4182	**Plat préparé de pavé de saumon**	**Prepared dish of salmon steak**	*L.monocytogenes* Ad1412+ *L.welshimeri* Ad1669	2,0	+	H-	H-	+	*L.welshimeri*	-	-	**ND**	**ND**	-	4	c
5194	Terrine de saumon	Salmon terrine	/	/	+	-	-			-	-	**ND**	**ND**	-	4	c
5328	Terrine aux Saint-Jacques	Scallop terrine	/	/	+	-	-			-	-	**ND**	**ND**	-	4	c
95	**Mélange de jeunes pousses**	**Mix of baby greens**	*L.monocytogenes* Ad2643	1,4	+	-	H+d	-	NC on TSYE	-	-	**ND**	**ND**	**-**	5	a
2184	Maïs doux en grains	Sweet corn in grains	/	/	+	-	-			-	-	**ND**	**ND**	-	5	a
2935	Crudités mélange chou blanc carottes céleri	Raw vegetables white cabbage carrot celery mix	/	/	+	H+d/H-	H-	-	*L.welshimeri*	-	-	**PPND**	**ND**	-	5	b
2191	Mélange trois poivrons	Three peppers mix	/	/	+	st	-			-	-	**ND**	**ND**	-	5	c
524	**Déchets découpe poisson**	**Fish cuttings**	*L.monocytogenes* Ad2599	1,2	+	st	-			-	-	**ND**	**ND**	**-**	6	b

♦ Analyses performed according to the COFRAC accreditation

Table 53 – Positive deviations

N°	Product (French)	Product (English name)	Artificial contamination		Reference method: ISO 11290-1♦	Alternative method: COMPASS *Listeria* Agar						Category	Type
						Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C							
			Strain	Inoculation level (CFU/sample)	*L.monocytogenes*	COMPASS *Listeria* Agar		Confirmations		Final result *L. monocytogenes*		Agreement 22 H	Agreement 48 H		
						22 h	48 h	β haemolyse	API Listeria	22 h	48 h				
181	Sandwich jambon cheddar	Ham and cheddar sandwich	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	a
724	**Sandwich thon œuf**	**Tuna and egg sandwich**	*L.monocytogenes* Ad1186	2,0	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	a
726	**Sandwich jambon Emmental**	**Ham and Emmental sandwich**	*L.monocytogenes* Ad271	2,8	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	a
2206	Nigiri saumon	Nigiri salmon	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	a
8616	**Pizza jambon fromage**	**Ham and cheese pizza**	*L.monocytogenes* Ad1494	2,4	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	b
531	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad669	0,6	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	b
8628	**Tortilla aux oignons**	**Tortilla with onions**	*L.innocua* Ad1277	2,8	-	H+/H-	H+/H-	+/+	*L.monocytogenes*/ *L.innocua*	+	+	PD	PD	1	c
79	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad2154 +*L.welshimeri* Ad1670	0,4+1,2	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	1	b
1107	Lardons cuits fumés	Smoked bacon	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	2	c
1108	Farce à légumes	Vegetable stuffing	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	2	c
84	**Emmental français au lait cru**	**Raw milk cheese (Emmental)**	*L.monocytogenes* Ad1785	1,4	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	a
352	Lait	Milk	/	/	-	H+	H+ni	+	*L.monocytogenes*	+	+	PD	PD	3	b
532	**Brie de Meaux au lait cru**	**Brie de Meaux (raw milk cheese)**	*L.monocytogenes* Ad1236	0,6	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	a
734	**Beurre cru demi-sel**	**Raw semi-salted butter**	*L.monocytogenes* Ad977	1,8	-	-	H+d	+	*L.monocytogenes*	-	+	NA	PD	3	b
735	**Beurre cru demi-sel**	**Raw half-salted butter**	*L.monocytogenes* Ad1205	0,8	-	H+dni	H+dni	+	*L.monocytogenes*	+	+	PD	PD	3	b
736	**Coulommiers**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad665	2,4	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	c
737	**Cousteron**	**Cousteron**	*L.monocytogenes* Ad977	1,8	-	H+	H+ni	+	*L.monocytogenes*	+	+	PD	PD	3	c
1193	Fromage au lait cru de vache	Raw cow's milk cheese	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	a
1205	Beurre cru fermier	Raw farm butter	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	3	b
4077	Barquette de pavé de saumon	Tray of salmon steak	/	/	-	H+	H+	**+**	*L.monocytogenes*	+	+	PD	PD	4	a
4170	**Pavé de saumon**	**Salmon steak**	*L.monocytogenes* Ad1279 +*L.innocua* Ad1233	0,6	-	H+/H-	H+/H-	**+**	*L.monocytogenes*/ *L.innocua*	+	+	PD	PD	4	a
4171	**Filet de julienne**	**Julienne fillet**	*L.monocytogenes* Ad1412 +*L.innocua* Ad1674	1,4	-	H+/H-	H+/H-	**+**	*L.monocytogenes*/ *L.innocua*	+	+	PD	PD	4	a
5182	Saumon fumé	Smoked salmon	/	/	-	H+(2)	H+	**+**	No identification by API colony confirmed on RLM and by PCR	+	+	PD	PD	4	b
4087	Poisson blanc gratiné au fromage	White fish with cheese au gratin	/	/	-	H+	H+/H-d	**+**	*L.monocytogenes*	+	+	PD	PD	4	c
5331	Cabillaud sauce citron	Cod with lemon sauce	/	/	-	H+	H+	**+**	*L.monocytogenes*	+	+	PD	PD	4	c
2182	Maïs doux en grains	Sweet corn	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	5	a
3069	**Tomate**	**Tomato**	*L.monocytogenes* Ad1212	2,4	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	5	a
195	Légumes vapeurs (haricots, courgettes, poivrons)	Steamed vegetables (beans, zucchini, peppers)	/	/	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD	5	b
2928	Crudités mélange chou rouge, carottes, choux blancs	Mixed raw vegetables (red cabbage, carrots, white cabbage)	/	/	-	H+/H-	H+/H-	+	*L.monocytogenes*	+	+	PD	PD	5	b
3065	**Poêlée de trois légumes**	**Three vegetables mix**	*L.monocytogenes* Ad1238	1,2	-	-	H+	**+**	*L.monocytogenes*	+	+	NA	PD	5	c
3357	**Tomates semi-séchées**	**Semi-dried tomatoes**	*L.monocytogenes* Ad1672+ *L.seeligeri* Ad1293	4,4	-	H+	H+	**+**	*L.monocytogenes*	+	+	PD	PD	5	c

♦ Analyses performed according to the COFRAC accreditation

N°	Product (French)	Product (English name)	Artificial contamination		Reference method: ISO 11290-1♦	Alternative method: COMPASS *Listeria* Agar								Category	Type
						Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C									
			Strain	Inoculation level (CFU/sample)	*L.monocytogenes*	COMPASS *Listeria* Agar		Confirmations		Final result *L. monocytogenes*		Agreement 22 H	Agreement 48 H		
						22 h	48 h	β haemolyse	API Listeria	22 h	48 h				
3366	**Chiffonnette Stéphan avant nettoyage (fabrication barre de céréales)**	Wipe before cleaning process (cereal bar)	*L.monocytogenes* Ad546	4,2	-	H+	H+	**+**	*L.monocytogenes*	+	+	**PD**	**PD**	6	c
3369	**Chiffonnette avant nettoyage (saucisses cocktail)**	Wipe before cleaning process (cocktail sausages)	*L.monocytogenes* Ad268	3,2	-	H+	H+	**+**	*L.monocytogenes*	+	+	**PD**	**PD**	6	c
4580	**Eau de rinçage poussoir après production saucisson**	Rinsing water for pusher after production of sausage	*L.monocytogenes* Ad1259	1,8	-	H+	H+	**+**	*L.monocytogenes*	+	+	**PD**	**PD**	6	a
4581	**Eau de rinçage ustensiles knacks porc**	Rinsing water for pork knack utensils	*L.monocytogenes* Ad1261	1,0	-	H+	H+	**+**	*L.monocytogenes*	+	+	**PD**	**PD**	6	a
525	**Déchets poisson**	Fish waste	*L.monocytogenes* Ad2599	1,2	-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**	6	b
528	**Déchets veggie**	Veggie waste	*L.monocytogenes* Ad2643	1,0	-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**	6	b

Negative deviations:

28 negative deviations were observed at 22 h and 48 h of incubation of COMPASS Listeria Agar. They concerned 12 artificially contaminated samples and 16 naturally contaminated samples.
The presence of *Listeria monocytogenes* was not confirmed for any of these samples after subculture in Fraser 1. The negative deviations are probably related to the fact that this is an unpaired study.

Positive deviations:

35 and 37 positive deviations were obtained respectively after 24 h and 48 h incubation of COMPASS *Listeria* Agar. 23 were from artificially contaminated samples and 14 from naturally contaminated samples.

Two samples in negative agreement after 48 h of incubation were confirmed positive after subculture for 24 h in Fraser 1.

The analysis of the discordant results according to ISO 16140-2 (2016) is given in Table 54 for 22 h of incubation and Table 55 for 48 h of incubation.

Table 54 – Analysis of discordant results – Incubation 22 h

Category		Type		N+	ND	PPND	PD	(ND+PPND) -PD	AL
1	Composite foods	a	Cold catering dishes	8	2	0	4		
		b	Hot catering dishes	11	2	0	3		
		c	Pastries and egg products	11	1	0	1		
			Total	30	5	0	8	-3	3
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	10	3	0	0		
		b	Catering meals and processed meat products	10	0	0	0		
		c	Cured products (raw and cooked)	11	2	0	2		
			Total	31	5	0	2	3	3
3	Dairy products	a	Raw milk cheeses	10	2	0	3		
		b	Other raw milk products	14	3	0	3		
		c	Heat treated products	7	1	0	2		
			Total	31	6	0	8	-2	3
4	Fishery products	a	Raw products (fresh, frozen)	9	1	0	3		
		b	Smoked, marinated	12	0	0	1		
		c	Catering dishes	13	5	0	2		
			Total	34	6	0	6	0	3
5	Vegetables	a	Raw vegetables (fresh, frozen)	11	2	0	2		
		b	Under modified atmosphere, pre-cooked vegetables	8	1	1	2		
		c	Vegetables-based preparations / Processed vegetables	11	1	0	1		
			Total	30	4	1	5	0	3
6	Environmental production samples	a	Process and cleaning water	12	0	0	2		
		b	Dusts and residues	9	1	0	2		
		c	Surface sampling	9	0	0	2		
			Total	30	1	0	6	-5	3
All categories				**186**	**27**	**1**	**35**	**-7**	**6**

Table 55 – Analysis of discordant results – Incubation 48 h

Category		Type		N+	ND	PPND	PD	(ND+PPND) -PD	AL
1	Composite foods	a	Cold catering dishes	8	2	0	4		
		b	Hot catering dishes	11	2	0	3		
		c	Pastries and egg products	11	1	0	1		
			Total	30	5	0	8	-3	3
2	Meat products	a	Raw meat products (frozen, unfrozen, seasoned)	10	3	0	0		
		b	Catering meals and processed meat products	10	0	0	0		
		c	Cured products (raw and cooked)	11	2	0	2		
			Total	31	5	0	2	3	3
3	Dairy products	a	Raw milk cheeses	10	2	0	3		
		b	Other raw milk products	15	3	0	4		
		c	Heat treated products	7	1	0	2		
			Total	32	6	0	9	-3	3
4	Fishery products	a	Raw products (fresh, frozen)	9	1	0	3		
		b	Smoked, marinated	12	0	0	1		
		c	Catering dishes	13	5	0	2		
			Total	34	6	0	6	0	3
5	Vegetables	a	Raw vegetables (fresh, frozen)	11	2	0	2		
		b	Under modified atmosphere, pre-cooked vegetables	8	2	0	2		
		c	Vegetables-based preparations / Processed vegetables	12	1	0	2		
			Total	31	5	0	6	-1	3
6	Environmental production samples	a	Process and cleaning water	12	0	0	2		
		b	Dusts and residues	9	1	0	2		
		c	Surface sampling	9	0	0	2		
			Total	30	1	0	6	-5	3
All categories				**188**	**28**	**0**	**37**	**-9**	**6**

The calculated values for ((ND+PPND)-PD) meet the acceptability limit (AL) for each individual category and for all categories combined regardless of the incubation time tested (22h and 48 h).

3.1.2.2.2 Relative level of detection

3.1.2.2.2.1 Protocol

Six matrix/strain pairs were tested (see Table 56).

Table 56 - Defined (matrix/strain) pairs for the RLOD determination

Category	Matrix	Strain	Origin	Protocol applied after inoculation and before analysis
Composite foods	Mixed salad	*L. monocytogenes* Ad494	Deli salad (Piémontaise)	48 h à 5°C ± 3°C
Meat products	Rillettes	*L. monocytogenes* Ad669	Pork	48 h à 5°C ± 3°C
Dairy products	Raw milk	*L. monocytogenes* 153	Raw milk cheese	48 h à 5°C ± 3°C
Fishery products	Smoked salmon	*L. monocytogenes* Ad670	Smoked salmon	48 h à 5°C ± 3°C
Vegetables	Frozen zucchini	*L. monocytogenes* Ad1672	Zucchini	-20°C - 2 weeks
Environmental production samples	Rinse water	*L. monocytogenes* Ad551	Environment (pastry)	48 h at 5°C ± 3°C

The following protocol was applied:

- A negative control: 5 samples,
- A low contamination level providing fractional recovery data, with 20 replicates,
- A high contamination level, with 5 replicates.

A total plate count determination on each matrix was performed.

3.1.2.2.2.2 Calculation and interpretation

The raw data are given in **Appendix 18**.

The RLOD calculations were performed using the Excel spreadsheet available at http://standards.iso.org/iso/16140 - RLOD using data from the 2011 extension study. The RLOD are given in Table 57.

Table 57 - Presentation of RLOD before and after confirmation of the alternative method results

Matrix/strain pairs	RLOD	RLODL	RLODU	b=ln (RLOD)	sd(b)	z-Test statistic	p-value
Deli salad (Piémontaise)/ *L.monocytogenes* Ad494	1,388	0,501	3,844	0,328	0,509	0,643	0,520
Rillettes / *L.monocytogenes* Ad669	0,724	0,296	1,769	-0,323	0,447	0,723	1,531
Raw milk / *L.monocytogenes* 153	0,399	0,143	1,119	-0,918	0,515	1,781	1,925
Smoked salmon/ *L.monocytogenes* Ad670	0,854	0,319	2,286	-0,157	0,492	0,320	1,251
Frozen zucchini slices / *L.monocytogenes* Ad1672	0,891	0,382	2,077	-0,116	0,423	0,273	1,215
Rinse water / *L.monocytogenes* Ad551	1,000	0,403	2,480	0,000	0,454	0,000	1,000
Combined results	**0,854**	**0,599**	**1,217**	**-0,158**	**0,177**	**0,892**	**1,628**

The RLOD values obtained meet the acceptability limit of 2.5 for an unpaired study.

The $LOD_{50\,\%}$ calculations according to Wilrich & Wilrich POD-LOD calculation program - version 11, 2022-10-12 test are given in Table 58.

Table 58 –LOD_{50} results

Category	Matrix/strain pairs	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich[5]		
		Reference method	Alternative method	
			22 h	48 h
1	Deli salad (Piémontaise)/ *L.monocytogenes* Ad494	0.8 [0.4; 1.4]	1.2 [0.6; 2.2]	1.0 [0.5; 1.8]
2	Rillettes / *L.monocytogenes* Ad669	1.0 [0.5; 1.9]	0.7 [0.4; 1.3]	0.7 [0.4; 1.3]
3	Raw milk / *L.monocytogenes* 153	0.9 [0.4; 2.1]	0.4 [0.2; 0.7]	0.4 [0.2; 0.7]
4	Smoked salmon/ *L.monocytogenes* Ad670	0.8 [0.4; 1.4]	0.7 [0.4;1.2]	0.7 [0.4; 1.2]
5	Frozen zucchini slices / *L.monocytogenes* Ad1672	0.7 [0.3; 1.3]	0.5 [0.3; 1.0]	0.5 [0.3; 1.0]
6	Rinsed water / *L.monocytogenes* Ad551	0.9 [0.5; 1.7]	0.9 [0.5; 1.7]	0.9 [0.5; 1.7]
Combined results		**0.8 [0.6; 1.1]**	**0.7 [0.6; 0.9]**	**0.7 [0.5; 0.9]**

The LOD_{50} varies from 0.7 to 1.0 CFU/25 g for the reference method and the alternative method (48 h), and from 0.5 to 1.2 CFU/25 g for the alternative method (22 h)

[5] Wilrich, C., and P.-Th. Wilrich: Estimation of the POD function and the LOD of a qualitative microbiological measurement method. AOAC International **92** (2009) 1763 - 1772.

3.2 Practicability

The alternative method practicability was evaluated according to the AFNOR criteria relative to method comparison study.

Storage conditions, shelf-life and modalities of utilisation after first use	The storage temperature is 2-8°C. The expiry date is given on the packaging and on the boxes		
Time to result	Steps	**Reference method**	**Alternative method**
	Negative samples		
	Sampling, enrichment	Day 0	Day 0
	Subculture in Fraser	Day 1	/
	Streaking onto selective agar plates (O1/P1/Compass)	Day 1	Day 1/
	Second streaking (O2/P2)	Day 3	/
	Reading the plates (O1/P1/Compass)	Day 2 - Day 3	Day 2
	Result	Day 5	Day 2
	Presumptive positive results or positive results		
	Streaking characteristic colonies	Day 3 - Day 5	/
	Confirmatory tests	Day 4 - Day 6	Day 2
	Result	Day 5 - Day 7 Day 8 - Day 11 *	Day 3
	*In case of rhamnose and xylose tests are performed in tubes		
Common step with the reference method	The primary enrichment step is common to both methods.		

The negative results are available in 2 days and the positive results in 3 days for the alternative method.

3.3 Inter-laboratory study

The inter-laboratory study is a study performed by multiple laboratories testing identical samples at the same time, the results of which are used to estimate alternative-method performance parameters.

The data obtained in this study were interpreted according to EN ISO 16140-2 (2016).

3.3.1 Study organisation

The inter-laboratory study was performed in 2007 with pasteurized half-skimmed milk inoculated with *Listeria monocytogenes* 153 isolated from raw milk cheese. The bottles of milk were inoculated individually at a rate of 8 bottles per rate per laboratory, i.e. 24 bottles to be analyzed per laboratory

Twelve laboratories participated in the study.

The target inoculation rates were as follows:

- 0 CFU/25 ml,
- 1 - 10 CFU/25 ml,
- 5 - 50 CFU/25 ml.

Samples were shipped on Monday, April 16, 2007, with receipt and testing scheduled at the laboratories on Tuesday, April 17, 2007.

The coded samples (code known only to the expert laboratory) were placed in insulated boxes containing ice packs and shipped to the various laboratories using express transport.

A temperature control bottle containing a temperature recorder was included in the package, in order to monitor the temperature during transport and to measure it upon receipt.

3.3.2 Experimental parameter controls

3.3.2.1 Sample stability

Three bottles of milk were inoculated at the high rate (5 - 50 CFU/25 ml) and stored at 7°C for 48 h. An enumeration on 5 ml was performed on PALCAM agar at Day 0, Day 1 and Day 2. In parallel, three bottles were inoculated at a low rate (1 - 10 CFU/25 ml) and stored at 7°C for 48 h. On these samples, a test for *Listeria monocytogenes* was performed by the reference method. The results are presented in the following table:

Table 59 – Sample stability

Day	Reference method (detection)			CFU/25 ml (PALCAM)		
	Bottle 1	Bottle 2	Bottle 3	Bottle 1	Bottle 2	Bottle 3
Day 0	+	+	+	14	13	13
Day 1	+	+	+	13	16	8
Day 2	+	+	+	13	13	13

No evolution was observed.

3.3.2.2 Contamination level

The contamination levels obtained in the matrix are given in the following table.

Table 60 – Contamination level

Level	Samples	Theoretical target level (CFU/25 ml)	True level (CFU/25 ml sample)	Low limit / 25 g sample	High limit / 25 g sample
Level 0	2 - 3 - 7 - 12 - 17 - 18 - 21 - 23	/	/	/	/
Low level	4 - 8 - 9 - 13 - 16 - 20 - 22 - 24	5	4,9	4,2	5,6
High level	1 - 5 - 6 - 10 - 11 - 14 - 15 - 19	25	23,1	20,1	26,6

3.3.2.3 *Logistic conditions*

Temperature conditions are given in Table 61.

Table 61 - Sample temperatures at receipt

Collaborators	Temperature measured by the probe (°C)	Temperature measured at receipt(°C)	Receipt date and time	
A	0,50	3,0	17/04/07	12h00
B	3,50	4,2	17/04/07	09h15
C	1,00	2,7	17/04/07	10h30
D	3,00	3,6	17/04/07	09h30
F	0,00	5,0	17/04/07	09h30
G	2,50	3,6	17/04/07	08h40
H	0,00	0,7	17/04/07	09h15
I	1,00	6,8 (measured at 14h)	17/04/07	11h00
J	1,50	0,3	17/04/07	16h00
K	0,50	2,5	17/04/07	08h45
L	0,50	2,5	17/04/07	11h15
M	0,00	1,9	17/04/07	08h45

No problem was encountered during the transport or at receipt.

3.3.3 Analysis results

The raw data are given in **Appendix 19.**

3.3.3.1 *Aerobic mesophilic flora enumeration*

An uncoded sample was provided to the collaborating laboratories to perform the enumeration of aerobic mesophilic flora of milk by the ISO 4833 method. The enumeration levels varied from 360 to 17,000 CFU/ml

3.3.3.2 *Expert laboratory results*

The results obtained by the expert laboratory are given in Table 62.

Table 62 – Results obtained by the expert lab

Level	Reference method	Alternative methd
L0	0/8	0/8
L1	8/8	8/8
L2	8/8	8/8

All inoculated samples were found positive by both methods.

3.3.3.3 Results obtained by the collaborators

12 collaborators participated to the study; the results obtained are provided in Table 63 (reference method) and Table 64 (alternative method).

Table 63 – Positive results by the reference method

Collaborators	Contamination level		
	L0	*L1*	*L2*
A	0	8	8
B	0	8	8
C	0	8	8
D	0	8	8
F	0	7	8
G	0	7	8
H	0	8	8
I	0	8	8
J	0	7	8
K	0	8	8
L	0	8	8
M	0	8	8
Total	**P_0 = 0**	**P_1 = 93**	**P2 = 96**

Table 64 – Positive results (before and after confirmation) by the alternative method

Collaborators	Contamination level								
	L0			*L1*			*L2*		
	Before confirmation	*Confir-mation*	*Final result*	*Before confirmation*	*Confir-mation*	*Final result*	*Before confirmation*	*Confir-mation*	*Final result*
A	0	0	0	8	8	8	8	8	8
B	0	0	0	8	8	8	8	8	8
C	0	0	0	8	8	8	8	8	8
E	0	0	0	7	7	7	8	8	8
F	0	0	0	8	8	8	8	8	8
G	0	0	0	7	7	7	8	8	8
H	0	0	0	8	8	8	8	8	8
I	0	0	0	8	8	8	8	8	8
J	0	0	0	7	7	7	8	8	8
K	0	0	0	8	8	8	8	8	8
L	0	0	0	8	8	8	8	8	8
N	0	0	0	8	8	8	8	8	8
Total	**$P_0 = 0$**	**$C_0 = 0$**	**$CP_0 = 0$**	**$P_1 = 93$**	**$C_1 = 93$**	**$CP_1 = 93$**	**$P_2 = 96$**	**$C_2 = 96$**	**$CP_2 = 96$**

3.3.4 Calculation and interpretation

3.3.4.1 Calculation of the specificity percentage (SP)

The percentage specificities (SP) of the reference method and of the alternative method, using the data after confirmation, based on the results of level L0 are the following (See Table 65).

Table 65 – Percentage specificity

Specificity for the reference method	$SP_{ref} = \left(1 - \left(\frac{P_0}{N\_}\right)\right) x\ 100\ \% =$	100 %
Specificity for the alternative method	$SP_{alt} = \left(1 - \left(\frac{CP_0}{N\_}\right)\right) x\ 100\ \% =$	100 %

N: number of all L0 tests

P_0 = total number of false-positive results obtained with the blank samples before confirmation

CP_0 = total number of false-positive results obtained with the blank samples

3.3.4.2 *Calculation of the sensitivity (SE_{alt}), the sensitivity for the reference method (SE_{ref}), the relative trueness (RT) and the false positive ratio for the alternative method (FPR)*

Fractional positive results were obtained for the low inoculation level (L1). This inoculation level was retained for calculation.

A summary of the results of the collaborators retained for interpretation and obtained with the reference and the alternative methods for Level 1 is provided in Table 66.

Table 66 Summary of the obtained results with the reference method and the alternative method for Level 1

Level	Response	Reference method positive (R+)	Reference method negative (R-)
1	Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 93**	Positive deviation (R-/A+) **PD = 0**
	Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 0 (PPND=0)**	Negative agreement (A-/R-) **NA = 3 (PPNA = 3)**

Based on the data summarized in Table 66, the values of sensitivity of the alternative and reference methods, as well as the relative trueness and false positive ratio for the alternative method taking account the confirmations, are the following (See Table 67).

Table 67 – Sensitivity, relative trueness and false positive ratio percentages

		Level 1
Sensitivity for the alternative method:	$SE_{alt} = \frac{(PA+PD)}{(PA+PD+ND)} \; x \; 100\% =$	100%
Sensitivity for the reference method:	$SE_{ref} = \frac{(PA+ND)}{(PA+PD+ND)} \; x \; 100\% =$	100%
Relative trueness	$RT = \frac{(PA+NA)}{N} \; x \; 100\% =$	100%
False positive ratio for the alternative method	$FPR = \frac{FP}{NA} \; x \; 100\% =$	0%

3.3.4.3 *Interpretation of data*

For a **paired study design**, the difference between (ND – PD) and the addition (ND + PD) are calculated for the level(s) where fractional recovery is obtained (so L_1). The observed value found for (ND – PD) and (ND + PD) shall not be higher than the AL.

For 12 Labs, the limits are the following:

	Calculated values	AL (12 collaborators)	Conclusion
ND - PD	0	4	ND-PD < AL
ND + PD	0	5	ND-PD < AL

The calculated values for ND-PD and ND+PD meet the acceptability limits, the alternative method is therefore considered equivalent to the reference method.

3.3.4.4 *Evaluation of the LOD 50%, LOD 95 % and RLOD between laboratories*

The RLOD was calculated using the EN ISO 16140-2:2016 Excel spreadsheet available at https://standards.iso.org/iso/16140/-5/ed-1/en/RLOD_inter-lab-study_16140-2_AnnexF_ver1_28-06-2017.xls. The results are used only for information (see Table 68).

Table 68 - LOD 50%, LOD 95 % et RLOD

Method	LOD 50%	LOD 95%	RLOD
Reference	0.98 [0.71 ;1.36]	4.24 [3.05 ;5.88]	1.00 [0.68 ;1.46]
Alternative	0.98 [0.71 ;1.36]	4.24 [3.05 ;5.88]	

3.4 General conclusion

The **method comparison study conclusions** are:

> ***Listeria spp. Detection***

☒ In the sensitivity study, five categories were tested: four food categories and the production environmental samples.

☒ **Half Fraser Protocol - 30°C**

- For the sensitivity study, 8 negative deviations (ND) and 2 positive deviations (PD) were obtained after 22 h of incubation of COMPASS *Listeria* Agar, 4 negative deviations and 2 positive deviations after 48 h of incubation.
- The calculated values for ND+PPND-PD and ND+PPND+PD are less than or equal to the acceptability limit (AL) for each individual category and for all categories combined regardless of the incubation time tested (22h and 48h)
- The Relative Levels of Detection (RLOD) meet the AL fixed at 1.5 for the paired data study.

☒ **Half Fraser Protocol - 37°C**

- For the sensitivity study, 32 negative deviations (ND) and 26 positive deviations (PD) were obtained after 22 h of incubation of COMPASS *Listeria* Agar, 30 negative deviations and 28 positive deviations after 48 h of incubation.
- The calculated values for ND+PPND-PD meet the acceptability limit (AL) for each individual category and for all categories combined regardless of the incubation time tested (22h and 48 h).
- The Relative Levels of Detection (RLOD) meet the AL fixed at 2.5 for the unpaired data study.

☒ The COMPASS *Listeria* Agar method is specific and selective.

☒ It is possible to store the Half Fraser broth for 72h at 5°C ± 3°C.

☒ The negative results are obtained in 2 days and the positive results in 3 days by the alternative method.

☒ The alternative method fulfils all the EN ISO 16140-2:2016 and AFNOR technical rules (PR revision 7).

Listeria monocytogenes Detection

☒ In the sensitivity study, five categories were tested: four food categories and the production environmental samples.

☒ **Protocol Half Fraser - 30°C**

- For the sensitivity study, 5 negative deviations (ND) and 6 positive deviations (PD) were obtained after 22 h of incubation of COMPASS *Listeria* Agar, 6 negative deviations and 3 positive deviations after 48 h of incubation.
- The calculated values for ND+PPND-PD and ND+PPND+PD meet the acceptability limit (AL) for each individual category and for all categories combined regardless of the incubation time tested (22h and 48h).
- The Relative Levels of Detection (RLOD) meet the AL fixed at 1.5 for the paired data study.

☒ **Protocol Half Fraser - 37°C**

- For the sensitivity study, 28 negative deviations (ND) and 35 positive deviations (PD) were obtained after 22 h of incubation of COMPASS *Listeria* Agar, 28 negative deviations and 37 positive deviations after 48 h of incubation.
- The calculated values for ND+PPND-PD are less than or equal to the limit of acceptability (AL) for each individual category and for all categories combined regardless of the incubation time tested (22h and 48 h).
- The Relative Levels of Detection (RLOD) meet the AL fixed at 2.5 for the unpaired data study.

☒ The COMPASS *Listeria* Agar method is specific and selective.

☒ It is possible to store the Half Fraser broth for 72h at 5°C ± 3°C.

☒ The negative results are obtained in 2 days and the positive results in 3 days by the alternative method.

☒ The alternative method fulfils all the EN ISO 16140-2:2016 and AFNOR technical rules (PR revision 7).

The **inter-laboratory conclusion is**:

☒ The data and interpretations comply with the EN ISO 16140-2:2016 requirements.
The alternative method is considered equivalent to the ISO standard.

Quimper, 16 February 2024

Astrid CARIOU
Deputy Manager
Validation of Alternative methods

I hereby attest to the validation of the verification of the conformity of the report (opinion and interpretation).

Appendix 1 - Flow diagram of the alternative method: COMPASS® Listeria Agar

Half Fraser - 30°C	**Half Fraser - 37°C**
xg or ml sample	xg or ml sample
+ 9 xg or ml Half Fraser	+ 9 xg or ml Half Fraser pre-warmed at 37°C
↓	↓
25 h ± 3 h at 30°C ± 1°C	21 h ± 3 h at 37°C ± 1°C

↓

Streaking onto

COMPASS® *Listeria* Agar (100 µl)

↓

24 h ± 2 h to 48 h at 37°C

(*reading can be done after 22h incubation time)*

↓

Presence of characteristics colonies

(blue to green surrounded or not with an opac halo)

↓

Confirmation

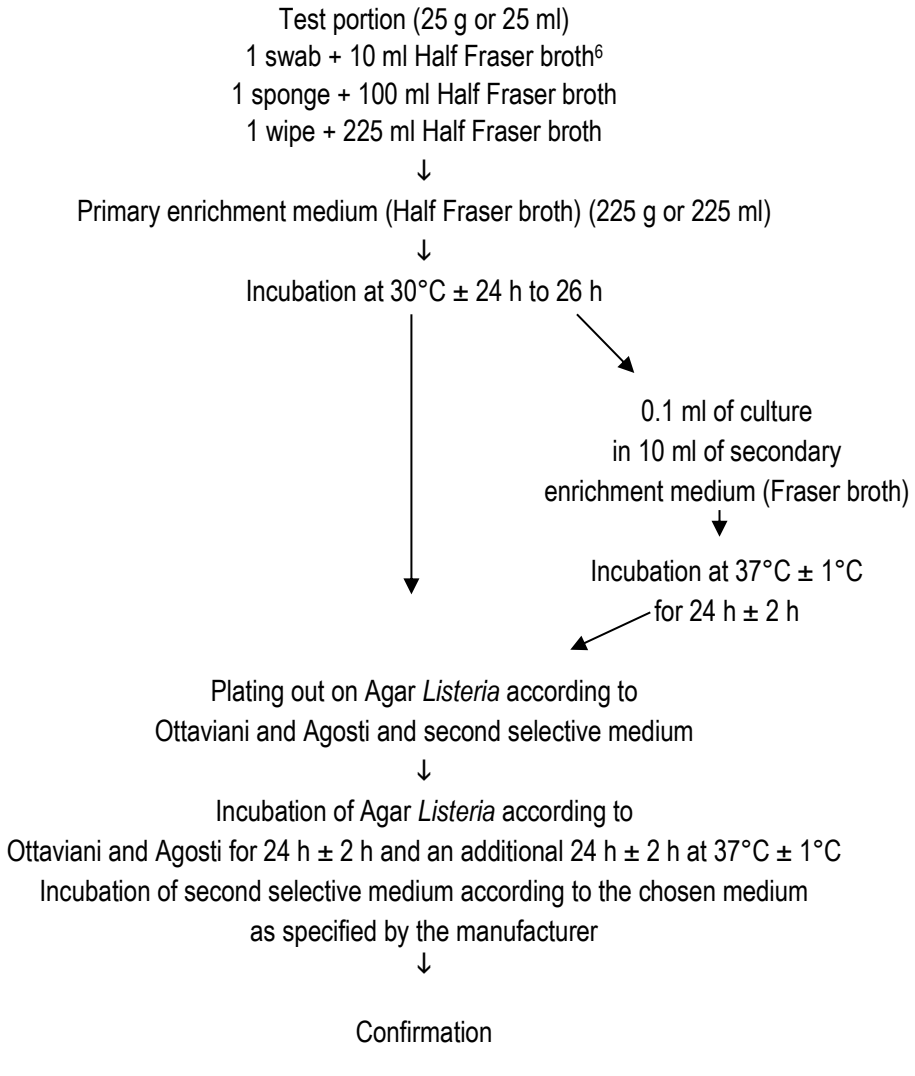
Listeria spp. confirmation:

- by spot or streaking onto PALCAM plates
- by identification using a *Listeria* biochemical gallery without purification step
- by the tests described in the standard methods CEN or ISO including a purification step.

Listeria monocytogenes confirmation:

- by streaking onto CONFIRM'*L.mono* Agar
- by inoculation of a colony into CONFIRM'*L.mono* broth
- by identification using a *Listeria* biochemical gallery without purification step
- by the tests described in the standard methods CEN or ISO including a purification step.

Appendix 2 - Flow diagram of the reference method: ISO 11290-1 (May 2017): Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and other *Listeria* spp. - Part 1: detection method



Target	Gram	Catalase	Beta haemolysis	CAMP test	Carbohydrates
Listeria spp	x	x			
Listeria monocytogenes	x	Optional	x	Optional	x

[6] For sampling after cleaning process pre-moisten
- 1 swab + 1 ml broth universal neutralizing (+ 9 ml Half-Fraser)
- 1 sponge + 10 ml broth universal neutralizing (+ 90 ml Half-Fraser)
- 1 wipe + BPW + 10 % neutralizing agent (+ 225 ml Half-Fraser)

Appendix 3 - Artificial contamination of samples - *Listeria* spp. - Half Fraser Protocol - 30°C

HALF FRASER PROTOCOL - 30°C												
Year	Sample	Product (French)	Product (English name)	Artificial contamination					Result *Listeria* spp 48h	Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)			
2018	**8614**	**Paëlla**	**Paella**	*L.innocua* Ad1675	Fish	Seeding 48h 3±2°C	/	3,0	+	1	b
2018	**8616**	**Pizza jambon fromage**	**Ham and cheese pizza**	*L.monocytogenes* Ad1494	Sausage	Seeding 48h 3±2°C	/	2,4	-	1	b
2018	**8618**	**Quiche Lorraine**	**Quiche Lorraine**	*L.welshimeri* Ad1671	Pork	Seeding 48h 3±2°C	/	4,0	+	1	b
2019	**79**	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad2154 +*L.welshimeri* Ad1670	Green pepper pâté + sausage	Seeding 48h 3±2°C	/	0,4+1,2	+	1	b
2019	**80**	**Pizza jambon fromage**	**Ham and cheese pizza**	*L.monocytogenes* Ad2154 +*L.welshimeri* Ad1670	Green pepper pâté + sausage	Seeding 48h 3±2°C	/	0,4+1,2	+	1	b
2019	**81**	**Feuilleté jambon Emmental**	**Ham and cheese puff pastry**	*L.monocytogenes* Ad2154 +*L.welshimeri* Ad1670	Green pepper pâté + sausage	Seeding 48h 3±2°C	/	0,4+1,2	+	1	b
2018	**8623**	**Eclair chocolat**	**Pastry (Chocolate éclair)**	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48h 3±2°C	/	1,6	+	1	c
2018	**8624**	**Eclair chocolat**	**Pastry (Chocolate éclair)**	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48h 3±2°C	/	2,8	+	1	c
2018	**8625**	**Flan**	**Custard**	*L.monocytogenes* JL2862 +*L.innocua* Ad644	Egg white + Pastry	Seeding 48h 3±2°C	/	1,0+1,4	+	1	c
2018	**8628**	**Tortilla aux oignons**	**Tortilla with onions**	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48h 3±2°C	/	2,8	+	1	c
2018	**8629**	**Tortilla aux oignons**	**Tortilla with onions**	*L.monocytogenes* Ad1757 +*L.welshimeri* Ad1270	Egg products + poultry slaughterhouse	Seeding 48h 3±2°C	/	1,0+1,6	+	1	c
2018	**8630**	**Tortilla espagnole aux oignons**	**Spanish onion tortilla**	*L.monocytogenes* Ad1195 +*L.innocua* Ad644	Egg products + Pastry	Seeding 48h 3±2°C	/	2,0+1,4	+	1	c
2018	**8631**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	*L.monocytogenes* Ad1757	Egg products	Seeding 48h 3±2°C	/	1,8	+	1	c
2018	**8632**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48h 3±2°C	/	1,6	+	1	c
2018	**8633**	**Crème aux œufs vanille**	**Vanilla egg cream**	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48h 3±2°C	/	1,6	+	1	c
2018	**8634**	**Crème aux œufs vanille**	**Vanilla egg cream**	*L.monocytogenes* Ad1195 +*L.innocua* Ad1277	Egg products + poultry slaughterhouse	Seeding 48h 3±2°C	/	2,0+2,0	+	1	c
2018	**8635**	**Ile flottante**	**Floating island**	*L.monocytogenes* JL2862 +*L.innocua* Ad644	Egg white + Pastry	Seeding 48h 3±2°C	/	1,0+1,4	+	1	c
2011	**1331**	**Steak haché charolais**	**Charolais minced steak**	*L.innocua* Ad671	Bacon	Spiking- (-20°C)	0,5	6,8	+	2	a
2011	**1332**	**Steak haché**	**Chopped steak**	*L.innocua* Ad671	Bacon	Spiking- (-20°C)	0,5	6,8	+	2	a
2011	**1333**	**Steak haché extra moelleux**	**Extra soft ground beef**	*L.innocua* Ad671	Bacon	Spiking- (-20°C)	0,5	6,8	+	2	a
2019	**74**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	*L.monocytogenes* Ad1218 +*L.innocua* Ad643	Minced steak + veal olives	Seeding 48h 3±2°C	/	6,2+1,0	+	2	b
2019	**75**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	*L.monocytogenes* Ad1208 +*L.welshimeri* Ad1202	Frozen minced steak + minced veal	Seeding 48h 3±2°C	/	4,8+1,8	+	2	b
2019	**76**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in the old style**	*L.monocytogenes* Ad1206 +*L.innocua* Ad643	Frozen minced steak + veal olives	Seeding 48h 3±2°C	/	1,4+1,0	+	2	b
2019	**77**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in old fashioned sauce**	*L.monocytogenes* Ad1218 +*L.welshimeri* Ad1202	Minced steak + minced veal	Seeding 48h 3±2°C	/	6,2+1,8	+	2	b
2019	**78**	**Paupiette de veau sauce tomate**	**Paupiette of veal with tomato sauce**	*L.monocytogenes* Ad1208 +*L.innocua* Ad643	Frozen minced steak + veal olives	Seeding 48h 3±2°C	/	4,8+1,0	+	2	b
2011	**918**	**Rocamadour au lait cru**	**Rocamadour (raw milk cheese)**	*L.innocua* Ad656	Cheese	Spiking-TT 10min 56°C	0,9	7,0	-	3	a
2011	**919**	**Tomme au lait cru**	**Tomme (raw milk cheese)**	*L.innocua* Ad656	Cheese	Spiking-TT 10min 56°C	0,9	7,0	-	3	a
2011	**920**	**Comté au lait cru**	**Comté (raw milk cheese)**	*L.innocua* Ad656	Cheese	Spiking-TT 10min 56°C	0,9	7,0	-	3	a
2011	**1334**	**Camembert au lait cru**	**Camembert (raw milk cheese)**	*L.ivanovii* Ad680	Raw milk	Spiking-TT 5min 56°C	0,5	12,6	-	3	a
2011	**1335**	**Tomme au lait cru**	**Tomme (raw milk cheese)**	*L.innocua* 913	Raw milk	Spiking- (-20°C)	1,01	20,2	+	3	a
2019	**82**	**Camembert au lait cru**	**Camembert (raw milk cheese)**	*L.monocytogenes* Ad2757	Dairy product	Seeding 48h 3±2°C	/	4,6	-	3	a
2019	**84**	**Emmental français au lait cru**	**Emmental (raw milk cheese)**	*L.monocytogenes* Ad1785	Sheep milk	Seeding 48h 3±2°C	/	1,4	-	3	a
2011	**961**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	Cross contamination with raw milk					+	3	c

HALF FRASER PROTOCOL - 30°C												
Year	Sample	Product (French)	Product (English name)	Artificial contamination					Result *Listeria* spp 48h	Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)			
2011	**962**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	Cross contamination with raw milk					+	3	c
2011	**963**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	Cross contamination with raw milk					+	3	c
2011	**1340**	**Poudre de lait**	**Milk powder**	RAEMA	/				-	3	c
2011	1576	**Lait entier en poudre**	**Whole milk powder**	*L.ivanovii* Ad680	Raw milk	Spiking-TT 5 min 50°C	2,64	6,6	+	3	c
2011	1577	**Lait demi écrémé en poudre**	**Semi-skimmed milk powder**	*L.ivanovii* Ad680	Raw milk	Spiking-TT 5 min 50°C	2,64	6,6	+	3	c
2011	1578	**Lait écrémé en poudre**	**Skimmed milk powder**	*L.ivanovii* Ad680	Raw milk	Spiking-TT 5 min 50°C	2,64	6,6	+	3	c
2011	1579	**Lait demi écrémé en poudre**	**Semi-skimmed milk powder**	*L.innocua* Ad659	Dairy environment	Spiking-TT 10 min 50°C	0,48	11,0	+	3	c
2011	1580	**Lait en poudre**	**Milk powder**	*L.innocua* Ad659	Dairy environment	Spiking-TT 10 min 50°C	0,48	11,0	+	3	c
2011	**1353**	**Steak de thon**	**Tuna steak**	*L.innocua* 1	Smoked salmon	Spiking-10% NaCl	0,46	14,4	+	4	a
2011	**1354**	**Merlu blanc**	**White hake**	*L.innocua* 1	Smoked salmon	Spiking-10% NaCl	0,46	14,4	+	4	a
2011	**1349**	**Brisures de saumon fumé**	**Smoked salmon flakes**	*L.innocua* 1	Smoked salmon	Spiking-10% NaCl	0,46	14,4	+	4	b
2019	**519**	**Saumon fumé de Norvège**	**Smoked salmon from Norway**	*L.innocua* Ad1674	Smoked salmon	Seeding 48h 3±2°C	/	0,4	+	4	b
2019	**520**	**Truite fumée au bois de hêtre**	**Beechwood smoked trout**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48h 3±2°C	/	2,0	-	4	b
2019	**546**	**Truite fumée**	**Smoked trout**	*L.innocua* Ad1674	Smoked salmon	Seeding 48h 3±2°C	/	0,4	+	4	b
2011	**1343**	**Chou blanc râpé**	**Shredded white cabbage**	*L.innocua* Ad1176	Spinach	Spiking-4°C	0,4	9,8	+	5	a
2011	**1344**	**Carottes râpées**	**Shredded carrots**	*L.innocua* Ad1176	Spinach	Spiking-4°C	0,4	9,8	+	5	a
2019	**93**	**Epinards**	**Spinaches**	*L.monocytogenes* Ad2598	Salad	Seeding 48h 3±2°C	/	4,2	+	5	a
2019	**94**	**Mélange de jeunes pousses**	**Mixed baby greens**	*L.monocytogenes* Ad2598	Salad	Seeding 48h 3±2°C	/	4,2	+	5	a
2011	**1342**	**Emincé de poireaux**	**Sliced leeks**	*L.innocua* Ad1176	Spinach	Spiking-4°C	0,4	9,8	+	5	b
2011	**1345**	**Mélange pois carottes**	**Pea and carrot mix**	*L.innocua* Ad1176	Spinach	Spiking- (-20°C)	0,5	9,4	+	5	b
2011	**1346**	**Poêlée de légumes**	**Pan-fried vegetables**	*L.innocua* Ad1176	Spinach	Spiking- (-20°C)	0,5	9,4	+	5	b
2011	**1347**	**Julienne de légumes**	**Vegetable Julienne**	*L.seeligeri* Ad1293	Chopped parsley	Spiking- (-20°C)	0,72	7,0	+	5	b
2011	**1348**	**Jardinière de légumes**	**Vegetable planter**	*L.seeligeri* Ad1293	Chopped parsley	Spiking- (-20°C)	0,72	7,0	+	5	b
2011	**917**	**Eau sol près laveuse**	**Floor water near the washer**	*L.ivanovii* Ad616	Dairy environment	Spiking-TT 10min 56°C	2,25	13,2	-	6	a
2011	**1672**	**Eau de rinçage plaque inox**	**Rinsing water for stainless steel plate**	*L.welshimeri* Ad1270	Poultry environment	Spiking-TT 8min 50°C	0,61	9,2	+	6	a
2011	**1673**	**Eau de rinçage table de saignée**	**Rinsing water for bleeding table**	*L.welshimeri* Ad1262	Environment	Spiking-TT 8min 50°C	0,55	11,2	+	6	a
2011	**1674**	**Eau de refroidissement poulets**	**Cooling water for chickens**	*L.welshimeri* Ad1270	Poultry environment	Spiking-TT 8min 50°C	0,61	9,2	+	6	a
2011	**1676**	**Eau refroidisseur cous**	**Water cooler necks**	*L.welshimeri* Ad1270	Poultry environment	Spiking-TT 8min 50°C	0,61	9,2	+	6	a
2011	**1678**	**Eau rinçage cutter**	**Rinsing water cutter**	*L.welshimeri* Ad1270	Poultry environment	Spiking-TT 8min 50°C	0,61	9,2	+	6	a
2019	**521**	**Déchets découpe saumon**	**Salmon cutting waste**	*L.innocua* Ad1674	Smoked salmon	Seeding 48h 3±2°C	/	0,4	-	6	b
2019	**522**	**Déchets poisson avec épices**	**Fish waste with spices**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48h 3±2°C	/	2,0	-	6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48h 3±2°C	/	2,0	+	6	b
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	*L.monocytogenes* Ad2599	Salmon	Seeding 48h 3±2°C	/	1,2	+	6	b
2019	**525**	**Déchets poisson**	**Fish waste**	*L.monocytogenes* Ad2599	Salmon	Seeding 48h 3±2°C	/	1,2	-	6	b
2019	**526**	**Déchets mêlée de jambon végétal**	**Vegetable ham waste**	*L.seeligeri* Ad1754	Sliced zucchinis	Seeding 48h 3±2°C	/	0,4	+	6	b
2019	**527**	**Déchets veggie**	**Veggie waste**	*L.seeligeri* Ad1754	Sliced zucchinis	Seeding 48h 3±2°C	/	0,4	-	6	b
2019	**528**	**Déchets veggie**	**Veggie waste**	*L.monocytogenes* Ad2643	Green salad	Seeding 48h 3±2°C	/	1,0	-	6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (fish cut with spices)**	L.monocytogenes Ad994	Fresh trout	Seeding 48h 3±2°C	/	1,6	+	6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	L.monocytogenes Ad994	Fresh trout	Seeding 48h 3±2°C	/	1,6	+	6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	L.monocytogenes Ad995	Smoked trout	Seeding 48h 3±2°C	/	3	+	6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	L.monocytogenes Ad995	Smoked trout	Seeding 48h 3±2°C	/	3	+	6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	L.monocytogenes Ad994	Fresh trout	Seeding 48h 3±2°C	/	1,6	+	6	b
2011	**910**	**Chiffonnette tapis bleu perforé**	**Perforated blue mat rag**	*L.innocua* Ad663	Dairy environment	Spiking-TT 10min 56°C	0,7	16,6	+	6	c
2011	**912**	**Chiffonnette tapis bleu perforé**	**Perforated blue mat rag**	*L.seeligeri* BR18	Fish environment	Spiking-TT 10min 56°C	>2,85	15,4	-	6	c
2011	**913**	**Chiffonnette godet**	**Rags (bucket)**	*L.ivanovii* Ad616	Dairy environment	Spiking-TT 10min 56°C	2,25	13,2	-	6	c
2011	**914**	**Chiffonnette tuyau plafond**	**Ceiling hose rag**	*L.ivanovii* Ad616	Dairy environment	Spiking-TT 10min 56°C	2,25	13,2	+	6	c

Appendix 4 - Sensitivity study: raw data - *Listeria* spp. - Half Fraser Protocol - 30°C

H-: colonies without halo

H+: colonies with halo

d: doubtful colonies

FOOD COMPOSITE- Half Fraser Protocol- 30°C (*Listeria* spp.)																									
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar														Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C								Agreement		Half Fraser stored for 72 h at 5°C ± 3°C					
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp									
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h	COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agreement		
2011	423	Sandwich poulet crudités	Chicken and vegetable sandwich	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	1	a
2011	425	Riz à l'Espagnole	Spanish rice	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	1	a
2011	430	Sandwich saumon fumé fromage blanc	Smoked salmon and cottage cheese sandwich	-	-	-	-	/	-	-	-					-	-	NA	NA					1	a
2011	500	Fromage de chèvre pané	Breaded goat cheese	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	1	a
2011	557	Sandwich au poulet rôti	Roasted chicken sandwich	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	1	a
2011	561	Taboulé aux fruits de mer	Seafood tabbouleh	-	-	-	-	/	-	-	-					-	-	NA	NA					1	a
2011	609	Taboulé au poulet	Chicken Tabbouleh	-	-	-	-	/	-	H-d	H-d	-	-			-	-	PPNA	PPNA					1	a
2011	616	Sandwich	Sandwich	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	1	a
2011	622	Salade composée	Mixed salad	-	-	-	-	/	-	-	-					-	-	NA	NA					1	a
2011	632	Sandwich jambon beurre	Ham and butter sandwich	-	-	-	-	/	-	-	-					-	-	NA	NA					1	a
2019	180	Salade pamplemousse	Grapefruit salad	-	+d(2col)	H+	+	*L.monocytogenes*	+	H+d	H+ (2col)	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+(2col)	+	+	PA	1	a
2019	181	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	-	-		-	st	st					-	-	NA	NA					1	a
2019	182	Sandwich jambon crudités œuf	Ham and egg sandwich	st	-	st	-		-	-	-					-	-	NA	NA					1	a
2019	183	Sandwich poulet crudités	Chicken and vegetables sandwich	st	st	st	st		-	st	st					-	-	NA	NA					1	a
2019	184	Salade de riz	Rice salad	st	st	st	st		-	st	st					-	-	NA	NA					1	a
2019	353	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	st	-		-	st	-					-	-	NA	NA					1	a
2019	354	Sandwich jambon Emmental	Ham and Emmental sandwich	st	st	st	st		-	st	st					-	-	NA	NA					1	a
2019	355	Sandwich jambon crudités œuf	Ham and egg sandwich	st	st	H+	+	*L.monocytogenes*	+	st	st					-	-	ND	ND	st	/	-	ND	1	a
2019	1396	Piémontaise au jambon	Deli salad (Piémontaise)	st	-	st	st		-	st	st					-	-	NA	NA					1	a
2019	1397	Taboulé au poulet rôti	Tabbouleh with roasted chicken	st	-	st	-		-	st	-					-	-	NA	NA					1	a
2011	506	Croque-monsieur	Croque-monsieur	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	1	b
2011	507	Paella	Paella	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	1	b
2011	573	Feuilletés au chèvre	Goat cheese puff pastry	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	1	b

♦ Analyses performed according to the COFRAC accreditation

FOOD COMPOSITE- Half Fraser Protocol- 30°C (*Listeria* spp.)																													
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar																Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C									
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agreement				
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria		22 h	48 h	**22 h**	**48 h**								
2011	579	Feuilleté jambon emmental	Ham and Emmental puff pastry	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*		+	+	**PA**	**PA**	H+/H-	+	+	**PA**	1	b
2011	636	Paniers épinards chèvre	Spinach and goat cheese baskets	-	-	-	-	/	-	-	-						-	-	**NA**	**NA**					1	b
2011	638	Croque-monsieur	Croque-monsieur	-	-	-	-	/	-	-	-						-	-	**NA**	**NA**					1	b
2011	644	Croque-monsieur	Croque-monsieur	-	-	-	-	/	-	-	-						-	-	**NA**	**NA**					1	b
2011	1203	Petits pois lardons	Peas and bacon	H+	+	H+	-	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**	H+	+	+	**PA**	1	b
2018	**8614**	**Paella**	**Paella**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	**PA**	**PA**	H-	H-	+	**PA**	1	b
2018	**8616**	**Pizza jambon fromage**	**Ham and cheese pizza**	st	-	H+/H-d	-	*Enterococcus faecium*	-	st	H-d	+	-	-	/		-	-	**NA**	**PPNA**	st	/	-	**NA**	1	b
2018	**8618**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	**PA**	**PA**	H-	H-	+	**PA**	1	b
2019	**79**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	**PA**	**PA**	H-	+	+	**PA**	1	b
2019	**80**	**Pizza jambon fromage**	**Ham and cheese pizza**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-	+/+	+	+/+	*L.monocytogenes/ L.welshimeri*		+	+	**PA**	**PA**	H+/H-	+/+	+	**PA**	1	b
2019	**81**	**Feuilleté jambon Emmental**	**Ham and cheese puff pastry**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	**PA**	**PA**	H-	+	+	**PA**	1	b
2019	738	Pizza jambon fromage	Ham and cheese pizza	-	st	-	-		-	-	-						-	-	**NA**	**NA**					1	b
2019	739	Quiche Lorraine	Quiche Lorraine	st	-	st	-		-	st	st						-	-	**NA**	**NA**					1	b
2019	740	Tarte aux poireaux	Leek pie	st	-	st	-		-	st	st						-	-	**NA**	**NA**					1	b
2019	1393	Pizza jambon champignons	Ham and mushroom pizza	st	-	st	-		-	-	-						-	-	**NA**	**NA**					1	b
2019	1394	Tarte aux poireaux	Leek pie	st	-	st	-		-	-	-						-	-	**NA**	**NA**					1	b
2019	1395	Couscous poulet merguez	Couscous chicken merguez	st	st	st	st		-	st	st						-	-	**NA**	**NA**					1	b
2011	503	Pâte feuilletée	Puff pastry	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**	H+	+	+	**PA**	1	c
2011	635	Pâte brisée au beurre	Shortcrust pastry with butter	-	-	-	-	/	-	-	-						-	-	**NA**	**NA**					1	c
2011	1042	Rouleau de pâte brisée	Shortcrust pastry roll	1H+	-	H+	-	*L.monocytogenes*	+	-	H-d(1col)	-	/	/	/		-	-	**ND**	**PPND**	H-d	-	-	**PPND**	1	c
2018	**8623**	**Eclair chocolat**	**Pastry (chocolate éclair)**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	**PA**	**PA**	H-	H-	+	**PA**	1	c
2018	**8624**	**Eclair chocolat**	**Pastry (chocolate éclair)**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	**PA**	**PA**	H-	H-	+	**PA**	1	c
2018	**8625**	**Flan**	**Custard**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.innocua*		+	+	**PA**	**PA**	H+/H-	H+/H-	+	**PA**	1	c
2018	**8628**	**Tortilla aux oignons**	**Onion tortilla**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	**PA**	**PA**	H-	H-	+	**PA**	1	c
2018	**8629**	**Tortilla aux oignons**	**Onion tortilla**	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**	H+	H+	+	**PA**	1	c
2018	**8630**	**Tortilla espagnole aux oignons**	**Spanish onion tortilla**	H+	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.monocytogenes/ L.innocua*		+	+	**PA**	**PA**	H+/H-	H+/H-	+	**PA**	1	c
2018	**8631**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**	H+	H+	+	**PA**	1	c
2018	**8632**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	**PA**	**PA**	H-	H-	+	**PA**	1	c
2018	**8633**	**Crème aux œufs vanille**	**Vanilla egg cream**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	**PA**	**PA**	H-	H-	+	**PA**	1	c
2018	**8634**	**Crème aux œufs vanille**	**Vanilla egg cream**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.innocua*		+	+	**PA**	**PA**	H+/H-	H+/H-	+	**PA**	1	c
2018	**8635**	**Ile flottante**	**Ile flottante**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.innocua*		+	+	**PA**	**PA**	H+/H-	H+/H-	+	**PA**	1	c
2019	741	Œufs au lait vanille	Vanilla eggs in milk	st	st	st	st		-	st	st						-	-	**NA**	**NA**					1	c

FOOD COMPOSITE- Half Fraser Protocol- 30°C (*Listeria* spp.)																									
Year	Sample No	Product (French)	Product (English name)	**Reference method: ISO 11290-1♦**						**Alternative method: COMPASS *Listeria* Agar**														Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	**Half Fraser- 22h at 30°C**										**Half Fraser stored for 72 h at 5°C ± 3°C**					
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp		**Agreement**		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	**Agreement**		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	**22 h**	**48 h**						
2019	742	Clafoutis aux cerises	Cherry clafoutis	st	-	st	st		-	st	st					-	-	**NA**	**NA**					1	c
2019	743	Crème aux œufs	Egg cream	st	-	st	-		-	st	st					-	-	**NA**	**NA**					1	c
2019	744	Tortilla espagnole	Spanish tortilla	st	-	st	-		-	st	st					-	-	**NA**	**NA**					1	c
2019	745	Flan	Custard	st	-	st	-		-	st	-					-	-	**NA**	**NA**					1	c
2019	746	Millefeuille	Millefeuille	st	-	st	st		-	st	-					-	-	**NA**	**NA**					1	c

MEAT PRODUCTS - Half Fraser Protocol- 30°C (*Listeria* spp.)																									
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar														Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C					
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h						
2011	433	Viande de bœuf	Beef meat	-	-	-	-	/	-	H+ 1col	H+ 1col	+	+	+	*L.monocytogenes*	+	+	PD	PD	-	/	-	NA	2	a
2011	434	Viande gros grain poulet	Coarse-grained meat chicken	H+/H-	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	2	a
2011	444	Tartare de bœuf	Beef tartar	H-d	-	H-	+	*L.welshimeri*	+	H-d	H-	+	+	+	*L.welshimeri*	+	+	PA	PA	H-	+	+	PA	2	a
2011	494	Poitrine de porc	Pork belly	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	2	a
2011	495	Viande de poulet	Chicken meat	H+	+	H+/H-	+	*L.welshimeri/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.welshimeri*	+	+	PA	PA	H+	+	+	PA	2	a
2011	497	Viande de dinde	Turkey meat	H+	+	H+	+	*L.welshimeri/ L.monocytogenes*	+	H+	H+	+	+	+	*L.welshimeri/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	2	a
2011	498	Viande de faisan	Pheasant meat	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.grayi/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	2	a
2011	558	Aile de volaille	Poultry wing	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	559	Barde	Bard	H+/H-	+	H+/H-	+	*L.welshimeri/ L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H- (L.welshi-meri)	+	+	PA	2	a
2011	560	Viande de cheval	Horse meat	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	562	Cubes de poulet	Chicken cubes	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	a
2011	563	Gras croûte	Fatty crust	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	615	VSM (viande séparée mécaniquement)	Mechanically deboned meat	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	620	Emincés de dinde	Sliced turkey	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	a
2011	621	Foies	Livers	-	-	-	-	/	-	H-d	H-d	-	-			-	-	PPNA	PPNA					2	a
2011	624	Cubes de poulet	Chicken cubes	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	626	Viande triée de poulet	Sorted chicken meat	H+/H-d	-	H-d	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.welshimeri/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	2	a
2011	648	Viande de poulet broyée	Ground chicken meat	H+/H-	+	H+/H-	+	*L.welshimeri/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.welshimeri/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	2	a
2011	1043	Maigre de porc	Lean pork	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA	H-	+	+	PA	2	a
2011	1046	Maigre de mouton	Lean sheep	H+/H-	+	H-	+	*L.ivanovii/ L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.ivanovii/ L.welshimeri*	+	+	PA	PA	H-	+	+	PA	2	a
2011	1050	Maigre de veau	Lean veal	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	1051	Gorge de porc	Pork Throat	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	1053	Sauté de porc	Sauté of pork	H-	+1col	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA	H-	+	+	PA	2	a
2011	1054	Steak haché de veau	Minced veal steak	-	-	-	-	/	-	-	-					-	-	NA	NA					2	a
2011	1055	Tartare de bœuf	Beef Tartar	-	-	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA	H-	+	+	PA	2	a
2011	**1331**	**Steak haché charolais**	**Charolais ground steak**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	a
2011	**1332**	**Steak haché**	**Minced steak**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	a
2011	**1333**	**Steak haché extra moelleux**	**Extra soft ground steak**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	a
2018	8323	Côte de porc à la provençale	Pork chop Provençal style	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	a
2018	8324	Côte de porc thym romarin	Pork chop with thyme and rosemary	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	a
2018	8716	Côte de porc provençale	Provençale pork chop	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	a
2018	8717	Côte de porc marinées tex mex	Pork chop marinated in tex mex	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	a
2011	424	Porc à la moutarde	Pork with mustard	-	-	-	-	/	-	-	-					-	-	NA	NA					2	b
2011	427	Ailes de poulet épicées	Spicy chicken wings	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	b

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MEAT PRODUCTS - Half Fraser Protocol- 30°C (*Listeria* spp.)																											
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar															Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C							
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment				
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h								
2011	571	Nuggets de dinde	Turkey Nuggets	-	-	H-	+	*L.innocua*	+	-	H-d	+	+	+	*L.innocua*	-	+	ND	PA	H-(L.innocua)	+	+	PA	2	b
2011	577	Chili con carne	Chili con carne	H-d	-	-	-	-	-	H-d	H-d	-	-			-	-	PPNA	PPNA					2	b
2011	633	Poulet provençale	Chicken Provençale	-	-	-	-	/	-	-	-					-	-	NA	NA					2	b
2011	656	Pavé de bœuf mariné à l'échalote	Shallot marinated beef steak	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	b
2018	8321	Steack haché Tex Mex	Tex Mex hamburger steak	st	-	st	-		-	st	st					-	-	NA	NA					2	b
2018	8322	Paupiette lapin moutarde	Rabbit and mustard Paupiette	-	st	-	st		-	st	H-d		-	-	/	-	-	NA	PPNA	H-d	-	-	PPNA	2	b
2018	8325	Manchons de poulet rôti	Roasted chicken wings	st	st	st	st		-	st	st					-	-	NA	NA					2	b
2018	8328	Terrine chapon miel châtaigne	Capon terrine with honey and chestnuts	st	st	st	st		-	st	st					-	-	NA	NA					2	b
2019	**74**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+d/H-	H+/H-	+/+	+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA	H+/H-	+/+	+	PA	2	b
2019	**75**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA	H-	+	+	PA	2	b
2019	**76**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in the old style**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-d	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA	H+	+	+	PA	2	b
2019	**77**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in old fashioned sauce**	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-d	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA	H+/H-	+/+	+	PA	2	b
2019	**78**	**Paupiette de veau sauce tomate**	**Paupiette of veal with tomato sauce**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	b
2019	747	Paupiette de veau sauce tomate	Paupiette of veal with tomato sauce	st	st	st	-		-	st	st					-	-	NA	NA					2	b
2019	748	Nuggets de poulet	Chicken nuggets	st	-	st	-		-	st	st					-	-	NA	NA					2	b
2019	749	Poulet basquaise	Chicken basquaise	st	st	st	st		-	st	st					-	-	NA	NA					2	b
2019	750	Bœuf bourguignon	Beef ready to cook meal (Boeuf bourguignon)	st	st	st	st		-	st	st					-	-	NA	NA					2	b
2019	751	Blanquette de veau et son riz	Blanquette of veal and rice	st	st	st	st		-	st	st					-	-	NA	NA					2	b
2011	421	Allumettes de jambon	Ham matches	-	-	-	-	/	-	-	-					-	-	NA	NA					2	c
2011	422	Boudin blanc	White pudding	-	-	H-	+	*L.innocua*	+	H-d	H-d	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	c
2011	431	Terrine de lapin	Rabbit terrine	-	-	-	-	/	-	-	-					-	-	NA	NA					2	c
2011	432	Jambonneau pané	Breaded ham	-	-	-	-	/	-	-	-					-	-	NA	NA					2	c
2011	499	Chipolatas aux herbes	Chipolatas with herbs	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	c
2011	613	Pâté	Pâté	-	-	-	-	/	-	-	-					-	-	NA	NA					2	c
2011	645	Salami danois	Danish salami	-	-	H-d	-	-	-	-	-					-	-	NA	NA					2	c
2011	650	Saucisse fumée	Smoked sausage	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	c
2011	1044	Andouille	Chitterlings sausage	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	c
2011	1052	Merguez	Merguez	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA	H-	+	+	PA	2	c
2018	8326	Chipolatas	Chipolatas	H-	+	H-	+	*L.innocua/ L.welshimeri*	+	H-	H-	+			*L.innocua*	+	+	PA	PA	H-	+	+	PA	2	c
2018	8327	Saucisse fumée	Smoked sausage	-	st	st	st		-	-	-					-	-	NA	NA					2	c
2018	8718	Farce tomate	Tomato stuffing	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	c
2018	8719	Chorizo	Chorizo	-	st	H-	+	*L.welshimeri*	+	st	H-d	+	+	+	*L.welshimeri*	-	+	ND	PA	H-(2col)	+	+	PA	2	c
2018	8720	Chipolatas	Chipolatas	st	st	st	-		-	st	st					-	-	NA	NA					2	c
2018	8721	Merguez	Merguez	st	-	st	-		-	st	-					-	-	NA	NA					2	c
2018	8722	Saucisse de Strasbourg tranchée	Sliced Strasbourg sausage	st	st	st	st		-	st	st					-	-	NA	NA					2	c
2018	8723	Chipolatas	Chipolatas	st	st	H-	+	*L.welshimeri*	+	st	st					-	-	ND	ND	H-(2col)	+ (*L.welshi-meri*)	+	PA	2	c
2019	178	Pâté de campagne	Pork pâté	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	2	c
2019	179	Pâté de lapin	Rabbit pâté	st	st	st	st		-	st	st					-	-	NA	NA					2	c

MEAT PRODUCTS - Half Fraser Protocol- 30°C (*Listeria* spp.)																									
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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	**Half Fraser- 22h at 30°C**												**Half Fraser stored for 72 h at 5°C ± 3°C**					
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp		**Agreement**		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	**Agree-ment**		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	**22 h**	**48 h**						
2019	2027	Rillettes pur porc	Pure pork rillettes	st	st	st	st		-	st	st					-	-	**NA**	**NA**					2	c
2019	2028	Pâté de campagne breton	Breton pâté de campagne	st	-	st	st		-	st	st					-	-	**NA**	**NA**					2	c

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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C								Agreement		Half Fraser stored for 72 h at 5°C ± 3°C					
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp				COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h						
2011	740	Fromage au lait cru	Raw milk cheese	-	-	-	-	/	-	-	-					-	-	NA	NA					3	a
2011	741	Brie de Meaux au lait cru	Brie de Meaux (raw milk cheese)	-	1col	-	-	*L.monocytogenes*	+	H+ 2col	H+ 2col	+	+	+	*L.monocytogenes*	+	+	PA	PA	-	/			3	a
2011	742	Fromage au lait cru de vache	Raw cow's milk cheese	-	-	-	-	/	-	-	-					-	-	NA	NA					3	a
2011	743	Fromage non affiné au lait cru de vache	Unripened cheese with raw cow's milk	H+	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	a
2011	744	Fromage au lait cru de vache	Cheese with raw cow's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	a
2011	745	Fromage non affiné au lait cru de vache	Unripened cheese with raw cow's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	a
2011	858	Fromage au lait cru	Cheese with raw milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	a
2011	859	Fromage au lait cru	Cheese with raw milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	a
2011	891	Fromage au lait cru	Cheese with raw milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	a
2011	892	Fromage à tartiflette	Cheese for tartiflette	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	a
2011	893	Fromage au lait cru de vache	Raw cow's milk cheese	-	-	-	-	/	-	-	-					-	-	NA	NA					3	a
2011	**918**	**Rocamadour au lait cru**	**Raw milk cheese (Rocamadour)**	H-d	-	H-d	-	-	-	-	H-	-		-		-	-	NA	PPNA	H-	-	-	PPNA	3	a
2011	**919**	**Tomme au lait cru**	**Raw milk cheese (Tomme)**	-	-	-	-	/	-	-	-	-				-	-	NA	NA					3	a
2011	**920**	**Comté au lait cru**	**Raw milk cheese (Comté)**	-	+/-	-	-	-	-	-	H-d	-		-		-	-	NA	PPNA	-	/			3	a
2011	1057	Fromage au lait cru de vache	Raw cow's milk cheese	-	-	-	-	/	-	-	-					-	-	NA	NA					3	a
2011	**1334**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	-	-	/	-	-	-					-	-	NA	NA					3	a
2011	**1335**	**Tomme au lait cru**	**Raw milk cheese (Tomme)**	H-	-	H-	+	*L.innocua*	+	H-d	H-d	-	/	/	/	-	-	PPND	PPND	H-d	-	-	PPND	3	a
2018	8334	Fromage de brebis	Ewe cheese	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	a
2018	8335	Fromage de brebis	Ewe cheese	st	-	st	-		-	st	st					-	-	NA	NA					3	a
2018	8336	Saint Nectaire	Cheese (Saint Nectaire)	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	a
2019	**82**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	st	-		-	st	-					-	-	NA	NA	-	/	-	NA	3	a
2019	**84**	**Emmental français au lait cru**	**Raw milk cheese (Emmental)**	-	st	st	st		-	st	-					-	-	NA	NA	H-d	-		0	3	a
2011	734	Lait cru de brebis	Raw ewe's milk	H+	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	b
2011	735	Lait cru de brebis	Raw Ewe's raw milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2011	736	Lait cru de brebis	Raw ewe's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2011	737	Lait cru de vache	Raw cow's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2011	738	Lait cru de vache	Raw cow's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2011	739	Lait cru de vache	Raw cow's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2011	836	Lait cru de vache	Raw cow's milk	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/+H-	H+/+H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/+H-	+	+	PA	3	b
2011	837	Lait cru de vache	Raw cow's milk	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	3	b
2011	838	Lait cru de vache	Raw cow's milk	H+	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	3	b
2011	839	Lait cru de vache	Raw cow's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2011	840	Lait cru de vache	Raw cow's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2011	841	Lait cru de vache	Raw cow's milk	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	3	b
2011	842	Lait cru de vache	Raw cow's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	b
2011	843	Lait cru de vache	Raw cow's milk	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	3	b
2011	844	Lait cru de vache	Raw cow's milk	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	3	b

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										COMPASS *Listeria* Agar		Confirmations				Final result L.spp				COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h						
2011	845	Lait cru de vache	Raw cow's milk	-	-	-	-	/	-	-	-					-	-	NA	NA					3	b
2018	8329	Lait de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	b
2018	8330	Lait de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	b
2018	8331	Lait de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	b
2018	8332	Lait de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	b
2018	8333	Lait de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	b
2011	614	Camembert pané	Breaded Camembert	-	-	-	-	/	-	-	-					-	-	NA	NA					3	c
2011	746	Poudre de lait	Milk powder	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	c
2011	747	Poudre de lait	Milk powder	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	c
2011	748	Poudre de lait	Milk powder	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	3	c
2011	749	Poudre de lait	Milk powder	-	-	-	-	/	-	-	-					-	-	NA	NA					3	c
2011	750	Poudre de lait	Milk powder	-	-	-	-	/	-	-	-					-	-	NA	NA					3	c
2011	**961**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	H-d	+	H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	3	c
2011	**962**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	H-	+	H-	+	*L.seeligeri*	+	H-d	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	3	c
2011	**963**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	3	c
2011	**1340**	**Poudre de lait**	**Milk powder**	-	-	-	-	/	-	-	-					-	-	NA	NA					3	c
2011	1576	Lait entier en poudre	Whole milk powder	H+	-	H+	-	*L.ivanovii*	+	H+	H+	+	+	+	*L.ivanovii*	+	+	PA	PA	H+	+	+	PA	3	c
2011	1577	Lait demi écrémé en poudre	Half skimmed milk powder	H+	+/-	H+	-	*L.ivanovii*	+	H+	H+	+	+	+	*L.ivanovii*	+	+	PA	PA	H+	+	+	PA	3	c
2011	1578	Lait écrémé en poudre	Skimmed milk powder	H+	-	H+	-	*L.ivanovii*	+	H+	H+	+	+	+	*L.ivanovii*	+	+	PA	PA	H+	+	+	PA	3	c
2011	1579	Lait demi écrémé en poudre	Half-skimmed milk powder	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	3	c
2011	1580	Lait en poudre	Milk powder	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	3	c
2019	1398	Glace vanille	Vanilla ice cream	st	-	st	-		-	st	st					-	-	NA	NA					3	c
2019	1399	Lait frais demi-écrémé pasteurisé	Fresh pasteurized half-skimmed milk	st	st	st	st		-	st	st					-	-	NA	NA					3	c
2019	1588	Brie au lait pasteurisé	Brie (pasteurized milk cheese)	st	-	st	st		-	st	st					-	-	NA	NA					3	c
2019	1589	Coulommiers au lait pasteurisé	Coulommiers (pasteurized milk cheese)	st	st	st	st		-	st	st					-	-	NA	NA					3	c
2019	1590	Lait frais pasteurisé	Fresh pasteurized milk	st	st	st	st		-	st	st					-	-	NA	NA					3	c

FISHERY PRODUCTS - Half Fraser Protocol- 30°C (*Listeria* spp.)																									
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar														Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C					
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement							
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h	COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
2011	428	Colin d'Alaska	Alaska Pollack	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	**PA**	**PA**	H+/H-	+	+	**PA**	4	a
2011	436	Filet de merlan	Whiting fillet	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					4	a
2011	509	Truite de mer	Sea trout	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	4	a
2011	511	Filet de Tilapia	Tilapia fillet	H+	+	H+	+	*L.innocua/ L.monocytogenes*	+	H+	H+	+	+	+	*L.innocua/ L.monocytogenes*	+	+	**PA**	**PA**	H+/H-	+	+	**PA**	4	a
2011	619	Colin	Hake	-	-	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	4	a
2011	639	Filet de Tilapia	Tilapia fillet	H+	+	H+/H-	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	4	a
2011	1045	Colin d'Alaska	Alaska Pollack	H+/H-	+	H+	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	4	a
2011	**1353**	**Steak de thon**	**Tuna Steak**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	4	a
2011	**1354**	**Merlu blanc**	**White hake**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	4	a
2019	1563	Pavés de truite	Trout steaks	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	a
2019	1564	Filet de sébaste	Redfish fillet	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	a
2019	1565	Filet de lieu jaune	Fillet of pollack	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	a
2019	1566	Filet de merlu	Hake fillet	-	st	st	-		-	-	-					-	-	**NA**	**NA**					4	a
2019	1567	Darne de saumon	Salmon steak	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+(4col)	+	+	**PA**	4	a
2019	1568	Dos de cabillaud	Back of cod	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	4	a
2019	1569	Filet de julienne	Julienne fillet	st	st	-	st		-	st	-					-	-	**NA**	**NA**					4	a
2019	1570	Filet de vieille	Fillet of fish	st	st	st	-		-	st	st					-	-	**NA**	**NA**					4	a
2019	1571	Filet de merlan	Fillet of whiting	-	st	-	st		-	-	-					-	-	**NA**	**NA**					4	a
2019	1572	Filet de lieu noir	Fillet of saithe	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	a
2019	1573	Pavé de saumon	Salmon steak	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	a
2011	438	Saumon fumé	Smoked salmon	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+/H-	+	+	**PA**	4	b
2011	513	Saumon fumé	Smoked salmon	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	**PA**	**PA**	H+/H-	+	+	**PA**	4	b
2011	**1349**	**Brisures de saumon fumé**	**Smoked salmon flakes**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	4	b
2018	8342	Saumon	Salmon	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	b
2019	186	Saumon fumé aneth	Dill smoked salmon	H+	+	H+	+	*L.monocytogenes*	+	H+d	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	4	b
2019	343	Filet de saumon fumé	Smoked salmon fillet	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	b
2019	344	Saumon fumé	Smoked salmon	H+ (1cold)/ H-	+	H-	+	*L.monocytogenes / L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**	H-	+	+	**PA**	4	b
2019	**519**	**Saumon fumé de Norvège**	**Smoked salmon from Norway**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	4	b
2019	**520**	**Truite fumée au bois de hêtre**	**Smoked trout with beech wood**	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	b
2019	**546**	**Truite fumée**	**Smoked trout**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	4	b
2019	1574	Emincés de saumon fumé aux 5 baies	Sliced smoked salmon with 5 berries	-	-	-	-		-	-	-					-	-	**NA**	**NA**					4	b
2019	1575	Filets de harengs fumés au naturel	Smoked herring fillets au naturel	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	b
2019	1576	Lardons de saumon fumés	Smoked salmon bacon	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	b
2019	1577	Truite fumée	Smoked trout	st	st	st	st		-	st	st					-	-	**NA**	**NA**					4	b
2019	1578	Emincés de thon fumés	Sliced smoked tuna	st	st	st	-		-	st	st					-	-	**NA**	**NA**					4	b

♦ Analyses performed according to the COFRAC accreditation

FISHERY PRODUCTS - Half Fraser Protocol- 30°C (*Listeria* spp.)																											
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar															Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C								Agreement		Half Fraser stored for 72 h at 5°C ± 3°C						
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp				COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment			
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h							
2019	1579	Emincés de truite fumée	Sliced smoked trout	st	st	st	st		-	st	st					-	-	NA	NA					4	b
2019	1580	Saumon mariné à l'aneth	Marinated salmon with dill	st	st	st	st		-	st	st					-	-	NA	NA					4	b
2019	1581	Haddock fumé au bois de hêtre	Beechwood smoked herdock	st	st	st	st		-	st	st					-	-	NA	NA					4	b
2019	1582	Filets d'anchois marinés	Marinated anchovy fillets	st	st	st	st		-	st	st					-	-	NA	NA					4	b
2019	2029	Truite fumée au bois de hêtre	Smoked trout with beech wood	st	st	st	st		-	-	-					-	-	NA	NA					4	b
2011	437	Colin pané	Breaded hake	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	440	Terrine de truite et légumes	Trout and vegetable terrine	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	442	Terrine de saumon	Salmon terrine	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c
2011	496	Tarama de saumon	Salmon tarama	-	-	-	-	/	-	H-d	-	-				-	-	PPNA	NA	-	/	-	NA	4	c
2011	504	Coquilles de fruits de mer	Seafood shells	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c
2011	515	Merlu blanc pané	Breaded white hake	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	572	Aumônières de Saint Jacques	Scallop aumônières	H-d	-	-	-	-	-	H-d	H-d	-	-			-	-	PPNA	PPNA					4	c
2011	575	Paniers de Saint -Jacques aux légumes	Baskets of scallops with vegetables	H-	-	H-	+	*L.innocua*	+	H-2col	H-2col	+	+	+	*L.innocua*	+	+	PA	PA	H- (L.innocua)	+	+	PA	4	c
2011	618	Poisson pané	Breaded fish	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H+(L.mono)/ H-	+	+	PA	4	c
2011	623	Colin pané	Breaded hake	-	-	-	-	/	-	-	-					-	-	NA	NA					4	c
2011	625	Coquilles Saint-Jacques	Scallops	H-	-	H-	-	-	-	-	-					-	-	NA	NA					4	c
2011	627	Panier de saumon	Basket of salmon	H+	-	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c
2011	628	Tarama de saumon	Salmon Tarama	-	-	-	-	/	-	-	-					-	-	NA	NA					4	c
2011	629	Merlu pané	Breaded hake	-	-	-	-	/	-	-	-					-	-	NA	NA					4	c
2011	630	Poisson pané à la tomate	Breaded fish with tomato	-	-	-	-	/	-	-	-					-	-	NA	NA					4	c
2011	631	Tranche de colin pané	Breaded hake slice	H+/H-	+	H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	634	Coquille de fruits de mer	Seafood shell	-	-	-	-	/	-	-	-					-	-	NA	NA					4	c
2011	637	Verrine de saumon	Salmon verrine	-	-	H-d	-	-	-	-	-					-	-	NA	NA					4	c
2011	640	Rillettes de thon	Tuna rillettes	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H- (L.innocua)	+	+	PA	4	c
2011	641	Bâtonnets colin panés	Breaded hake sticks	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	642	Filet de Merlan Meunière	Whiting fillet Meunière	-	-	H-d	-	-	-	-	-					-	-	NA	NA					4	c
2011	643	Feuilletés de saumon	Salmon puff pastry	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	646	Beurre de saumon	Salmon butter	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	649	Hoki poêlé	Pan fried hoki	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c
2011	655	Filet colin grillé	Grilled hake fillet	-	-	-	-	/	-	-	-					-	-	NA	NA					4	c
2011	1049	Bâtonnets de colin d'Alaska	Alaska Pollock Sticks	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H-	+	+	PA	4	c
2011	1202	Croquettes poisson nature	Plain fish croquettes	H+/H-	+2col	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H-	+	+	PA	4	c
2011	1204	Terrine de Saint Jacques	Terrine of scallops	H+	+2col	H+	-	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c
2011	1206	Poisson pané cuit	Breaded cooked fish	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2011	1228	Tartare poisson/légumes	Fish/vegetable tartar	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c

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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C							
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment				
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h								
2011	1229	Pithiviers Saint-Jacques crevettes	Pithiviers scallop shrimps	H-	+1col	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	4	c
2011	1230	Tomate poisson blanc pané	Breaded white fish tomato	H+	+	H+	+	*L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c
2011	1231	Feuilleté Saint Jacques	Scallop puff pastry	H+/H-	+	H+/H-	-	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	4	c
2018	8337	Poisson blanc crumble	White fish crumble	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	4	c
2018	8338	Pané de poisson blanc provençale	Breaded white fish Provençale	H-	+d	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	4	c
2018	8339	Pavé de poisson blanc thym citron	White fish steak with lemon thyme	st	-	st	-		-	st	st					-	-	NA	NA					4	c
2018	8340	Bouchées au poulpe	Bites of octopus	-	-	st	st		-	st	-					-	-	NA	NA					4	c
2018	8341	Poisson blanc gratiné au fromage	White fish with cheese au gratin	st	-	st	-		-	st	st					-	-	NA	NA					4	c
2019	185	California roll saumon	California roll salmon	st	-	st	st		-	st	st					-	-	NA	NA					4	c
2019	187	Surimi base colin	Surimi with hake	st	-	st	st		-	st	-					-	-	NA	NA					4	c
2019	188	Poisson sauce Chablis	Fish with Chablis sauce	st	-	st	st		-	st	st					-	-	NA	NA					4	c
2019	189	Colin Alaska sauce citron	Alaska Pollack with lemon sauce	st	-	-	-		-	st	st					-	-	NA	NA					4	c

VEGETABLES - Half Fraser Protocol- 30°C (*Listeria* spp.)																									
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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C					
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h						
2011	426	Chou-fleur	Cauliflower	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	5	a
2011	435	Brocolis	Broccoli	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	5	a
2011	510	Persil	Parsley	-	-	-	-	/	-	-	-					-	-	NA	NA					5	a
2011	568	Légumes couscous	Couscous vegetables	-	-	-	-	/	-	-	-					-	-	NA	NA					5	a
2011	569	Persil plat	Parsley flat	-	-	-	-	/	-	-	-					-	-	NA	NA					5	a
2011	570	Légumes couscous	Couscous vegetables	-	-	-	-	/	-	-	-					-	-	NA	NA					5	a
2011	574	Brocolis	Broccoli	-	-	-	-	/	-	-	-					-	-	NA	NA					5	a
2011	576	Ciboulette	Chives	H-d	-	H-	-	-	-	H-d	H-d	-	-			-	-	PPNA	PPNA					5	a
2011	654	Pommes de terre crue	Raw potatoes	-	-	-	-	/	-	-	-					-	-	NA	NA					5	a
2011	1207	Persil plat	Flat parsley	-	-	-	-	/	-	-	-					-	-	NA	NA					5	a
2011	**1343**	**Chou blanc râpé**	**Grated white cabbage**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	a
2011	**1344**	**Carottes râpées**	**Grated carrots**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	a
2018	8343	Roquette	Rocket	st	-	st	-		-	st	st					-	-	NA	NA					5	a
2018	8344	Epinards	Spinach	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	a
2018	8345	Maïs grains	Corn grains	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	a
2018	8346	Epinards en branches	Spinach in branches	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	a
2019	**93**	**Epinards**	**Spinach**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	a
2019	**94**	**Mélange de jeunes pousses**	**Mixed baby greens**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	a
2019	1584	Champignons blancs	White mushrooms	st	st	st	st		-	st	st					-	-	NA	NA					5	a
2019	1585	Concombre	Cucumber	st	st	st	st		-	st	st					-	-	NA	NA					5	a
2011	429	Poêlée de légumes	Pan-fried vegetables	-	-	-		/	-	-	-					-	-	NA	NA					5	b
2011	514	Courgettes émincées	Sliced zucchini	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	b
2011	516	Légumes couscous	Couscous vegetables	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	b
2011	517	Julienne de légumes	Vegetable Julienne	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	b
2011	567	Courgettes émincées	Sliced zucchini	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	5	b
2011	647	Champignons	Mushrooms	H-	-	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	b
2011	651	Mélange de légumes surgelés	Frozen vegetable mix	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	b
2011	653	Julienne de légumes	Vegetable Julienne	-	-	-	-	/	-	-	-					-	-	NA	NA					5	b
2011	1048	Champignons	Mushrooms	H-	-	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	b
2011	1200	Champignons	Mushrooms	H-	-	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	b
2011	1201	Epinards branches	Spinach branches	H+/H-	+	H+/H-	+	*L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H-	+	+	PA	5	b
2011	**1342**	**Emincé de poireaux**	**Sliced leeks**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	b
2011	**1345**	**Mélange pois carottes**	**Pea and carrot mixture**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	b
2011	**1346**	**Poêlée de légumes**	**Pan-fried vegetables**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	5	b
2011	**1347**	**Julienne de légumes**	**Vegetable Julienne**	H-	+	H-	+	*L.seeligeri*	+	H-	H-	+	+	+	*L.seeligeri*	+	+	PA	PA	H-	+	+	PA	5	b
2011	**1348**	**Jardinière de légumes**	**Mixed vegetables**	H-	+	H-	+	*L.seeligeri*	+	H-	H-	+	+	+	*L.seeligeri*	+	+	PA	PA	H-	+	+	PA	5	b
2018	8348	Mélange de légumes	Mixed vegetables	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	5	b
2019	1385	Choux fleurs prêt à cuire	Ready to cook cauliflower	st	st	st	st		-	st	st					-	-	NA	NA					5	b
2019	1386	Crudités mélangées	Mixed vegetables	st	st	st	st		-	st	st					-	-	NA	NA					5	b
2019	1387	Carottes râpées	Grated carrots	st	st	st	st		-	st	st					-	-	NA	NA					5	b
2019	1388	Mélange de crudités	Mixed vegetables	st	st	st	st		-	st	st					-	-	NA	NA					5	b

♦ Analyses performed according to the COFRAC accreditation

VEGETABLES - Half Fraser Protocol- 30°C (*Listeria* spp.)																											
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar															Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C							
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	**22 h**	**48 h**						
2019	1389	Cœur de laitue	Heart of lettuce	-	-	st	st		-	-	-					-	-	**NA**	**NA**					5	b
2019	1583	Rolmops au vinaigre	Rolmops in vinegar	st	st	st	st		-	st	st					-	-	**NA**	**NA**					5	b
2019	1586	Salade batavia, betterave, mâche	Batavia, beet and lamb's lettuce salad	-	-	st	-		-	-	-					-	-	**NA**	**NA**					5	b
2019	1587	Chou blanc, carottes et céleri branche	White cabbage, carrots and celery	st	st	st	st		-	st	st					-	-	**NA**	**NA**					5	b
2011	439	Bol de soupe moulinée	Bowl of ground soup	H+	+	H+	+	*L.innocua/ L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+/H-	+	+	**PA**	5	c
2011	441	Epinards à la crème	Creamed spinach	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H+/H-	+	+	**PA**	5	c
2011	443	Potage surgelé	Frozen soup	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					5	c
2011	501	Poêlée paysanne	Country style pan fried potatoes	H+/H-	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	5	c
2011	502	Poêlée Savoyarde	Savoyard pan-fried soup	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	5	c
2011	505	Taboulé oriental	Oriental tabbouleh	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					5	c
2011	508	Pommes allumettes	Matching apples	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	5	c
2011	512	Purée carottes, navets	Carrot and turnip purée	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	5	c
2011	556	Quinoa	Quinoa	H-d	-	H-d	-	-	-	-	-					-	-	**NA**	**NA**					5	c
2011	566	Ratatouille	Ratatouille	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					5	c
2011	578	Fagots de haricots	Bales of beans	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+/H- (L.innocua)	+	+	**PA**	5	c
2011	610	Ciboulette	Chives	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					5	c
2011	611	Potage surgelé	Frozen soup	-	-	H+	+	*L.monocytogenes*	+	H+1co l	H+1col	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	5	c
2011	612	Poivrons en lanières	Bell pepper strips	-	-	-	-	/	-	H-d	H-d	-	-			-	-	**PPNA**	**PPNA**					5	c
2011	617	Riz cuisiné	Cooked rice	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					5	c
2011	652	Pulpe d'avocat	Avocado pulp	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					5	c
2011	1047	Croquettes ail et fines herbes	Garlic and fine herbs croquettes	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**	H-	+	+	**PA**	5	c
2011	1056	Poêlée à la Bretonne	Pan-fried Breton style	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	5	c
2011	1205	Epinards hachés à la crème	Chopped spinach with cream	-	-	-	-	/	-	-	H-d	-	/	/	/	-	-	**NA**	**PPNA**	H-d	-	-	**PPNA**	5	c
2018	8347	Pommes de terre au beurre	Potatoes with butter	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	5	c
2018	8349	Salade de fruits	Fruit salad	st	-	-	-		-	st	st					-	-	**NA**	**NA**					5	c

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 30°C (*Listeria* spp.)																											
Year	Sample No	Product (French)	Product (English name)	**Reference method: ISO 11290-1♦**						**Alternative method: COMPASS *Listeria* Agar**														Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	**Half Fraser- 22h at 30°C**								**Agreement**		**Half Fraser stored for 72 h at 5°C ± 3°C**							
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp				COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	**Agree-ment**				
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	**22 h**	**48 h**								
2011	727	Eau de refroidissement des cous (Volaille)	Cooling water for necks (Poultry)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	728	Eau de refroidissement poulet B	Cooling water chicken B	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	729	Eau de refroidissement poulet	Chicken cooling water	H+/H-	+	H-	+	*L.innocua/ L.monocytogenes*	+	H-	H+ 1col/H-	+	+	+	*L.innocua / L.monocytogenes*	+	+	**PA**	**PA**	H+ 1col/H-	+	+	**PA**	6	a
2011	730	Eau de lavage mélangeur VSM	Washing water mixer VSM	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	731	Eau de décongélation crevettes	Thawing water shrimps	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	732	Eau de rinçage crevettes	Rinsing water shrimps	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	733	Saumure crevettes	Brine shrimp	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	900	Eau après peleuse (saumon)	Water after peeler (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	901	Eau résiduelle avant injecteuse en dessous tapis parage (saumon)	Residual water before injector under trimming belt (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	902	Eau résiduelle en dessous épineuse (saumon)	Residual water under thorny (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	903	Eau dessous tapis évacuation déchet parage (saumon)	Water under belt waste evacuation trimming (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	916	Eau tuyau en dessous laveuse poisson	Water from pipe under fish washer	H-	+/-	H-	+	*L.innocua*	+	H-d	H-	+	+	+	*L.seeligeri/ L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	6	a
2011	**917**	**Eau sol près laveuse**	**Water floor near washer**	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	a
2011	1670	Eau de refroidissement	Cooling water	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H+(L.mono)/ H-	+	+	**PA**	6	a
2011	1671	Eau de refroidissement	Cooling water	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	H-	+	+	**PA**	6	a
2011	**1672**	**Eau de rinçage plaque inox**	**Rinsing water from stainless steel plate**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**	H-	+	+	**PA**	6	a
2011	**1673**	**Eau de rinçage table de saignée**	**Rinsing water for bleeding table**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**	H-	+	+	**PA**	6	a
2011	**1674**	**Eau de refroidissement poulets**	**Cooling water for chickens**	H+	+	H+/H-	+	*L.welshimeri/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.welshimeri/ L.monocytogenes*	+	+	**PA**	**PA**	H+/H-	+	+	**PA**	6	a
2011	**1676**	**Eau refroidisseur cous**	**Neck cooling water**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**	H-	+	+	**PA**	6	a
2011	**1678**	**Eau rinçage cutter**	**Rinsing water cutter**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**	H-	+	+	**PA**	6	a
2011	846	Lingette poussières dessus bloc (saumon)	Dust wipe on top of block (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	b
2011	905	Chiffonnette poussière sous bloc en maturation salage (saumon)	Dust wipe under maturing block (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	b
2019	356	Déchets farine de blé noir	Buckwheat flour waste	dni/-	+(1col)	H- d(3col)	+	NC sur TSYEA	-	H-	H-ni	+	+	+	*L.innocua*	+	+	**PD**	**PD**	H+/H-	+	+	**PD**	6	b
2019	**521**	**Déchets découpe saumon**	**Salmon cutting waste**	st	st	st	st		-	st	-					-	-	**NA**	**NA**					6	b
2019	**522**	**Déchets poisson avec épices**	**Fish waste with spices**	st	-	st	-		-	st	-					-	-	**NA**	**NA**					6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	H-	+	H-	+	*L.seeligeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**	H-	+	+	**PA**	6	b

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PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 30°C (*Listeria* spp.)																											
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar														Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C							
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h						
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	6	b
2019	**525**	**Déchets poisson**	**Waste fish**	st	st	st	st		-	-	-					-	-	**NA**	**NA**					6	b
2019	**526**	**Déchets mélée de jambon végétale**	**Mixed vegetable ham waste**	H-	+	H-	+	*L.seeligeri*	+	-	H-	+	+	+	*L.seeligeri*	-	+	**ND**	**PA**	H-	+	+	**PA**	6	b
2019	**527**	**Déchets veggie**	**Veggie waste**	-	-	st	-		-	-	-					-	-	**NA**	**NA**					6	b
2019	**528**	**Déchets veggie**	**Veggie waste**	-	-	st	-		-	-	-					-	-	**NA**	**NA**					6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (fish cut with spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**	H+	+	+	**PA**	6	b
2019	1763	Déchets Sol Scan (usine poisson)	Waste Sol Scan (fish factory)	st	st	-	st		-	st	st					-	-	**NA**	**NA**					6	b
2019	1764	Déchets nature bac maggy (usine poisson)	Waste nature maggy bin (fish factory)	st	st	-	st		-	st	st					-	-	**NA**	**NA**					6	b
2019	2030	Déchets de porcs (abattoir porcs)	Pork Waste (pork slaughterhouse)	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.monocytogenes/ L.grayi*	+	+	**PA**	**PA**	H+	H+	+	**PA**	6	b
2019	2031	Déchets découpe bœuf (abattoir bœuf)	Beef Cutting Waste (beef slaughterhouse)	H-	+d	H-	+	*L.innocua*	+	H-d	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**	-	H-d	+	**PA**	6	b
2011	847	Lingette tapis peux co-produit (saumon)	Co-product carpet wipe (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	848	Lingette balance co-produit (saumon)	Wipe scale co-product (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	849	Lingette eau résiduelle près de balance co-produit (saumon)	Wipe residual water near scale co-product (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	850	Lingette sol près porte coulissante entrefiletage et co-produit (saumon)	Wipe floor near sliding door between threading and co-product (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	851	Lingette bac gris salle de lavage (saumon)	Wipe grey bin washroom (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	852	Lingettes élévateur shida surface (crevettes)	Shida surface elevator wipe (shrimp)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	853	Lingette élévateur Neautec surface (crevettes)	Neautec surface elevator wipe (shrimp)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	854	Lingette tapis Shida surface (crevettes)	Shida surface mat wipe (shrimp)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	855	Lingette tapis transversal surface (crevettes)	Cross carpet wipe surface (shrimp)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	856	Lingette plafond dessus Neautec environnement (crevettes)	Neautec environment ceiling wipe (shrimp)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	857	Lingette groupe froid S750 environnement (crevettes)	S750 environment cooling unit wipe (shrimps)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c
2011	904	Chiffonnette sol salage n°7 (saumon)	Salting floor wipe n°7 (salmon)	-	-	-	-	/	-	-	-					-	-	**NA**	**NA**					6	c

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 30°C (*Listeria* spp.)																										
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar														Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser- 22h at 30°C										Half Fraser stored for 72 h at 5°C ± 3°C						
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		COMPASS *Listeria* Agar	Confirmation (Palcam)	Final result	Agree-ment		
				O&A	Palcam	O&A	Palcam			22h	48h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h						
2011	906	Chiffonnette tour accumulatrice (crevettes)	Accumulator tower wipe (shrimps)	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	907	Chiffonnette dessus tapis sortie peleuse	Rags on top of the peeler exit belt	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	908	Chiffonnette guide poisson sur tapis avant peleuse	Fish guide cloth on belt before the peeler	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	909	Chiffonnette dessus tapis parage	Cloth on top of the trimming belt	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	**910**	**Chiffonnette tapis bleu perforé**	**Cloth on blue perforated** belt	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	6	c
2011	911	Chiffonnette dessus tapis lave poisson	Cloth on top of the fish washing belt	H-	-	H-	-	*L.innocua*	+	-	H-	+	+	+	*L.innocua*	-	+	ND	PA	H-	+	+	PA	6	c
2011	**912**	**Chiffonnette tapis bleu perforé**	**Cloth on perforated blue belt**	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	**913**	**Chiffonnette godet**	**Rags on bucket**	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	**914**	**Chiffonnette tuyau plafond**	**Rags for ceiling pipes**	H+	+	H+	+	*L.ivanovii*	+	H+	H+	+	+	+	*L.ivanovii*	+	+	PA	PA	H+2col	+	+	PA	6	c
2011	965	Chiffonnette table de saignée	Rags for bleeding table	H-	+	H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	6	c
2011	966	Lingette goulotte hampe	Wipe for the shank chute	H-	+	H-	+	*L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	6	c
2011	967	Lingette guide de marquage	Wipe marking guide	H-	+	H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	6	c
2011	1232	Chiffonnette sol (volaille)	Floor cloth (poultry)	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	6	c
2011	1233	Chiffonnette chariot (volaille)	Cart wipe (poultry)	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	6	c
2011	1234	Chiffonnette hotte (volaille)	Hood wipe (poultry)	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	1235	Chiffonnette tapis montant (volaille)	Rack cloth (poultry)	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	6	c
2011	1236	Chiffonnette carters chargeur (volaille)	Rags for loader casings (poultry)	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	1237	Chiffonnette sol (volaille)	Floor cloth (poultry)	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA	H+	+	+	PA	6	c
2011	1238	Chiffonnette tapis Meyn (volaille)	Rugs Meyn (poultry)	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	1239	Chiffonnette tapis entrée surgel (volaille)	Freezer entrance belt (poultry)	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	1240	Chiffonnette tapis sortie (volaille)	Cleaning cloth exit (poultry)	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA	H-	+	+	PA	6	c
2011	1241	Chiffonnette lave-semelle (volaille)	Sole cleaning cloth (poultry)	-	-	-	-	/	-	-	-					-	-	NA	NA					6	c
2011	1680	Chiffonnette jambière	Rustproofing cloth for legs (poultry)	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	6	c
2011	1681	Chiffonnette barre anti-retour	Anti-return bar rag	H+/H-	+	H+/H-	+	*L.innocua/ L.monocytogenes*	+	H+/H-	H+/H-	+	+	+	*L.innocua/ L.monocytogenes*	+	+	PA	PA	H+/H-	+	+	PA	6	c

Appendix 5 - Relative level of detection determination: raw data - *Listeria* spp. - Half Fraser Protocol- 30°C

Composite: Deli salad (Piémontaise)
Strain: *Listeria welshimeri* Ad1175
Aerobic mesophilic flora: 1,4 10^3 CFU/g

Sample No	Sample No	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar				
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading		Confirmation	Final result	Number of positive samples/Total
			COMPASS	Palcam	COMPASS	Palcam			22h	48h			
824	0	0	st	st	st	-	-	0/5	-	-	/	-	0/20
825			st	st	st	st	-		-	-	/	-	
826			st	st	st	-	-		-	-	/	-	
827			st	-	st	st	-		-	-	/	-	
828			st	st	st	st	-		-	-	/	-	
888	1	1,5	+	+	+	+	+	12/20	+	+	+	+	12/20
889			-	+(L.monocytogenes)	-	+(L.monocytogenes)	-		-	-	/	-	
890			-	+(L.monocytogenes)	-	+(L.monocytogenes)	-		-	-	/	-	
891			st	st	-	-	-		st	st	/	-	
892			st	st	-	st	-		st	st	/	-	
893			+	+	+	+	+		+	+	+	+	
894			st	st	-	-	-		st	st	/	-	
895			st	st	st	st	-		st	st	/	-	
896			+	+	+	+	+		+	+	+	+	
897			+	+	+	+	+		+	+	+	+	
898			+	+	+	+	+		+	+	+	+	
899			+	+	+	+	+		+	+	+	+	
900			+	+	+	+	+		+	+	+	+	
901			+	+	+	+	+		+	+	+	+	
902			st	-	-	-	-		st	st	/	-	
903			+	+	+	+	+		+	+	+	+	
904			st	st	-	-	-		st	st	/	-	
905			+	+	+	+	+		+	+	+	+	
906			+	+	+	+	+		+	+	+	+	
907			+	+	+	+	+		+	+	+	+	
908	2	4,3	-	+(L.monocytogenes)	-	+(L.monocytogenes)	-	4/5	-	-	/	-	4/5
909			+	+	+	+	+		+	+	+	+	
910			+	+	+	+	+		+	+	+	+	
911			+	+	+	+	+		+	+	+	+	
912			+	+	+	+	+		+	+	+	+	

♦ Analyses performed according to the COFRAC accreditation

Rillettes
Listeria monocytogenes 1/2 V2/124

Level	Inoculation level (CFU/25g)	No	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	1214	-	-	-	-	-	0/6	-	-	0/6
		1215	-	-	-	-	-		-	-	
		1216	-	-	-	-	-		-	-	
		1217	-	-	-	-	-		-	-	
		1218	-	-	-	-	-		-	-	
		1219	-	-	-	-	-		-	-	
1	0,2	1480	+	+	+	+	+	3/6	+	+	3/6
		1481	+	+	+	+	+		+	+	
		1482	+	+	+	+	+		+	+	
		1483	-	-	-	-	-		-	-	
		1484	-	-	-	-	-		-	-	
		1485	-	-	-	-	-		-	-	
2	0,4	1486	-	-	-	-	-	2/6	-	-	2/6
		1487	-	-	-	-	-		-	-	
		1488	-	-	-	-	-		-	-	
		1489	+	+	+	+	+		+	+	
		1490	+	+	+	+	+		+	+	
		1491	-	-	-	-	-		-	-	
3	0,9	1492	+	+	+	+	+	5/6	+	+	5/6
		1493	+	+	+	+	+		+	+	
		1494	-	-	-	-	-		-	-	
		1495	+	+	+	+	+		+	+	
		1496	+	+	+	+	+		+	+	
		1497	+	+	+	+	+		+	+	
4	2,3	1498	+	+	+	+	+	4/6	+	+	4/6
		1499	-	-	-	-	-		-	-	
		1500	+	+	+	+	+		+	+	
		1501	+	+	+	+	+		+	+	
		1502	-	-	-	-	-		-	-	
		1503	+	+	+	+	+		+	+	
5	4,1	2028	+	+	+	+	+	6/6	+	+	6/6
		2029	+	+	+	+	+		+	+	
		2030	+	+	+	+	+		+	+	
		2031	+	+	+	+	+		+	+	
		2032	+	+	+	+	+		+	+	
		2033	+	+	+	+	+		+	+	

♦ Analyses performed according to the COFRAC accreditation

Fresh goat cheese
***Listeria ivanovii* Ad991**
Aerobic mesophilic flora: 715 to 720 (1,8.10^6/g);812 to 829 (5,0.10^6/g)

Sample No	Level	Inoculation level (CFU/25g)	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
594	0	/	-	-	-	-	-	0/6	-	-	0/6
595			-	-	-	-	-		-	-	
596			-	-	-	-	-		-	-	
597			-	-	-	-	-		-	-	
598			-	-	-	-	-		-	-	
599			-	-	-	-	-		-	-	
812	1	0,4	-	-	-	-	-	1/6	-	-	1/6
813			H+	+	/	/	+		H+	+	
814			-	-	-	-	-		-	-	
815			-	-	-	-	-		-	-	
816			-	-	-	-	-		-	-	
817			-	-	-	-	-		-	-	
818	2	0,9	H+	+	/	/	+	3/6	H+	+	3/6
819			-	-	-	-	-		-	-	
820			-	-	-	-	-		-	-	
821			H+	+	/	/	+		H+	+	
822			-	-	-	-	-		-	-	
823			H+	+	/	/	+		H+	+	
824	3	1,8	-	-	-	-	-	5/6	-	-	5/6
825			H+	+	/	/	+		H+	+	
826			H+	+	/	/	+		H+	+	
827			H+	+	/	/	+		H+	+	
828			H+	+	/	/	+		H+	+	
829			H+	+	/	/	+		H+	+	
715	4	4,8	H+	+	/	/	+	6/6	H+	+	6/6
716			H+	+	/	/	+		H+	+	
717			H+	+	/	/	+		H+	+	
718			H+	+	/	/	+		H+	+	
719			H+	+	/	/	+		H+	+	
720			H+	+	/	/	+		H+	+	

♦ Analyses performed according to the COFRAC accreditation

Smoked salmon
***Listeria innocua* 1**
Aerobic mesophilic flora:600 à 605 and 682 to 68 (9,3.10³/g) ; 960 to 871 (5,2.10³/g

Sample No	Level	Inoculation level (CFU/25g)	NF EN ISO 11290-1♦				Result	Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser						
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
600	0	/	-	-	-	-	-	0/6	-	-	0/6
601			-	-	-	-	-		-	-	
602			-	-	-	-	-		-	-	
603			-	-	-	-	-		-	-	
604			-	-	-	-	-		-	-	
605			-	-	-	-	-		-	-	
860	1	0,1	-	-	-	-	-	1/6	-	-	1/6
861			-	-	-	-	-		-	-	
862			-	-	-	-	-		-	-	
863			H-	+	/	/	+		H-	+	
864			-	-	-	-	-		-	-	
865			-	-	-	-	-		-	-	
866	2	0,3	-	-	-	-	-	2/6	-	-	2/6
867			H-	+	/	/	+		H-	+	
868			-	-	-	-	-		-	-	
869			-	-	-	-	-		-	-	
870			-	-	-	-	-		-	-	
871			H-	+	/	/	+		H-	+	
682	4	0,4	H-	+	/	/	+	5/6	H-	+	5/6
683			H-	+	/	/	+		H-	+	
684			H-	+	/	/	+		H-	+	
685			-	-	-	-	-		-	-	
686			H-	+	/	/	+		H-	+	
687			H-	+	/	/	+		H-	+	
872	3	0,6	H-	+	/	/	+	6/6	H-	+	6/6
873			H-	+	/	/	+		H-	+	
874			H-	+	/	/	+		H-	+	
875			H-	+	/	/	+		H-	+	
876			H-	+	/	/	+		H-	+	
877			H-	+	/	/	+		H-	+	

♦ Analyses performed according to the COFRAC accreditation

Green beans

Listeria monocytogenes 1/2 1011/14/10

Aerobic mesophilic flora:3,7.10^5 CFU/g

Level	Inoculation level (CFU/25g)	Sample No	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	2392	-	-	-	-	-	0/6	-	-	0/6
		2393	-	-	-	-	-		-	-	
		2394	-	-	-	-	-		-	-	
		2395	-	-	-	-	-		-	-	
		2396	-	-	-	-	-		-	-	
		2397	-	-	-	-	-		-	-	
1	0,2	2398	+	+	+	+	+	4/6	+	+	4/6
		2399	-	-	-	-	-		-	-	
		2400	+	+	+	+	+		+	+	
		2401	-	-	-	-	-		-	-	
		2402	+	+	+	+	+		+	+	
		2403	+	+	+	+	+		+	+	
2	0,3	2404	-	-	-	-	-	3/6	-	-	3/6
		2405	-	-	-	-	-		-	-	
		2406	+	+	+	+	+		+	+	
		2407	+	+	+	+	+		+	+	
		2408	-	-	-	-	-		-	-	
		2409	+	+	+	+	+		+	+	
3	0,7	2410	+	+	+	+	+	4/6	+	+	4/6
		2411	-	-	-	-	-		-	-	
		2412	+	+	+	+	+		+	+	
		2413	+	+	+	+	+		+	+	
		2414	+	+	+	+	+		+	+	
		2415	-	-	-	-	-		-	-	
4	1,7	2416	+	+	+	+	+	6/6	+	+	6/6
		2417	+	+	+	+	+		+	+	
		2418	+	+	+	+	+		+	+	
		2419	+	+	+	+	+		+	+	
		2420	+	+	+	+	+		+	+	
		2421	+	+	+	+	+		+	+	
5	3,4	2422	+	+	+	+	+	6/6	+	+	6/6
		2423	+	+	+	+	+		+	+	
		2424	+	+	+	+	+		+	+	
		2425	+	+	+	+	+		+	+	
		2426	+	+	+	+	+		+	+	
		2427	+	+	+	+	+		+	+	

♦ Analyses performed according to the COFRAC accreditation

Process water

Listeria monocytogenes 877/113

Level	Inoculation level (CFU/25g)	Sample No	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	1783	-	-	-	-	-	0/6	-	-	
		1784	-	-	-	-	-		-	-	
		1785	-	-	-	-	-		-	-	
		1786	-	-	-	-	-		-	-	
		1787	-	-	-	-	-		-	-	
		1788	-	-	-	-	-		-	-	
1	0,2	1789	+	+	+	+	+	3/6	+	+	3/6
		1790	-	-	-	-	-		-	-	
		1791	-	-	-	-	-		-	-	
		1792	+	+	+	+	+		+	+	
		1793	-	-	-	-	-		-	-	
		1794	+	+	+	+	+		+	+	
2	0,3	1795	-	-	-	-	-	0/6	-	-	0/6
		1796	-	-	-	-	-		-	-	
		1797	-	-	-	-	-		-	-	
		1798	-	-	-	-	-		-	-	
		1799	-	-	-	-	-		-	-	
		1800	-	-	-	-	-		-	-	
3	0,7	1801	-	-	-	-	-	4/6	-	-	4/6
		1802	+	+	+	+	+		+	+	
		1803	+	+	+	+	+		+	+	
		1804	+	+	+	+	+		+	+	
		1805	+	+	+	+	+		+	+	
		1806	-	-	-	-	-		-	-	
4	1,7	1807	+	+	+	+	+	6/6	+	+	6/6
		1808	+	+	+	+	+		+	+	
		1809	+	+	+	+	+		+	+	
		1810	+	+	+	+	+		+	+	
		1811	+	+	+	+	+		+	+	
		1812	+	+	+	+	+		+	+	
5	0,3	2046	-	-	-	-	-	0/6	-	-	0/6
		2047	-	-	-	-	-		-	-	
		2048	-	-	-	-	-		-	-	
		2049	-	-	-	-	-		-	-	
		2050	-	-	-	-	-		-	-	
		2051	-	-	-	-	-		-	-	
6	0,5	2052	-	-	-	-	-	1/6	-	-	1/6
		2053	-	-	-	-	-		-	-	
		2054	+	+	+	+	+		+	+	
		2055	-	-	-	-	-		-	-	
		2056	-	-	-	-	-		-	-	
		2057	-	-	-	-	-		-	-	

♦ Analyses performed according to the COFRAC accreditation

Appendix 6 - Inclusivity/Exclusivity: raw data (Extension study, 2011)

POSITIVE STRAINS (*Listeria monocytogenes*)										
No	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h		
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo
1.	*Listeria*	*monocytogenes*	153	Munster	Blue	2	+	Blue	3	+
2.	*Listeria*	*monocytogenes*	909	Milk	Blue	2	+	Blue	3	+
3.	*Listeria*	*monocytogenes*	910	Milk	Blue	2	+	Blue	3	+
4.	*Listeria*	*monocytogenes*	917	Milk	Blue	2	+	Blue	3	+
5.	*Listeria*	*monocytogenes*	18023	Milk	Blue	2	+	Blue	3	+
6.	*Listeria*	*monocytogenes*	18024	Milk	Blue	2	+	Blue	3	+
7.	*Listeria*	*monocytogenes*	1011/1410	Frozen broccolis	Blue	2	+	Blue	3	+
8.	*Listeria*	*monocytogenes*	1016/1413	Frozen broccolis	Blue	2	+	Blue	3	+
9.	*Listeria*	*monocytogenes*	17501	Milk	Blue	2	+	Blue	3	+
10.	*Listeria*	*monocytogenes*	1972/2399	Mushrooms puff pastry	Blue	2	+	Blue	3	+
11.	*Listeria*	*monocytogenes*	1973/2400	Quiche lorraine	Blue	2	+	Blue	3	+
12.	*Listeria*	*monocytogenes*	2407/3139	Tripes à la tomate	Blue	2	+	Blue	3	+
13.	*Listeria*	*monocytogenes*	2760/3145	Pork meat	Blue	2	+	Blue	3	+
14.	*Listeria*	*monocytogenes*	32.183	Croque-monsieur	Blue	2	+	Blue	3	+
15.	*Listeria*	*monocytogenes*	38/181	Toulouse sausage	Blue	2	+	Blue	3	+
16.	*Listeria*	*monocytogenes*	5721/6179	Bacon	Blue	2	+	Blue	3	+
17.	*Listeria*	*monocytogenes*	6072	Smoked salmon	Blue micro-colonies	<0,5	+	Blue	3	+
18.	*Listeria*	*monocytogenes*	7111/7516	Rillettes	Blue	2	+	Blue	3	+
19.	*Listeria*	*monocytogenes*	850/109	Nordic plate	Blue	2	+	Blue	3	+
20.	*Listeria*	*monocytogenes*	86/690	Food product	Blue	2	+	Blue	3	+
21.	*Listeria*	*monocytogenes*	87/6172	Food product	Blue	2	+	Blue	3	+
22.	*Listeria*	*monocytogenes*	877/113	Environmental sample	Blue	2	+	Blue	3	+
23.	*Listeria*	*monocytogenes*	88/7137	Food product	Blue	2	+	Blue	3	+
24.	*Listeria*	*monocytogenes*	913/1 048	Blood sausage	Blue	2	+	Blue	3	+
25.	*Listeria*	*monocytogenes*	A00C014	Chipolatas	Blue	2	+	Blue	3	+

POSITIVE STRAINS (*Listeria monocytogenes*)										
No	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h		
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo
26.	*Listeria*	*monocytogenes*	A00C015	Chipolatas	Blue	2	+	Blue	3	+
27.	*Listeria*	*monocytogenes*	A00C022	Merguez	Blue	2	+	Blue	3	+
28.	*Listeria*	*monocytogenes*	A00C024	Chipolatas with herbs	Blue	2	+	Blue	3	+
29.	*Listeria*	*monocytogenes*	A00C036	Guinea fowl	Blue	2	+	Blue	3	+
30.	*Listeria*	*monocytogenes*	A00C039	Sausage	Blue	2	+	Blue	3	+
31.	*Listeria*	*monocytogenes*	A00C040	Delicatessen	Blue	2	+	Blue	3	+
32.	*Listeria*	*monocytogenes*	A00C041	Sausage meat	Blue	2	+	Blue	3	+
33.	*Listeria*	*monocytogenes*	A00C042	Toulouse sausage	Blue	2	+	Blue	3	+
34.	*Listeria*	*monocytogenes*	A00C043	Bacon	Blue	2	+	Blue	3	+
35.	*Listeria*	*monocytogenes*	A00C044	Barbarian cane	Blue	2	+	Blue	3	+
36.	*Listeria*	*monocytogenes*	A00C052	Osso bucco	Blue	2	+	Blue	3	+
37.	*Listeria*	*monocytogenes*	A00C053	Gizzard	Blue	2	+	Blue	3	+
38.	*Listeria*	*monocytogenes*	A00C054	Beef heat	Blue	2	+	Blue	3	+
39.	*Listeria*	*monocytogenes*	A00C055	Toulouse sausage	Blue	2	+	Blue	3	+
40.	*Listeria*	*monocytogenes*	A00E008	Environmental sample	Blue	2	+	Blue	3	+
41.	*Listeria*	*monocytogenes*	A00E033	Environmental sample	Blue	2	+	Blue	3	+
42.	*Listeria*	*monocytogenes*	A00E049	Environmental sample	Blue	2	+	Blue	3	+
43.	*Listeria*	*monocytogenes*	A00E082	Smoked salmon environment	Blue	2	+	Blue	3	+
44.	*Listeria*	*monocytogenes*	A00L097	Milk	Blue	2	+	Blue	3	+
45.	*Listeria*	*monocytogenes*	A00L101	Milk	Blue	2	+	Blue	3	+
46.	*Listeria*	*monocytogenes*	A00L107	Milk	Blue	2	+	Blue	3	+
47.	*Listeria*	*monocytogenes*	A00M009	Smoked salmon	Blue	2	+	Blue	3	+
48.	*Listeria*	*monocytogenes*	A00M019	Smoked salmon	Blue	2	+	Blue	3	+
49.	*Listeria*	*monocytogenes*	A00M020	Smoked salmon	Blue	2	+	Blue	3	+
50.	*Listeria*	*monocytogenes*	A00M021	Smoked salmon	Blue	2	+	Blue	3	+
51.	*Listeria*	*monocytogenes*	A00M023	Smoked salmon	Blue	2	+	Blue	3	+
52.	*Listeria*	*monocytogenes*	A00M029	Smoked salmon	Blue	2	+	Blue	3	+

POSITIVE STRAINS (*Listeria monocytogenes*)										
No	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h		
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo
53.	*Listeria*	*monocytogenes*	A00M030	Smoked salmon raw material	Blue	2	+	Blue	3	+
54.	*Listeria*	*monocytogenes*	A00M032	Norwegian salmon	Blue	2	+	Blue	3	+
55.	*Listeria*	*monocytogenes*	A00M045	Smoked salmon	Blue	2	+	Blue	3	+
56.	*Listeria*	*monocytogenes*	A00M050	Swordfish raw material	Blue	2	+	Blue	3	+
57.	*Listeria*	*monocytogenes*	A00M051	Smoked salmon	Blue	2	+	Blue	3	+
58.	*Listeria*	*monocytogenes*	A00M080	Salmon raw material	Blue	2	+	Blue	3	+
59.	*Listeria*	*monocytogenes*	A00M081	Smoked salmon	Blue	2	+	Blue	3	+
60.	*Listeria*	*monocytogenes*	A00M088	Irish smoked salmon	Blue	2	+	Blue	3	+
61.	*Listeria*	*monocytogenes*	A00M089	Norwegian smoked salmon	Blue	2	+	Blue	3	+
62.	*Listeria*	*monocytogenes*	A00M096	Scottish smoked salmon	Blue	2	+	Blue	3	+
63.	*Listeria*	*monocytogenes*	A00M111	Scottish smoked salmon	Blue	2	+	Blue	3	+
64.	*Listeria*	*monocytogenes*	A00M112	Norwegian smoked salmon	Blue	2	+	Blue	3	+
65.	*Listeria*	*monocytogenes*	A00M113	Irish smoked salmon	Blue	2	+	Blue	3	+
66.	*Listeria*	*monocytogenes*	A00M123	Smoked salmon	Blue	2	+	Blue	3	+
67.	*Listeria*	*monocytogenes*	Ad148	Seafood	Blue	2	+	Blue	3	+
68.	*Listeria*	*monocytogenes*	Ad235	Poultry	Blue	2	+	Blue	3	+
69.	*Listeria*	*monocytogenes*	Ad252	Dairy product	Blue	2	+	Blue	3	+
70.	*Listeria*	*monocytogenes*	Ad253	Cheese	Blue	2	+	Blue	3	+
71.	*Listeria*	*monocytogenes*	Ad255	Dairy product	Blue	2	+	Blue	3	+
72.	*Listeria*	*monocytogenes*	Ad258	Dairy product	Blue	2	+	Blue	3	+
73.	*Listeria*	*monocytogenes*	Ad260	Cheese	Blue	2	+	Blue	3	+
74.	*Listeria*	*monocytogenes*	Ad262	Dairy product	Blue	2	+	Blue	3	+
75.	*Listeria*	*monocytogenes*	Ad265	Tongue	Blue	2	+	Blue	3	+
76.	*Listeria*	*monocytogenes*	Ad266	Chicken	Blue	2	+	Blue	3	+
77.	*Listeria*	*monocytogenes*	Ad267	Dry sausage	Blue	2	+	Blue	3	+
78.	*Listeria*	*monocytogenes*	Ad268	Vendée ham	Blue	2	+	Blue	3	+
79.	*Listeria*	*monocytogenes*	Ad270	Delicatessen	Blue	2	+	Blue	3	+

POSITIVE STRAINS (*Listeria monocytogenes*)										
No	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h		
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo
80.	*Listeria*	*monocytogenes*	Ad271	Bacon fillet	Blue	2	+	Blue	3	+
81.	*Listeria*	*monocytogenes*	Ad272	Dry sausage from 'Auvergne	Blue	2	+	Blue	3	+
82.	*Listeria*	*monocytogenes*	Ad273	Dry ham from Savoie	Blue	2	+	Blue	3	+
83.	*Listeria*	*monocytogenes*	Ad274	Asian mix	Blue	2	+	Blue	3	+
84.	*Listeria*	*monocytogenes*	Ad275	Delicatessen	Blue	2	+	Blue	3	+
85.	*Listeria*	*monocytogenes*	Ad276	Strasbourg Sausage	Blue	2	+	Blue	3	+
86.	*Listeria*	*monocytogenes*	Ad277	Chorizo	Blue	2	+	Blue	3	+
87.	*Listeria*	*monocytogenes*	Ad278	Smoked bacon	Blue	2	+	Blue	3	+
88.	*Listeria*	*monocytogenes*	Ad279	Precooked vegetables mix	Blue	2	+	Blue	3	+
89.	*Listeria*	*monocytogenes*	Ad280	Bacon	Blue	2	+	Blue	3	+
90.	*Listeria*	*monocytogenes*	Ad281	Pasta with cheese	Blue	2	+	Blue	3	+
91.	*Listeria*	*monocytogenes*	Ad285	Green pepper	Blue	2	+	Blue	3	+
92.	*Listeria*	*monocytogenes*	Ad291	Bacon	Blue	2	+	Blue	3	+
93.	*Listeria*	*monocytogenes*	Ad292	Knacky	Blue	2	+	Blue	3	+
94.	*Listeria*	*monocytogenes*	Ad293	Sliced coppa	Blue	2	+	Blue	3	+
95.	*Listeria*	*monocytogenes*	Ad294	Clinical	Blue	2	+	Blue	3	+
96.	*Listeria*	*monocytogenes*	Ad295	Clinical	Blue	2	+	Blue	3	+
97.	*Listeria*	*monocytogenes*	Ad299	Cockle	Blue	2	+	Blue	3	+
98.	*Listeria*	*monocytogenes*	Ad470	Cheese	Blue	2	+	Blue	3	+
99.	*Listeria*	*monocytogenes*	Ad474	Smoked salmon	Blue	2	+	Blue	3	+
100.	*Listeria*	*monocytogenes*	Ad494	Deli salad (Piémontaise)	Blue	2	+	Blue	3	+
101.	*Listeria*	*monocytogenes*	Ad523	Raclette cheese	Blue	2	+	Blue	3	+
102.	*Listeria*	*monocytogenes*	Ad532	Fruits	Blue	2	+	Blue	3	+
103.	*Listeria*	*monocytogenes*	Ad534	Fruits	Blue	2	+	Blue	3	+
104.	*Listeria*	*monocytogenes*	Ad543	Sliced pepper	Blue	2	+	Blue	3	+
105.	*Listeria*	*monocytogenes*	Ad544	Prefried onion	Blue	2	+	Blue	3	+
106.	*Listeria*	*monocytogenes*	Ad545	Cabbage carrot salad	Blue	2	+	Blue	3	+

POSITIVE STRAINS (*Listeria monocytogenes*)										
No	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h		
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo
107.	*Listeria*	*monocytogenes*	Ad546	Buckwheat flour	Blue	2	+	Blue	3	+
108.	*Listeria*	*monocytogenes*	Ad548	Environmental sample	Blue	2	+	Blue	3	+
109.	*Listeria*	*monocytogenes*	Ad549	Fish delicatessen workshop	Blue	2	+	Blue	3	+
110.	*Listeria*	*monocytogenes*	Ad550	Sewer outside	Blue	2	+	Blue	3	+
111.	*Listeria*	*monocytogenes*	Ad551	Environmental sample	Blue	2	+	Blue	3	+
112.	*Listeria*	*monocytogenes*	Ad610	Milk	Blue	2	+	Blue	3	+
113.	*Listeria*	*monocytogenes*	Ad611	Milk	Blue	2	+	Blue	3	+
114.	*Listeria*	*monocytogenes*	Ad612	Livarot	Blue	2	+	Blue	3	+
115.	*Listeria*	*monocytogenes*	Ad613	Munster	Blue	2	+	Blue	3	+
116.	*Listeria*	*monocytogenes*	Ad614	Dairy environment	Blue	2	+	Blue	3	+
117.	*Listeria*	*monocytogenes*	Ad615	Dairy environment	Blue	2	+	Blue	3	+
118.	*Listeria*	*monocytogenes*	Ad617	Dairy environment	Blue	2	+	Blue	3	+
119.	*Listeria*	*monocytogenes*	Ad618	Munster	Blue	2	+	Blue	3	+
120.	*Listeria*	*monocytogenes*	Ad619	fromage	Blue	2	+	Blue	3	+
121.	*Listeria*	*monocytogenes*	Ad620	Dairy environment	Blue	2	+	Blue	3	+
122.	*Listeria*	*monocytogenes*	Ad621	Dairy environment (floor)	Blue	2	+	Blue	3	+
123.	*Listeria*	*monocytogenes*	Ad622	Cheese	Blue	2	+	Blue	3	+
124.	*Listeria*	*monocytogenes*	Ad623	Breadcrumbs (dairy)	Blue	2	+	Blue	3	+
125.	*Listeria*	*monocytogenes*	Ad624	Dairy environment	Blue	2	+	Blue	3	+
126.	*Listeria*	*monocytogenes*	Ad625	Dairy environment	Blue	2	+	Blue	3	+
127.	*Listeria*	*monocytogenes*	Ad626	Gorgonzola	Blue	2	+	Blue	3	+
128.	*Listeria*	*monocytogenes*	Ad627	Dairy product packaging	Blue	2	+	Blue	3	+
129.	*Listeria*	*monocytogenes*	Ad628	Dairy product packaging	Blue	2	+	Blue	3	+
130.	*Listeria*	*monocytogenes*	Ad629	Cantal	Blue	2	+	Blue	3	+
131.	*Listeria*	*monocytogenes*	Ad630	Cantal	Blue	2	+	Blue	3	+
132.	*Listeria*	*monocytogenes*	Ad631	Dairy environment	Blue	2	+	Blue	3	+
133.	*Listeria*	*monocytogenes*	Ad632	Milk	Blue	2	+	Blue	3	+

POSITIVE STRAINS (*Listeria monocytogenes*)										
No	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h		
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo
134.	*Listeria*	*monocytogenes*	Ad633	Dairy environment	Blue	2	+	Blue	3	+
135.	*Listeria*	*monocytogenes*	Ad634	Dairy environment (floor)	Blue	2	+	Blue	3	+
136.	*Listeria*	*monocytogenes*	ADQP105	Smoked salmon	Blue	2	+	Blue	3	+
137.	*Listeria*	*monocytogenes*	AER100	Chicken	Blue	2	+	Blue	3	+
138.	*Listeria*	*monocytogenes*	AER101	Milk	Blue	2	+	Blue	3	+
139.	*Listeria*	*monocytogenes*	AER102	Brine	Blue	2	+	Blue	3	+
140.	*Listeria*	*monocytogenes*	AER103	Poultry	Blue	2	+	Blue	3	+
141.	*Listeria*	*monocytogenes*	BR32	Trout	Blue	2	+	Blue	3	+
142.	*Listeria*	*monocytogenes*	CL3:29	Meat product environment	Blue	2	+	Blue	3	+
143.	*Listeria*	*monocytogenes*	LMH180	Salad	Blue	2	+	Blue	3	+
144.	*Listeria*	*monocytogenes*	V2/124	Pork	Blue	2	+	Blue	3	+
145.	*Listeria*	*monocytogenes*	V5/126	Beef	Blue	2	+	Blue	3	+
146.	*Listeria*	*monocytogenes*	V8/127	Beef	Blue	2	+	Blue	3	+
147.	*Listeria*	*monocytogenes*	Ad 664	Unripened raw milk cheese	Blue	2	+	Blue	3	+
148.	*Listeria*	*monocytogenes*	Ad 665	Raw milk	Blue	2	+	Blue	3	+
149.	*Listeria*	*monocytogenes*	Ad 666	Cockerel	Blue	2	+	Blue	3	+
150.	*Listeria*	*monocytogenes*	Ad 667	Chicken leg	Blue	2	+	Blue	3	+
151.	*Listeria*	*monocytogenes*	Ad 668	Chicken wings	Blue	2	+	Blue	3	+
152.	*Listeria*	*monocytogenes*	Ad 669	Rillettes	Blue	2	+	Blue	3	+
153.	*Listeria*	*monocytogenes*	Ad 670	Smoked salmon	Blue	2	+	Blue	3	+

POSITIVE STRAINS (*Listeria* other than *Listeria monocytogenes*)												
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	
1	*Listeria*	*innocua*	1	Smoked salmon	+	Blue	2	-	Blue	2	-	
2	*Listeria*	*innocua*	T727	Meat product	+	Blue	2	-	Blue	2	-	
3	*Listeria*	*innocua*	NCTC10528	/	+	Blue	2	-	Blue	2	-	
4	*Listeria*	*innocua*	T654	Cheese	+	Blue	0,5-1	-	Blue	1-2	-	
5	*Listeria*	*innocua*	ATCC33090	Beef brain	+	Blue	2	-	Blue	2	-	
6	*Listeria*	*innocua*	CIP8012	/	+	Blue	2	-	Blue	2	-	
7	*Listeria*	*innocua*	17765	Pork meat	+	Blue	2	-	Blue	2	-	
8	*Listeria*	*innocua*	16969	Milk	+	Blue	2	-	Blue	2	-	
9	*Listeria*	*innocua*	18313	Milk	+	Blue	2	-	Blue	2	-	
10	*Listeria*	*innocua*	Ad 658	Gorgonzola	+	Blue	2	-	Blue	2	-	
11	*Listeria*	*innocua*	Dairy environment	Environmental sample	+	Blue	2	-	Blue	2	-	
12	*Listeria*	*innocua*	902	Dairy product	+	Blue	2	-	Blue	2	-	
13	*Listeria*	*innocua*	DSM20649	/	+	Blue	2	-	Blue	2	-	
14	*Listeria*	*innocua*	Ad663	Environmental sample	+	Blue	2	-	Blue	2	-	
15	*Listeria*	*innocua*	Ad660	Breadcrumbs	+	Blue	2	-	Blue	2	-	
16	*Listeria*	*innocua*	Ad657	Cheese (Cantal)	+	Blue	2	-	Blue	2	-	
17	*Listeria*	*innocua*	As661	Cheese (Pont L'Evêque)	+	Blue	2	-	Blue	2	-	
18	*Listeria*	*innocua*	Ad656	Soft cheese	+	Blue	2	-	Blue	2	-	
19	*Listeria*	*innocua*	Ad655	Brine	+	Blue	2	-	Blue	2	-	
20	*Listeria*	*innocua*	Ad653	Environment	+	Blue	2	-	Blue	2	-	
21	*Listeria*	*innocua*	Ad654	Dairy product	+	Blue	2	-	Blue	2	-	
22	*Listeria*	*innocua*	Ad671	Bacon	+	Blue	2	-	Blue	2	-	
23	*Listeria*	*ivanovii londoniensis*	CIP103466	/	+	Blue	0,5-1	+	Blue	1-2	+	
24	*Listeria*	*ivanovii*	CIP7842T	/	+	Blue	0,5-1	+	Blue	1-2	+	
25	*Listeria*	*ivanovii*	CIP103212	/	+	Blue	0,5-1	+	Blue	1-2	+	
26	*Listeria*	*ivanovii*	CIP103505	Trout	+	Blue	0,5-1	+	Blue	1-2	+	

POSITIVE STRAINS (*Listeria* other than *Listeria monocytogenes*)												
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	
27	*Listeria*	*ivanovii*	BR11	Fish farm environment, anti-bird net	+	Blue	0,5-1	+	Blue	1-2	+	
28	*Listeria*	*ivanovii*	BR15	Fish farm environment, basin wall	+	Blue	0,5-1	+	Blue	1-2	+	
29	*Listeria*	*ivanovii*	Ad466	Veal kidney	+	Blue	0,5-1	+	Blue	1-2	+	
30	*Listeria*	*ivanovii*	Ad662	Packaging	+	Blue	1-2	-	Blue	1-2	-	
31	*Listeria*	*ivanovii*	Ad648 (AERIAL 28)	Collection	+	Blue	1	+	Blue	1-2	+	
32	*Listeria*	*ivanovii*	L2-2	Poultry	+	Blue	1-2	+	Blue	1-2	+	
33	*Listeria*	*ivanovii*	L2-9	Ewe's milk	+	Blue	1-2	+	Blue	1-2	+	
34	*Listeria*	*ivanovii*	L2-11	Raw milk cheese	+	Blue	1-2	+	Blue	1-2	+	
35	*Listeria*	*ivanovii*	L2-12	Milk powder	+	Blue	1-2	+	Blue	1-2	+	
36	*Listeria*	*ivanovii*	L41	Raw milk	+	Blue	1-2	+	Blue	1-2	+	
37	*Listeria*	*ivanovii*	Ad616	Dairy environment (floor)	+	Blue	1-2	+ weak	Blue	1-2	+	
38	*Listeria*	*seeligeri*	CIP100100	/	+	Blue	µcolony	-	Blue	0,1-1	-	
39	*Listeria*	*seeligeri*	CNR936133	/	+	Blue	0,1-0,5	-	Blue	0,5-1	-	
40	*Listeria*	*seeligeri*	BR1	Trout	+	Blue	0,1-0,5	-	Blue	0,5-1	-	
41	*Listeria*	*seeligeri*	BR4	Fish	+	Blue	0,1-0,5	-	Blue	0,5-1	-	
42	*Listeria*	*seeligeri*	BR18	Fish farm environment, basin wall	+	Blue	0,1-0,5	-	Blue	0,5-1	-	
43	*Listeria*	*seeligeri*	Ad652	Foot bath	+	Blue	µcolony	-	Blue	0,5-1	-	
44	*Listeria*	*seeligeri*	Ad649 (AERIAL 26)	Cheese	+	Blue	µcolony	-	Blue	0,5-2	-	
45	*Listeria*	*seeligeri*	Ad651 (AERIAL 46)	Environment	+	Blue	µcolony	-	Blue	1-2	+ weak	
46	*Listeria*	*seeligeri*	Ad674	Munster (Cheese)	+	Blue	µcolony	-	Blue	1-2	-	
47	*Listeria*	*welshimeri*	CIP10413	/	+	Blue	2	-	Blue	2	-	
48	*Listeria*	*welshimeri*	CIP8149	/	+	Blue	0,1-0,5	-	Blue	0,1-1	-	
49	*Listeria*	*welshimeri*	Ad650 (AERIAL 45)	Poultry	+	Blue	0,5	-	Blue	1-2	-	
50	*Listeria*	*welshimeri*	191424	Poultry	+	Blue	2	-	Blue	1-2	-	
51	*Listeria*	*grayi*	ATCC19120	/	+	Pale blue	0,5-1	-	Blue	3	-	
52	*Listeria*	*grayi*	CIP76124	/	+	Pale blue	0,5-1	-	Blue	3	-	

NEGATIVE STRAINS												
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	
1	*Bacillus*	*cereus*	1	Liquid egg	+	No growth	/	-	No growth	/	+	
2	*Bacillus*	*cereus*	8	Spanish style pasta	+	No growth	/	-	No growth	/	/	
3	*Bacillus*	*cereus*	11	Rice purée	+	No growth	/	-	No growth	/	+ at inoculation point	
4	*Bacillus*	*cereus*	14.2	Ile flottante	+	No growth	/	-	No growth	/	/	
5	*Bacillus*	*cereus*	16	Spaghetti with seafood	+	No growth	/	+	No growth	/	+	
6	*Bacillus*	*cereus*	17	Rice pudding	+	No growth	/	+	No growth	/	+	
7	*Bacillus*	*cereus*	20	Chicken and carrot sauce	+	No growth	/	+	No growth	/	+ at inoculation point	
8	*Bacillus*	*cereus*	21	Rice with curry	+	No growth	/	-	No growth	/	+ at inoculation point	
9	*Bacillus*	*cereus*	22	Wheat flour	+	White spread, blue centre	>2	+	White spread, blue centre	>2	+	
10	*Bacillus*	*cereus*	26	Raw cow's milk	+	No growth	/	+	No growth	/	+	
11	*Bacillus*	*cereus*	30	Raw peeled shrimp ionized at 3Kgray	+	No growth	/	+ at inoculation point	No growth	/	+ at inoculation point	
12	*Bacillus*	*cereus*	31	Butter powder	+	No growth	/	+	No growth	/	+	
13	*Bacillus*	*cereus*	Ad420	Caseinate powder	+	White spread, blue centre	>2	+	White spread, blue centre	>2	+	
14	*Bacillus*	*cereus*	Ad465	Salmon terrine	+	No growth	/	-	No growth	/	-	
15	*Bacillus*	*cereus*	Ad483	Punch	+	No growth	/	+	No growth	/	+	
16	*Bacillus*	*cereus*	Ad495	Rice flour	+	White spread, green centre	>2	+	White spread, green centre	>2	+	
17	*Bacillus*	*cereus*	INRA104	Cold-stored purée	+	No growth	/	-	No growth	/	-	
18	*Bacillus*	*cereus*	Ad608	French stick dough	+	White spread, blue turquoise centre	>2	+	White spread, blue turquoise centre	>2	+	
19	*Bacillus*	*cereus*	54	Dairy product	+	No growth	/	-	Few white spread colonies	>2	-	
20	*Bacillus*	*cereus*	Ad607	Environment	+	Spread, turquoise	>2	+	Spread, turquoise	>2	+	
21	*Bacillus*	*cereus*	Ad609	Raining wipe, dairy workshop	+	White, green centre	>2	-	White, green centre	>2	-	

NEGATIVE STRAINS												
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	
22	*Bacillus*	*weihenstephanensis*	N12	Egg product	+	No growth	/	-	No growth	/	-	
23	*Bacillus*	*weihenstephanensis*	INRA87	Cold-stored purée	+	No growth	/	-	No growth	/	-	
24	*Bacillus*	*weihenstephanensis*	INRA140	Ready to eat	+	No growth	/	-	No growth	/	-	
25	*Bacillus*	*weihenstephanensis*	INRA171	Pasteurized vegetable	+	No growth	/	-	No growth	/	-	
26	*Bacillus*	*weihenstephanensis*	A1	Egg product	+	No growth	/	-	No growth	/	+ at inoculation point	
27	*Bacillus*	*weihenstephanensis*	SDA NFFE640	Dairy product	+	No growth	/	-	No growth	/	+ at inoculation point	
28	*Bacillus*	*thuringiensis*	IEBC T31	Vegetables	+	No growth	/	-	No growth	/	-	
29	*Bacillus*	*licheniformis*	7600	Dairy product	+	White spread	>2	-	White spread	>2	-	
30	*Bacillus*	*licheniformis*	LMSA 049	Egg product	+	White spread, green centre	>2	-	White spread, green centre	>2	-	
31	*Bacillus*	*pumilus*	7572	Dairy product	+	White	01-0,5	-	Blue spread	1-2	-	
32	*Bacillus*	*pumilus*	INRA 260	Vegetables	+	Pale green	1-2	-	White spread, blue centre	>2	-	
33	*Bacillus*	*circulans*	B8	Dairy product	+	Turquoise	1	-	Blue	1-2	Lightening halo	
34	*Bacillus*	*coagulans*	7179	Dairy product	+	No growth	/	-	No growth	/	-	
35	*Bacillus*	*sphaericus*	/	Dairy product	+	White	1	-	Spread brown	>2	-	
36	*Bacillus*	*subtilis*	7750	Dairy product	+	No growth	/	-	No growth	/	-	
37	*Bacillus*	*subtilis*	LMSA 092	Egg product	+	No growth	/	-	No growth	/	-	
38	*Bacillus*	*mycoïdes*	NFSO60	Milk	+	No growth	/	-	No growth	/	-	
39	*Bacillus*	*pseudomycoides*	S38	Vegetables	+	No growth	/	-	No growth	/	-	
40	*Enterococcus*	*durans*	Ad 149	Ham	+	No growth	/	-	No growth	/	-	
41	*Enterococcus*	*durans*	Ad181	Pasteurized liquid egg	+	No growth	/	-	No growth	/	-	
42	*Enterococcus*	*faecalis*	89L326	Vacherin	+	No growth	/	-	No growth	/	-	
43	*Enterococcus*	*faecalis*	89L333	Appenzel	+	No growth	/	-	No growth	/	-	
44	*Enterococcus*	*faecalis*	F4	Cheese	+	No growth	/	-	No growth	/	-	
45	*Enterococcus*	*faecalis*	25	Chicken leg	+	No growth	/	-	No growth	/	-	
46	*Enterococcus*	*faecalis*	Ad289	Ready to eat	+	No growth	/	-	Turquoise	Trace	-	

NEGATIVE STRAINS												
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	
47	*Enterococcus*	*faecium*	Ad180	Pasteurized liquid egg	+	Green	µcolony	-	Pale turquoise	<1	-	
48	*Enterococcus*	*faecium*	CNRZ1391	Cheese	+	No growth	/	-	Turquoise	Trace	-	
49	*Enterococcus*	*hirae*	CNRZ1380	Cheese	+	Green	µcolony	-	Pale turquoise	<1	-	
50	*Enterococcus*	*avium*	Ad183	Raw liquid egg	+	No growth	/	-	No growth	/	-	
51	*Lactococcus*	*lactis cremoris*	91G030	Gros lait	+	No growth	/	-	No growth	/	-	
52	*Lactococcus*	*lactis*	89L335	Reblochon	+	No growth	/	-	No growth	/	-	
53	*Streptococcus*	*salivarius*	Ad441	Milk	+	No growth	/	-	No growth	/	-	
54	*Streptococcus*	*bovis*	92L613	Cheese	+	No growth	/	-	No growth	/	-	

Appendix 7 - Artificial contamination of samples - *Listeria* spp. - Half Fraser Protocol- 37°C

HALF FRASER PROTOCOL - 37°C												
Year	Sample No	Product (French)	Product (English name)	Artificial contamination					Result *Listeria* spp		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level	22 h	48 h		
2019	**723**	**Sandwich thon œuf**	**Tuna and egg sandwich**	*L.seeligeri* Ad2635	Trout	Seeding 48 h 3±2°C	/	4,0	+	+	1	a
2019	**724**	**Sandwich thon œuf**	**Tuna and egg sandwich**	*L.monocytogenes* Ad1186	Breaded codfish	Seeding 48 h 3±2°C	/	2,0	+	+	1	a
2019	**725**	**Sandwich jambon Emmental**	**Emmental ham sandwich**	*L.monocytogenes* Ad270	Sausage	Seeding 48 h 3±2°C	/	1,8	+	+	1	a
2019	**726**	**Sandwich jambon Emmental**	**Emmental ham sandwich**	*L.monocytogenes* Ad271	Bacon	Seeding 48 h 3±2°C	/	2,8	+	+	1	a
2019	**727**	**Sandwich jambon Emmental**	**Ham Emmental sandwich**	*L.monocytogenes* Ad271	Bacon	Seeding 48 h 3±2°C	/	2,8	+	+	1	a
2019	**728**	**Sandwich saumon cuit et fumé**	**Cooked and smoked salmon sandwich**	*L.monocytogenes* Ad1185	Panga fish	Seeding 48 h 3±2°C	/	2,2	+	+	1	a
2019	**729**	**Sandwich saumon cuit et fumé**	**Cooked and smoked salmon sandwich**	*L.welshimeri* Ad642	Sea bream	Seeding 48 h 3±2°C	/	2,6	+	+	1	a
2018	**8613**	**Paella**	**Paella**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	3,4	+	+	1	b
2018	**8614**	**Paella**	**Paella**	*L.innocua* Ad1675	Fish	Seeding 48 h 3±2°C	/	3,0	+	+	1	b
2018	**8615**	**Pizza jambon fromage**	**Ham and cheese pizza**	*L.monocytogenes* Ad2154	Pâté	Seeding 48 h 3±2°C	/	1,6	+	+	1	b
2018	**8616**	**Pizza jambon fromage**	**Ham and cheese pizza**	*L.monocytogenes* Ad1494	Sausage	Seeding 48 h 3±2°C	/	2,4	+	+	1	b
2018	**8617**	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad2154	Pâté	Seeding 48 h 3±2°C	/	1,6	+	+	1	b
2018	**8618**	**Quiche Lorraine**	**Quiche Lorraine**	*L.welshimeri* Ad1671	Pork	Seeding 48 h 3±2°C	/	4,0	+	+	1	b
2018	**8619**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	3,4	+	+	1	b
2018	**8620**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	*L.monocytogenes* Ad1279	Smoked fish	Seeding 48 h 3±2°C	/	3,0	+	+	1	b
2019	**79**	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad2154+*L.welshimeri* Ad1670	Green pepper pâté + sausage	Seeding 48 h 3±2°C	/	0,4+1,2	+	+	1	b
2019	**80**	**Pizza jambon fromage**	**Ham and cheese pizza**	*L.monocytogenes* Ad2154+*L.welshimeri* Ad1670	Green pepper pâté + sausage	Seeding 48 h 3±2°C	/	0,4+1,2	+	+	1	b
2019	**81**	**Feuilleté jambon Emmental**	**Puff pastry with ham and mint**	*L.monocytogenes* Ad2154+*L.welshimeri* Ad1670	Green pepper pâté + sausage	Seeding 48 h 3±2°C	/	0,4+1,2	+	+	1	b
2019	**529**	**Couscous 3 viandes**	**Couscous 3 meats**	*L.monocytogenes* Ad1494	Strasbourg sausage	Seeding 48 h 3±2°C	/	1,0	+	+	1	b
2019	**530**	**Croissant au jambon**	**Ham Croissant**	*L.monocytogenes* Ad1494	Strasbourg sausage	Seeding 48 h 3±2°C	/	1,0	-	-	1	b
2019	**531**	**Quiche Lorraine**	**Quiche Lorraine**	*L.monocytogenes* Ad669	Rillettes	Seeding 48 h 3±2°C	/	0,6	+	+	1	b
2018	**8621**	**Eclair vanille**	**Pastry (Vanilla éclair)**	*L.monocytogenes* Ad1195	Egg products	Seeding 48 h 3±2°C	/	5,2	+	+	1	c
2018	**8622**	**Eclair vanille**	**Pastry (Vanilla éclair)**	*L.monocytogenes* Ad1757	Egg products	Seeding 48 h 3±2°C	/	1,8	+	+	1	c
2018	**8623**	**Eclair chocolat**	**Pastry (Chocolate éclair)**	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,6	+	+	1	c
2018	**8624**	**Eclair chocolat**	**Pastry (Chocolate éclair)**	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,8	+	+	1	c
2018	**8625**	**Flan**	**Custard**	*L.monocytogenes* JL2862 + *L.innocua* Ad644	Egg white + Pastry	Seeding 48 h 3±2°C	/	1,0+1,4	+	+	1	c
2018	**8626**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	*L.monocytogenes* Ad1195	Egg products	Seeding 48 h 3±2°C	/	5,2	+	+	1	c
2018	**8627**	**Tortilla espagnole**	**Spanish Tortilla**	*L.monocytogenes* JL2862	Egg white	Seeding 48 h 3±2°C	/	3,2	+	+	1	c
2018	**8628**	**Tortilla aux oignons**	**Tortilla with onions**	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,8	+	+	1	c
2018	**8629**	**Tortilla aux oignons**	**Tortilla with onions**	*L.monocytogenes* Ad1757 + *L.welshimeri* Ad1270	Egg products + Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,0+1,6	+	+	1	c
2018	**8630**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	*L.monocytogenes* Ad1195 + *L.innocua* Ad644	Egg products + Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,0+1,4	+	+	1	c
2018	**8631**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	*L.monocytogenes* Ad1757	Egg products	Seeding 48 h 3±2°C	/	1,8	+	+	1	c
2018	**8632**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,6	+	+	1	c
2018	**8633**	**Crème aux œufs vanille**	**Vanilla egg cream**	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,6	+	+	1	c
2018	**8634**	**Crème aux œufs vanille**	**Vanilla egg cream**	*L.monocytogenes* Ad1195 + *L.innocua* Ad1277	Egg products + Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,0+2,0	+	+	1	c
2018	**8635**	**Ile flottante**	**Ile flottante**	*L.monocytogenes* JL2862 + *L.innocua* Ad644	Egg white + Pastry	Seeding 48 h 3±2°C	/	1,0+1,4	+	+	1	c
2019	**74**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	*L.monocytogenes* Ad1218 + *L.innocua* Ad643	Minced steak + veal paupiette	Seeding 48 h 3±2°C	/	6,2+1,0	+	+	2	b
2019	**75**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	*L.monocytogenes* Ad1208 + *L.welshimeri* Ad1202	Frozen minced steak + minced veal	Seeding 48 h 3±2°C	/	4,8+1,8	+	+	2	b
2019	**76**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in the old style**	*L.monocytogenes* Ad1206 + *L.innocua* Ad643	Frozen minced steak + veal paupiette	Seeding 48 h 3±2°C	/	1,4+1,0	+	+	2	b
2019	**77**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in old fashioned style**	*L.monocytogenes* Ad1218 + *L.welshimeri* Ad1202	Frozen minced steak + minced veal	Seeding 48 h 3±2°C	/	6,2+1,8	+	+	2	b
2019	**78**	**Paupiette de veau sauce tomate**	**Paupiette of veal with tomato sauce**	*L.monocytogenes* Ad1208 + *L.innocua* Ad643	Frozen minced steak + veal olives	Seeding 48 h 3±2°C	/	4,8+1,0	+	+	2	b
2019	**971**	**Bœuf bourguignon et ses tagliatelles**	**Beef bourguignon with tagliatelle**	*L.monocytogenes* Ad1206	Minced steak	Seeding 48 h 3±2°C	/	4,2	+	+	2	b

HALF FRASER PROTOCOL - 37°C												
Year	Sample No	Product (French)	Product (English name)	Artificial contamination					Result *Listeria* spp		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level	22 h	48 h		
2019	972	Bœuf bourguignon et ses tagliatelles	Beef bourguignon with tagliatelle	*L.monocytogenes* Ad265	Ox tongue	Seeding 48 h 3±2°C	/	1,2	+	+	2	b
2019	973	Escalope de dinde milanaise	Turkey escalope Milanese	*L.monocytogenes* Ad2453	Poultry	Seeding 48 h 3±2°C	/	2,4	+	+	2	b
2019	974	Blanquette de veau et son riz blanc	Blanquette of veal and its white rice	*L.monocytogenes* Ad1206	Minced steak	Seeding 48 h 3±2°C	/	4,2	+	+	2	b
2019	975	Blanquette de veau et son riz blanc	Blanquette of veal and its white rice	*L.monocytogenes* Ad265	Ox tongue	Seeding 48 h 3±2°C	/	1,2	+	+	2	b
2019	82	Camembert au lait cru	Camembert (raw milk cheese)	*L.monocytogenes* Ad2757	Dairy product	Seeding 48 h 3±2°C	/	4,6	-	-	3	a
2019	83	Camembert au lait cru	Camembert (raw milk cheese)	*L.monocytogenes* Ad2858	Milk	Seeding 48 h 3±2°C	/	2,2	+	+	3	a
2019	84	Emmental français au lait cru	Emmental (raw milk cheese)	*L.monocytogenes* Ad1785	Sheep milk	Seeding 48 h 3±2°C	/	1,4	+	+	3	a
2019	85	Emmental français au lait cru	Emmental (raw milk cheese)	*L.monocytogenes* Ad2757	Dairy product	Seeding 48 h 3±2°C	/	4,6	+	+	3	a
2019	532	Brie de Meaux au lait cru	Brie de Meaux (raw milk cheese)	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48 h 3±2°C	/	0,6	+	+	3	a
2019	533	Brie de Meaux au lait cru	Brie de Meaux (raw milk cheese)	*L.monocytogenes* Ad2603	Dairy product	Seeding 48 h 3±2°C	/	0,6	-	-	3	a
2019	534	Roquefort au lait cru	Roquefort (raw milk cheese)	*L.monocytogenes* Ad2642	Emmental	Seeding 48 h 3±2°C	/	0,4	-	-	3	a
2019	730	Emmental français au lait cru	Emmental (raw milk cheese)	*L.monocytogenes* Ad665	Raw milk	Seeding 48 h 3±2°C	/	2,4	-	-	3	a
2019	731	Coulommiers au lait cru	Coulommiers with raw milk	*L.monocytogenes* Ad977	Dairy product	Seeding 48 h 3±2°C	/	1,8	+	+	3	a
2019	1183	Brie de Meaux au lait cru	Brie de Meaux (raw milk cheese)	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48 h 3±2°C	/	5,2	-	-	3	a
2019	535	Lait cru fermier	Raw milk farm	*L.monocytogenes* Ad2642	Emmental	Seeding 48 h 3±2°C	/	0,4	+	+	3	b
2019	536	Lait cru fermier	Raw milk farm	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48 h 3±2°C	/	0,6	+	+	3	b
2019	734	Beurre cru demi-sel	Raw semi-salted butter	*L.monocytogenes* Ad977	Dairy product	Seeding 48 h 3±2°C	/	1,8	-	+	3	b
2019	735	Beurre cru demi-sel	Raw semi-salted butter	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48 h 3±2°C	/	0,8	+	+	3	b
2019	86	Lait frais entier	Fresh whole milk	*L.monocytogenes* Ad2858	Milk	Seeding 48 h 3±2°C	/	2,2	+	+	3	c
2019	87	Lait frais demi-écrémé	Fresh semi-skimmed milk	*L.monocytogenes* Ad1785	Sheep milk	Seeding 48 h 3±2°C	/	1,4	+	+	3	c
2019	88	Lait frais de montagne	Fresh mountain milk	*L.monocytogenes* Ad2757	Dairy product	Seeding 48 h 3±2°C	/	4,6	+	+	3	c
2019	537	Lait frais entier pasteurisé	Fresh pasteurized whole milk	*L.monocytogenes* Ad2603	Dairy product	Seeding 48 h 3±2°C	/	0,6	+	+	3	c
2019	2333	Camembert pasteurisé	Pasteurized Camembert	*L.monocytogenes* Ad610 + *L.welshimeri* Ad1667	Milk + raw milk cheese	Seeding 48 h 3±2°C	/	1,4	+	+	3	c
2019	2334	Camembert pasteurisé	Pasteurized Camembert	*L.monocytogenes* Ad632 + *L.innocua* Ad1771	Milk + ewe's milk	Seeding 48 h 3±2°C	/	2,2	+	+	3	c
2019	2335	Lait frais demi-écrémé pasteurisé	Fresh pasteurized semi-skimmed milk	*L.monocytogenes* Ad610 + *L.welshimeri* Ad1667	Milk + raw milk cheese	Seeding 48 h 3±2°C	/	1,4	+	+	3	c
2019	2336	Lait frais demi-écrémé pasteurisé	Fresh pasteurized semi-skimmed milk	*L.monocytogenes* Ad632 + *L.innocua* Ad1771	Milk + ewe's milk	Seeding 48 h 3±2°C	/	2,2	+	+	3	c
2019	2337	Lait chocolaté pasteurisé	Pasteurized chocolate milk	*L.monocytogenes* Ad610 + *L.welshimeri* Ad1667	Milk + raw milk cheese	Seeding 48 h 3±2°C	/	1,4	+	+	3	c
2019	2338	Lait chocolaté pasteurisé	Pasteurized chocolate milk	*L.monocytogenes* Ad632 + *L.innocua* Ad1771	Milk + ewe's milk	Seeding 48 h 3±2°C	/	2,2	+	+	3	c
2019	4170	Pavé de saumon	Salmon steak	*L.monocytogenes* Ad1279 + *L.innocua* Ad1233	Smoked fish + breaded codfish fillet	Seeding 72 h 3±2°C	/	0,6	+	+	4	a
2019	4171	Filet de julienne	Fillet of julienne	*L.monocytogenes* Ad1412 + *L.innocua* Ad1674	Smoked salmon + Smoked salmon	Seeding 72 h 3±2°C	/	1,4	+	+	4	a
2019	4172	Dos de cabillaud	Back of cod	*L.innocua* Ad1233	Breaded codfish fillet	Seeding 72 h 3±2°C	/	1,8	+	+	4	a
2019	4173	Filet d'églefin	Haddock fillet	*L.innocua* Ad1674	Smoked salmon	Seeding 72 h 3±2°C	/	1,8	+	+	4	a
2019	4174	Filet d'églefin	Haddock fillet	*L.welshimeri* Ad1669	Saithe steak	Seeding 72 h 3±2°C	/	2,4	+	+	4	a
2019	4175	Emincés de thon fumé aux zestes de citron et au thym	Sliced smoked tuna with lemon zest and thyme	*L.monocytogenes* Ad2599 + *L.innocua* Ad1233	Salmon + Breaded codfish fillet	Seeding 72 h 3±2°C	/	1,4	+	+	4	b
2019	4176	Emincés de saumon fumé aux cing baies fumés au bois de hêtre	Sliced smoked salmon with five berries and beech wood	*L.monocytogenes* Ad1412 + *L.welshimeri* Ad1669	Smoked salmon + Saithe steak	Seeding 72 h 3±2°C	/	2,0	+	+	4	b
2019	4179	Filets de maquereaux fumés au bois de hêtre au poivre	Smoked mackerel fillets with beech wood and pepper	*L.innocua* Ad1233	Breaded codfish fillet	Seeding 72 h 3±2°C	/	1,8	+	+	4	b
2019	4180	Filets de maquereaux fumés au bois de hêtre au poivre	Smoked mackerel fillets with beech wood and pepper	*L.innocua* Ad1674	Smoked salmon	Seeding 72 h 3±2°C	/	1,8	+	+	4	b
2019	4181	Tielles Sétois	Tielles Sétois	*L.monocytogenes* Ad1279 + *L.innocua* Ad1674	Smoked fish + smoked salmon	Seeding 72 h 3±2°C	/	0,8	+	+	4	c
2019	4182	Plat préparé de pavé de saumon	Prepared dish of salmon steak	*L.monocytogenes* Ad1412 + *L.welshimeri* Ad1669	Smoked salmon + Saithe steak	Seeding 72 h 3±2°C	/	2,0	+	+	4	c
2019	93	Epinards	Spinaches	*L.monocytogenes* Ad2598	Salad	Seeding 48 h 3±2°C	/	4,2	+	+	5	a
2019	94	Mélange de jeunes pousses	Mixed baby greens	*L.monocytogenes* Ad2598	Salad	Seeding 48 h 3±2°C	/	4,2	+	+	5	a
2019	95	Mélange de jeunes pousses	Mixed baby greens	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,4	+	+	5	a
2019	3349	Poivron jaune	Yellow bell pepper	*L.seeligeri* Ad1293	Chopped parsley	Seeding 48 h 3±2°C	/	2,8	+	+	5	a
2019	3350	Poivron jaune	Yellow bell pepper	*L.welshimeri* Ad1668	Vegetables	Seeding 48 h 3±2°C	/	3,4	+	+	5	a
2019	4583	Courgette crue	Raw zucchini	*L.innocua* Ad1673	Zucchini	Seeding 72 h 3±2°C	/	0,8	+	+	5	a
2019	3353	Tartare de légumes	Vegetable Tartar	*L.monocytogenes* Ad1672 + *L.seeligeri* Ad1293	Zucchini + chopped parsley	Seeding 48 h 3±2°C	/	4,4	+	+	5	c

HALF FRASER PROTOCOL - 37°C												
Year	Sample No	Product (French)	Product (English name)	Artificial contamination					Result *Listeria* spp		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level	22 h	48 h		
2019	**3354**	**Tartare de légumes**	**Vegetable Tartar**	*L.monocytogenes* Ad1680 + *L.welshimeri* Ad1668	Frozen celery + vegetables	Seeding 48 h 3±2°C	/	5,4	+	+	5	c
2019	**3355**	**Gratin de quinoa et boulgour de légumes**	**Quinoa and vegetable bulgur gratin**	*L.monocytogenes* Ad1672 + *L.welshimeri* Ad1668	Zucchini + vegetables	Seeding 48 h 3±2°C	/	3,4	+	+	5	c
2019	**3356**	**Houmous extra au basilic**	**Extra hummus with basil**	*L.monocytogenes* Ad1680 + *L.seeligeri* Ad1293	Frozen celery + chopped parsley	Seeding 48 h 3±2°C	/	6,4	+	+	5	c
2019	**3357**	**Tomates semi-séchées**	**Semi-dried tomatoes**	*L.monocytogenes* Ad1672 + *L.seeligeri* Ad1293	Zucchini + chopped parsley	Seeding 48 h 3±2°C	/	4,4	+	+	5	c
2019	**3358**	**Gratin de quinoa et boulgour de légumes**	**Quinoa and bulgur vegetable gratin**	*L.seeligeri* Ad1293	Chopped parsley	Seeding 48 h 3±2°C	/	2,8	+	+	5	c
2019	**540**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	1,2	+	+	6	a
2019	**542**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	*L.monocytogenes* Ad1191	Fish	Seeding 48 h 3±2°C	/	0,6	-	-	6	a
2019	**543**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	*L.monocytogenes* Ad1191	Fish	Seeding 48 h 3±2°C	/	0,6	-	-	6	a
2019	**544**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,0	+	+	6	a
2019	**545**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,0	+	+	6	a
2019	**1188**	**Eau rinçage (préparation chantilly)**	**Rinsing water (whipped cream)**	L.monocytogenes Ad1201	Brie de Meaux (Cheese)	Seeding 48 h 3±2°C	/	3,0	+	+	6	a
2019	**1189**	**Eau rinçage (fromage)**	**Rinsing water (cheese)**	*L.monocytogenes* Ad1205	Morbier (Cheese)	Seeding 48 h 3±2°C	/	5,2	+	+	6	a
2019	**1190**	**Eau de rinçage marmite cuisson compote pomme rhubarbe**	**Rinsing water for cooking apple rhubarb compote**	*L.monocytogenes* Ad1493	Red pepper	Seeding 48 h 3±2°C	/	3,0	+	+	6	a
2019	**1191**	**Eau de rinçage marmite cuisson soupe haricots verts**	**Rinsing water for cooking green bean soup**	*L.monocytogenes* Ad1493	Red pepper	Seeding 48 h 3±2°C	/	3,0	-	-	6	a
2019	**521**	**Déchets découpe saumon**	**Salmon cutting waste**	*L.innocua* Ad1674	Smoked salmon	Seeding 48 h 3±2°C	/	0,4	-	-	6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48 h 3±2°C	/	2,0	+	+	6	b
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	1,2	+	+	6	b
2019	**525**	**Déchets poisson**	**Fish waste**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	1,2	+	+	6	b
2019	**526**	**Déchets mêlée de jambon végétal**	**Waste vegetable ham mix**	*L.seeligeri* Ad1754	Zucchini	Seeding 48 h 3±2°C	/	0,4	+	+	6	b
2019	**527**	**Déchets veggie**	**Veggie waste**	*L.seeligeri* Ad1754	Zucchini	Seeding 48 h 3±2°C	/	0,4	-	+	6	b
2019	**528**	**Déchets veggie**	**Veggie waste**	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,0	+	+	6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (fish cut with spices)**	L.monocytogenes Ad994	Fresh trout	Seeding 48 h 3±2°C	/	1,6	+	+	6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	L.monocytogenes Ad994	Fresh trout	Seeding 48 h 3±2°C	/	1,6	+	+	6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	L.monocytogenes Ad995	Smoked trout	Seeding 48 h 3±2°C	/	3	+	+	6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	L.monocytogenes Ad995	Smoked trout	Seeding 48 h 3±2°C	/	3	+	+	6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	L.monocytogenes Ad994	Fresh trout	Seeding 48 h 3±2°C	/	1,6	+	+	6	b

Appendix 8 - Sensitivity study: raw data- *Listeria* spp. - Half Fraser Protocol- 37°C

H-: colonies without halo
H+: colonies with halo
d: doubtful colonies
st : sterile plates

FOOD COMPOSITE- Half Fraser Protocol- 37°C (*Listeria* spp.)																							
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar											Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C												
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria		22 h	48 h	22 h	48 h			
2019	180	Salade pamplemousse	Grapefruit salad	-	+d(2col)	H+	+	*L.monocytogenes*	+	st	-						-	-	ND	ND	-	1	a
2019	181	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	-	-		-	H+	H+	+	+	+	*L.monocytogenes*		+	+	PD	PD		1	a
2019	182	Sandwich jambon crudités œuf	Ham and egg sandwich	st	-	st	-		-	st	st						-	-	NA	NA	-	1	a
2019	183	Sandwich poulet crudités	Chicken and vegetables sandwich	st	st	st	st		-	H-d	H-d	-	-	-	/		-	-	PPNA	PPNA	-	1	a
2019	184	Salade de riz	Rice salad	st	st	st	st		-	-	-						-	-	NA	NA	-	1	a
2019	353	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	st	-		-	-	-						-	-	NA	NA	-	1	a
2019	354	Sandwich jambon Emmental	Ham and Emmental sandwich	st	st	st	st		-	st	-						-	-	NA	NA	-	1	a
2019	355	Sandwich jambon crudités œuf	Ham and egg sandwich	st	st	H+	+	*L.monocytogenes*	+	H+	H+ni	+	+	+	*L.monocytogenes*		+	+	PA	PA		1	a
2019	**723**	**Sandwich thon œuf**	**Tuna and egg sandwich**	st	st	H-d(3col)	+d	*L.seeligeri*	+	st	-						-	-	ND	ND	-	1	a
2019	**724**	**Sandwich thon œuf**	**Tuna and egg sandwich**	st	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*		+	+	PD	PD		1	a
2019	**725**	**Sandwich jambon Emmental**	**Emmental ham sandwich**	st	st	H+	+	*L.monocytogenes*	+	-	-						-	-	ND	ND	-	1	a
2019	**726**	**Sandwich jambon Emmental**	**Ham sandwich Emmental**	st	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*		+	+	PD	PD		1	a
2019	**727**	**Sandwich jambon Emmental**	**Ham sandwich Emmental**	H+	+	H+	+	*L.monocytogenes*	+	st	-						-	-	ND	ND	-	1	a
2019	**728**	**Sandwich saumon cuit et fumé**	**Cooked and smoked salmon sandwich**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+dni	+	+	+	*L.monocytogenes*		+	+	PA	PA		1	a
2019	**729**	**Sandwich saumon cuit et fumé**	**Cooked and smoked salmon sandwich**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	PA	PA		1	a
2019	1396	Piémontaise au jambon	Deli salad (Piémontaise)	st	-	st	st		-	st	-						-	-	NA	NA	-	1	a
2019	1397	Taboulé au poulet rôti	Tabbouleh with roasted chicken	st	-	st	-		-	st	-						-	-	NA	NA	-	1	a
2019	3514	Sandwich Suédois (saumon)	Swedish sandwich (salmon)	-	-	-	-		-	-	-						-	-	NA	NA	-	1	a
2019	3515	Salade thon riz	Tuna and rice salad	-	-	st	st		-	H-d	H-d	+d	+	+	*L.grayi*		+	+	PD	PD		1	a
2019	3516	Salade jambon pâtes	Ham and pasta salad	-	st	-	st		-	-	-						-	-	NA	NA	-	1	a
2018	**8613**	**Paella**	**Paella**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		1	b
2018	**8614**	**Paella**	**Paella**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	PA	PA		1	b
2018	**8615**	**Pizza jambon fromage**	**Ham and cheese pizza**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		1	b
2018	**8616**	**Pizza jambon fromage**	**Pizza ham and cheese**	st	-	H+/H-d	-	*Enterococcus faecium*	-	H+	H+	+	+	+	*L.monocytogenes*		+	+	PD	PD		1	b
2018	**8617**	**Quiche Lorraine**	**Quiche Lorraine**	H+	+	H+	+	*L.monocytogenes*	+	st	-						-	-	ND	ND	-	1	b
2018	**8618**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	PA	PA		1	b
2018	**8619**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		1	b
2018	**8620**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		1	b
2019	**79**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		1	b
2019	**80**	**Pizza jambon fromage**	**Ham and cheese pizza**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+d/H-	H+/H-	+	+/+	+	*L.monocytogenes/ L.welshimeri*		+	+	PA	PA		1	b
2019	**81**	**Feuilleté jambon Emmental**	**Puff pastry with ham and mint**	H-	+	H-	+	*L.welshimeri*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.welshimeri*		+	+	PA	PA		1	b
2019	**529**	**Couscous 3 viandes**	**Couscous 3 meats**	H+	+	H+	+	*L.monocytogenes*	+	st	st						-	-	ND	ND	-	1	b
2019	**530**	**Croissant au jambon**	**Ham Croissant**	-	st	st	st		-	st	H-d	+	-	-	/		-	-	NA	PPNA	-	1	b
2019	**531**	**Quiche Lorraine**	**Quiche Lorraine**	-	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*		+	+	PD	PD		1	b
2019	738	Pizza jambon fromage	Ham and cheese pizza	-	st	-	-		-	-	-						-	-	NA	NA	-	1	b
2019	739	Quiche Lorraine	Quiche Lorraine	st	-	st	-		-	st	st						-	-	NA	NA	-	1	b

♦ Analyses performed according to the COFRAC accreditation

FOOD COMPOSITE- Half Fraser Protocol- 37°C (*Listeria* spp.)																								
Year	Sample No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C												Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h			
2019	740	Tarte aux poireaux	Leek pie	st	-	st	-		-	st	st					-	-	NA	NA	-	1	b
2019	1393	Pizza jambon champignons	Ham and mushroom pizza	st	-	st	-		-	-	-					-	-	NA	NA	-	1	b
2019	1394	Tarte aux poireaux	Leek pie	st	-	st	-		-	st	st					-	-	NA	NA	-	1	b
2019	1395	Couscous poulet merguez	Chicken merguez couscous	st	st	st	st		-	st	st					-	-	NA	NA	-	1	b
2019	3511	Quiche Lorraine	Quiche Lorraine	st	st	-	-		-	-	-					-	-	NA	NA	-	1	b
2019	3512	Couscous 3 viandes	Couscous 3 meats	st	st	st	st		-	st	st					-	-	NA	NA	-	1	b
2019	3513	Pizza	Pizza	-	-	st	-		-	H-d	H-d	+d	/	-	NC sur TSYEA	-	-	NA	NA	-	1	b
2018	**8621**	**Eclair vanille**	**Pastry (vanilla éclair)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		1	c
2018	**8622**	**Eclair vanille**	**Pastry (vanilla éclair)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		1	c
2018	**8623**	**Eclair chocolat**	**Pastry (chocolate éclair)**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA		1	c
2018	**8624**	**Eclair chocolat**	**Pastry (chocolate éclair)**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		1	c
2018	**8625**	**Flan**	**Custard**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		1	c
2018	**8626**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		1	c
2018	**8627**	**Tortilla espagnole**	**Spanish Tortilla**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		1	c
2018	**8628**	**Tortilla aux oignons**	**Tortilla with onions**	H-	+	H-	+	*L.innocua*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		1	c
2018	**8629**	**Tortilla aux oignons**	**Tortilla with onions**	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+	+/+	+	+	*L.monocytogenes*	+	+	PA	PA		1	c
2018	**8630**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	H+	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		1	c
2018	**8631**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		1	c
2018	**8632**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA		1	c
2018	**8633**	**Crème aux œufs vanille**	**Vanilla egg cream**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA		1	c
2018	**8634**	**Crème aux œufs vanille**	**Vanilla egg cream**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		1	c
2018	**8635**	**Ile flottante**	**Ile flottante**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		1	c
2019	351	Profiteroles	Profiteroles	st	st	st	st		-	-	-					-	-	NA	NA	-	1	c
2019	741	Œufs au lait vanille	Vanilla eggs in milk	st	st	st	st		-	st	st					-	-	NA	NA	-	1	c
2019	742	Clafoutis aux cerises	Cherry clafoutis	st	-	st	st		-	st	st					-	-	NA	NA	-	1	c
2019	743	Crème aux œufs	Egg cream	st	-	st	-		-	st	-					-	-	NA	NA	-	1	c
2019	744	Tortilla espagnole	Spanish tortilla	st	-	st	-		-	st	st					-	-	NA	NA	-	1	c
2019	745	Flan	Flan	st	-	st	-		-	st	-					-	-	NA	NA	-	1	c
2019	746	Millefeuille	Millefeuille	st	-	st	st		-	st	-					-	-	NA	NA	-	1	c
2019	3507	Religieuse au café	Coffee cake	-	st	st	st		-	st	-					-	-	NA	NA	-	1	c
2019	3508	Tartelette citron meringue	Lemon meringue tartlet	-	st	-	-		-	st	st					-	-	NA	NA	-	1	c
2019	3509	Millefeuille	Millefeuille	-	-	-	-		-	st	-					-	-	NA	NA	-	1	c
2019	3510	Flan	Custard	st	st	st	-		-	-	-					-	-	NA	NA	-	1	c

MEAT PRODUCTS - Half Fraser Protocol- 37°C (*Listeria* spp.)																								
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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C													
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria		22 h	48 h	22 h	48 h			
2018	8323	Côte de porc à la provençale	Pork chop Provencal style	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	a
2018	8324	Côte de porc thym romarin	Pork chop with thyme and rosemary	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	a
2018	8696	Viande rouge surgelée	Frozen red meat	H+/H-	+	H+	+	*L.monocytogenes/ L.innocua*	+	st	-						-	-	**ND**	**ND**	**-**	2	a
2018	8697	Suprême de poulet	Chicken supreme	-	-	st	st		-	-	-						-	-	**NA**	**NA**	**-**	2	a
2018	8698	Viande rouge surgelée	Frozen red meat	st	st	st	st		-	H-	H-	+	+	+	*L.welshimeri*		+	+	**PD**	**PD**		2	a
2018	8699	Viande rouge surgelée	Frozen red meat	st	st	st	st		-	st	-						-	-	**NA**	**NA**	**-**	2	a
2018	8700	Sot l'y laisse de poulet	Sot l y laisse of chicken	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.innocua*		+	+	**PA**	**PA**		2	a
2018	8701	Viande rouge surgelée	Frozen red meat	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.innocua*		+	+	**PA**	**PA**		2	a
2018	8702	Maigre de tête de porc surgelé	Frozen pork head lean	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	**PA**	**PA**		2	a
2018	8703	Noix de joue de bœuf	Cheek of beef	st	st	st	st		-	-	-						-	-	**NA**	**NA**	***L.monocytogenes***	2	a
2018	8704	Blanquette	Blanquette	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-	+/+	+	+	*L.monocytogenes/ L.welshimeri*		+	+	**PA**	**PA**		2	a
2018	8705	Filet mignon de porc	Pork tenderloin	-	st	-	st		-	-	-						-	-	**NA**	**NA**	**-**	2	a
2018	8714	Côte de porc thym romarin	Pork chop with thyme and rosemary	H+	+	H+	+	*L.monocytogenes*	+	st	-						-	-	**ND**	**ND**	**-**	2	a
2018	8716	Côte de porc provençale	Pork chop Provencal	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	a
2019	1101	Côte d'agneau	Lamb chop	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	a
2019	1102	Filet de dinde	Turkey fillet	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	a
2019	1103	Escalope de poulet	Chicken cutlet	-	-	-	st		-	-	-						-	-	**NA**	**NA**	**-**	2	a
2019	2210	Morceaux de filet de poule	Pieces of chicken fillet	-	-	st	st		-	-	-						-	-	**NA**	**NA**	**-**	2	a
2019	2924	Morceaux de filet de dinde	Pieces of turkey fillet	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.welshimeri*		+	+	**PA**	**PA**		2	a
2019	2925	Maigre de porcs surgelé	Frozen pork lean	st	st	-	st		-	-	-						-	-	**NA**	**NA**	**-**	2	a
2019	3517	Viande bovine tournedos à griller	Beef tournedos for grilling	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	a
2019	3518	Viande bovine bourguignon	Beef bourguignon	-	st	-	st		-	-	-						-	-	**NA**	**NA**	**-**	2	a
2019	3519	Côte de porcs	Pork chop	-	st	-	st		-	-	-						-	-	**NA**	**NA**	**-**	2	a
2019	3520	Viande sauté de porcs	Pork sauté meat	H-	+	H-	+	*L.monocytogenes/ L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	**PA**	**PA**		2	a
2019	5504	Souris d'agneau congelée	Frozen lamb mice	-	-	-	-		-	st	-						-	-	**NA**	**NA**	**-**	2	a
2018	8321	Steak haché Tex Mex	Tex Mex minced steak	st	-	st	-		-	-	-						-	-	**NA**	**NA**	**-**	2	b
2018	8322	Paupiette lapin moutarde	Paupiette rabbit mustard	-	st	-	st		-	-	-						-	-	**NA**	**NA**	**-**	2	b
2018	8325	Manchons de poulet rôti	Roasted chicken wings	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	b
2018	8328	Terrine chapon miel châtaigne	Terrine capon honey chestnut	st	st	st	st		-	-	-						-	-	**NA**	**NA**	**-**	2	b
2018	8713	Emincés poulet tikka	Sliced chicken tikka	-	st	st	st		-	st	-						-	-	**NA**	**NA**	**-**	2	b
2019	**74**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*		+	+	**PA**	**PA**		2	b
2019	**75**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+/+	+	*L.welshimeri*		+	+	**PA**	**PA**		2	b
2019	**76**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in the old style**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	b
2019	**77**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in old fashioned sauce**	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	b
2019	**78**	**Paupiette de veau sauce tomate**	Paupiette of veal with tomato sauce	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	**PA**	**PA**		2	b
2019	747	Paupiette de veau sauce tomate	Paupiette of veal with tomato sauce	st	st	st	-		-	st	st						-	-	**NA**	**NA**	**-**	2	b
2019	748	Nuggets de poulet	Chicken nuggets	st	-	st	-		-	st	-						-	-	**NA**	**NA**	**-**	2	b
2019	749	Poulet basquaise	Chicken basquaise	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	b
2019	750	Bœuf bourguignon	Beef bourguignon	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	b
2019	751	Blanquette de veau et son riz	Blanquette of veal and its rice	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	b

♦ Analyses performed according to the COFRAC accreditation

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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C									Agreement			
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp				Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria		22 h	48 h	22 h	48 h			
2019	**971**	**Bœuf bourguignon et ses tagliatelles**	**Bœuf bourguignon with tagliatelle**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	b
2019	**972**	**Bœuf bourguignon et ses tagliatelles**	**Bœuf bourguignon with tagliatelle**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	b
2019	**973**	**Escalope de dinde milanaise**	**Turkey escalope Milanese**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	b
2019	**974**	**Blanquette de veau et son riz blanc**	**Blanquette of veal and its white rice**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	b
2019	**975**	**Blanquette de veau et son riz blanc**	**Blanquette of veal and its white rice**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	b
2019	1104	Emincés de poulet rôti	Sliced roasted chicken	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	b
2018	8326	Chipolatas	Chipolatas	H-	+	H-	+	*L.innocua/ L.welshimeri*	+	H-	H-	+	+	+	*L.innocua*		+	+	**PA**	**PA**		2	c
2018	8327	Saucisse fumée	Smoked sausage	-	st	st	st		-	H-	H-	+	+	+	*L.welshimeri*		+	+	**PD**	**PD**		2	c
2018	8718	Farce tomate	Tomato stuffing	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	c
2019	178	Pâté de campagne	Country style pâté	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	c
2019	179	Pâté de lapin	Rabbit pâté	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	c
2019	345	Saucisses de Strasbourg	Strasbourg sausages	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	c
2019	346	Saucisses cocktail	Cocktail sausages	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	c
2019	347	Merguez	Merguez	H+	+	H+	+	*L.monocytogenes*	+	st	-						-	-	**ND**	**ND**	**-**	2	c
2019	348	Lardons cuits fumés	Cooked and smoked bacon	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	c
2019	349	Bacon cuits	Cooked bacon	H+	+	H+	+	*L.monocytogenes*	+	st	st						-	-	**ND**	**ND**	**-**	2	c
2019	1105	Emincés rôti de dinde poulets épicés	Sliced roast turkey spicy chicken	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	c
2019	1106	Bloc de jambon sec	Block of dry-cured ham	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	c
2019	1107	Lardons cuits fumés	Cooked smoked bacon	-	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PD**	**PD**		2	c
2019	1108	Farce à légumes	Vegetable stuffing	st	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PD**	**PD**		2	c
2019	1109	Chair à merguez	Merguez meat	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.grayi*	+	H+/H-	H+/H-d	+	+	+	*L.monocytogenes/ L.welshimeri or L.innocua*		+	+	**PA**	**PA**		2	c
2019	3521	Rillettes de poulet	Chicken rillettes	st	st	st	st		-	st	st						-	-	**NA**	**NA**	**-**	2	c
2019	3522	Tranches de salami	Slices of salami	st	st	st	st		-	st	-						-	-	**NA**	**NA**	**-**	2	c
2019	3523	Saucisses cuites fumées	Cooked smoked sausages	-	-	st	st		-	-	-						-	-	**NA**	**NA**	**-**	2	c
2019	3524	Lardons nature	Plain bacon	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	**PA**	**PA**		2	c
2019	3525	Pâté de campagne	Country style pâté	-	-	st	-		-	-	-						-	-	**NA**	**NA**	**-**	2	c
2019	3526	Tranches de jambon sec	Slices of dried ham	-	st	st	st		-	-	-						-	-	**NA**	**NA**	**-**	2	c
2019	5506	Bacon	Bacon	-	-	-	-		-	-	-						-	-	**NA**	**NA**	**-**	2	c

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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h			
2018	8334	Fromage de brebis	Sheep cheese	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	a
2018	8335	Fromage de brebis	Sheep cheese	st	-	st	-		-	-	-					-	-	NA	NA	-	3	a
2018	8336	Saint Nectaire	Saint Nectaire	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+		*L.monocytogenes*	+	+	PA	PA		3	a
2019	**82**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	st	-		-	-	-					-	-	NA	NA	-	3	a
2019	**83**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	H+	+	*L.monocytogenes*	+	-	-					-	-	ND	ND	-	3	a
2019	**84**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	-	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*	+	+	PD	PD		3	a
2019	**85**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	H+	+	H+	+	*L.monocytogenes*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.grayi*	+	+	PA	PA		3	a
2019	**532**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	st	st		-	H+	H+	+	+	+	*L.monocytogenes*	+	+	PD	PD		3	a
2019	**533**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	H-d	st	NC on TSYEA	-	st	-					-	-	NA	NA	-	3	a
2019	**534**	**Roquefort au lait cru**	**Raw milk cheese (Roquefort)**	-	-	H-d	-	NC on TSYEA	-	-	H-d	-	-	-	NC sur TSYEA	-	-	NA	PPNA	-	3	a
2019	**730**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	-	st	st	st		-	st	-					-	-	NA	NA	-	3	a
2019	**731**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	H+	+	H+	+	*L.monocytogenes*	+	st	-					-	-	ND	ND	-	3	a
2019	**1183**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	-	-		-	-	-					-	-	NA	NA	-	3	a
2019	1192	Fromage au lait cru de vache	Raw cow's milk cheese	st	-	st	-		-	st	st					-	-	NA	NA	-	3	a
2019	1193	Fromage au lait cru de vache	Raw cow's milk cheese	st	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*	+	+	PD	PD		3	a
2019	1194	Morbier au lait cru	Raw milk cheese (Morbier)	-	-	-	-		-	st	-					-	-	NA	NA	-	3	a
2019	1197	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	st	st	st	st		-	st	st					-	-	NA	NA	-	3	a
2019	1198	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	st	-	st	st		-	st	st					-	-	NA	NA	-	3	a
2019	1199	Emmental au lait cru	Raw milk cheese (Emmental)	-	st	st	st		-	-	-					-	-	NA	NA	-	3	a
2019	1200	Brie de Meaux au lait cru	Raw milk cheese (Brie de Meaux)	-	st	-	-		-	-	-					-	-	NA	NA	-	3	a
2019	1653	Fromage au lait cru	Raw milk cheese	H+	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	a
2018	8329	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8330	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8331	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H-	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8332	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8333	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2019	352	Lait de vache	Cow's milk	H-	+	H-	+	*L.innocua*	+	H+	H+ni	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2019	**535**	**Lait cru fermier**	**Raw farm milk**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		3	b
2019	**536**	**Lait cru fermier**	**Raw farm milk**	H+/H-	+	H+/H-	+	*L.monocytogenes*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		3	b
2019	**734**	**Beurre cru demi-sel**	**Raw semi-salted butter**	H-d	-	H-d	+	Gram -	-	-	H+d	+	+	+	*L.monocytogenes*	-	+	NA	PD	***L.monocytogenes***	3	b
2019	**735**	**Beurre cru demi-sel**	**Raw semi-salted butter**	H-d	-	H-d	+	Gram -	-	H+dni	H+dni	+	+	+	*L.monocytogenes*	+	+	PD	PD		3	b
2019	1201	Lait cru fermier	Raw farm milk	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		3	b
2019	1202	Lait cru fermier	Raw farm milk	H-	+	H-	+	*L.innocua*	+	-	-					-	-	ND	ND	-	3	b
2019	1203	Lait cru de vache	Raw cow's milk	-	st	st	st		-	st	st					-	-	NA	NA	-	3	b
2019	1204	Beurre à la crème au lait cru	Raw milk cream butter	st	st	st	st		-	-	-					-	-	NA	NA	-	3	b
2019	1205	Beurre cru fermier	Raw farm butter	H-	+	H-	+	*L.innocua*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2019	1206	Beurre cru	Raw butter	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		3	b
2019	3527	Lait cru fermier	Raw farm milk	-	-	st	-		-	H-d	H-d	-	/	+	NC on TSYEA	-	-	NA	NA	-	3	b
2019	3528	Lait cru fermier	Farm raw milk	-	st	st	st		-	H-d	H-d	-	/	+	NC on TSYEA	-	-	NA	NA	-	3	b
2019	3529	Beurre demi-sel au lait cru	Raw milk semi-salted butter	H+/H-	+	H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		3	b
2019	3530	Beurre demi-sel au lait cru	Raw milk semi-salted butter	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		3	b
2019	3531	Beurre doux au lait cru	Mild butter with raw milk	st	st	st	st		-	-	-					-	-	NA	NA	-	3	b
2019	3532	Beurre doux au lait cru	Mild butter with raw milk	-	-	-	-		-	-	-					-	-	NA	NA	-	3	b

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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h			
2019	**86**	**Lait frais entier**	**Fresh whole milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		3	c
2019	**87**	**Lait frais demi-écrémé**	**Fresh semi-skimmed milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		3	c
2019	**88**	**Lait frais de montagne**	**Fresh mountain milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		3	c
2019	350	Feta bio	Organic Feta cheese	-	-	st	-		-	H-d	H-d	-	-	-	/	-	-	**PPNA**	**PPNA**	**-**	3	c
2019	**537**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	H+	+	H+	+	*L.monocytogenes*	+	st	st					-	-	**ND**	**ND**	**-**	3	c
2019	1398	Glace vanille	Vanilla ice cream	st	-	st	-		-	st	st					-	-	**NA**	**NA**	**-**	3	c
2019	1399	Lait frais demi-écrémé pasteurisé	Fresh pasteurized semi-skimmed milk	st	st	st	st		-	st	st					-	-	**NA**	**NA**	**-**	3	c
2019	1400	Lait demi-écrémé au chocolat	Semi-skimmed milk with chocolate	st	st	st	st		-	st	st					-	-	**NA**	**NA**	**-**	3	c
2018	1401	Lait chocolaté pasteurisé	Pasteurized chocolate milk	st	st	st	st		-	st	-					-	-	**NA**	**NA**		3	c
2019	1652	Munster au cumin	Munster cheese with cumin	-	-	st	st		-	-	-					-	-	**NA**	**NA**	**-**	3	c
2019	**2333**	**Camembert pasteurisé**	**Camembert (pasteurized cheese)**	H-	+	H-	+	*L.welshimeri*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		3	c
2019	**2334**	**Camembert pasteurisé**	**Camembert (pasteurized cheese)**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**		3	c
2019	**2335**	**Lait frais demi-écrémé pasteurisé**	**Fresh half-skimmed pasteurized milk**	st	st	st	st		-	H-	H-	+	+	+	*L.welshimeri*	+	+	**PD**	**PD**		3	c
2019	**2336**	**Lait frais demi-écrémé pasteurisé**	**Fresh pasteurized half-skimmed milk**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+		*L.innocua*	+	+	**PA**	**PA**		3	c
2019	**2337**	**Lait chocolaté pasteurisé**	**Pasteurized chocolate milk**	H+/H-	+	H+/H-	+	*L.monocytogenes*/ *L.welshimeri*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		3	c
2019	**2338**	**Lait chocolaté pasteurisé**	**Pasteurized chocolate milk**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**		3	c
2019	3533	Lait demi-écrémé pasteurisé	Pasteurized semi-skimmed milk	st	st	st	st		-	st	st					-	-	**NA**	**NA**	**-**	3	c
2019	3534	Petit camembert pasteurisé	Petit Camembert (pasteurized cheese)	-	-	-	-		-	-	-					-	-	**NA**	**NA**	**-**	3	c
2019	3535	Brie pasteurisé	Brie (pasteurized cheese)	st	-	st	st		-	-	-					-	-	**NA**	**NA**	**-**	3	c
2019	4584	Lait frais demi-écrémé	Fresh semi-skimmed milk	st	st	st	st		-	st	st					-	-	**NA**	**NA**	**-**	3	c
2019	4587	Bleu d'Auvergne pasteurisé	Bleu d'Auvergne (pasteurized cheese)	-	-	st	st		-	-	-					-	-	**NA**	**NA**	**-**	3	c
2019	5507	Fromage blanc pasteurisé	Pasteurized cottage cheese	st	-	-	st		-	-	-					-	-	**NA**	**NA**	**-**	3	c

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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h			
2018	8709	Pavé de poisson	Fish steak	st	st	st	st		-	st	st					-	-	NA	NA	-	4	a
2018	8710	Pavé de colin	Hake steak	st	-	st	-		-	st	st					-	-	NA	NA	-	4	a
2018	8711	Seiche	Cuttlefish	st	-	st	-		-	st	st					-	-	NA	NA	-	4	a
2019	358	Bloc de saumon	Salmon block	st	st	st	st		-	st	st					-	-	NA	NA	-	4	a
2019	361	Saumon	Salmon	st	st	st	st		-	st	st					-	-	NA	NA	-	4	a
2019	1646	Pavé de colin	Hake steak	st	-	st	-		-	-	-					-	-	NA	NA	-	4	a
2019	1650	Barquette de pavé de saumon	Tray of salmon steak	st	st	st	st		-	st	st					-	-	NA	NA	-	4	a
2019	2394	Œufs de truite	Trout eggs	st	st	-	-		-	st	st					-	-	NA	NA	-	4	a
2019	2923	Paupiettes de saumon	Paupiettes of salmon	-	st	st	st		-	st	-					-	-	NA	NA	-	4	a
2019	2933	Filet de merlan	Fillet of whiting	st	st	st	st		-	st	-					-	-	NA	NA	-	4	a
2019	4071	Surimi	Surimi	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		4	a
2019	4072	Saumon	Salmon	st	st	st	st		-	st	st					-	-	NA	NA	-	4	a
2019	4073	Saumon	Salmon	-	st	st	st		-	-	-					-	-	NA	NA	-	4	a
2019	4074	Filet de saumon	Salmon fillet	st	st	st	st		-	st	st					-	-	NA	NA	-	4	a
2019	4075	Crevettes roses	Pink shrimps	-	-	st	-		-	st	-					-	-	NA	NA	-	4	a
2019	4076	Surimi	Surimi	-	st	H-(1d)	-	*Gram-*	-	-	-					-	-	NA	NA	-	4	a
2019	4077	Barquette de pavé de saumon	Tray of salmon steak	st	st	st	st		-	H+	H+	+	+	+	*L.monocytogenes*	+	+	PD	PD		4	a
2019	4078	Barquette de pavé de saumon	Tray of salmon steak	H+	+	H+	+	*L.monocytogenes*	+	st	-					-	-	ND	ND	-	4	a
2019	4079	Tartare de saumon	Salmon tartar	H+	+	H+	+	*L.monocytogenes*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.welshimeri*	+	+	PA	PA		4	a
2019	4080	Pavé de saumon	Salmon steak	st	st	st	st		-	st	st					-	-	NA	NA	-	4	a
2019	4081	Bloc de chair de saumon	Salmon meat block	st	st	st	st		-	st	-					-	-	NA	NA	-	4	a
2019	**4170**	**Pavé de saumon**	**Salmon steak**	-	st	-	-		-	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PD	PD		4	a
2019	**4171**	**Filet de julienne**	**Julienne fillet**	H-	+	H-	+	*L.innocua*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		4	a
2019	**4172**	**Dos de cabillaud**	**Back of cod**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		4	a
2019	**4173**	**Filet d'églefin**	**Haddock fillet**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA		4	a
2019	**4174**	**Filet d'églefin**	**Haddock fillet**	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA		4	a
2019	4552	Paupiette de saumon	Paupiette of salmon	-	-	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA		4	a
2019	4553	Saumon	Salmon	st	st	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		4	a
2019	5179	Filet d'Eglefin	Haddock fillet	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		4	a
2019	5180	Steak d'espadon	Swordfish steak	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		4	a
2018	8342	Saumon	Salmon	st	st	st	st		-	st	st					-	-	NA	NA	-	4	b
2019	1115	Bouchées aux poulpes marinés	Marinated Octopus Bites	-	-	st	st		-	-	-					-	-	NA	NA	-	4	b
2019	1116	Bouchées aux poulpes marinés	Marinated Octopus Bites	st	st	st	st		-	-	-					-	-	NA	NA	-	4	b
2019	1649	Saumon gravlax	Salmon gravlax	st	st	st	st		-	st	-					-	-	NA	NA	-	4	b
2019	2405	Truite fumée bio	Organic smoked trout	st	st	st	-		-	st	st					-	-	NA	NA	-	4	b
2019	2406	Filets de maquereaux fumés	Smoked mackerel fillets	st	st	st	st		-	st	st					-	-	NA	NA	-	4	b
2019	2407	Filet de haddock fumé	Smoked haddock fillet	st	st	st	st		-	st	st					-	-	NA	NA	-	4	b
2019	2921	Petites pieuvres marinées	Small, marinated octopus	st	-	st	-		-	-	H-d(1col)				NC on TSYEA	-	-	NA	NA	-	4	b
2019	2931	Mini Tranche de truite fumée	Mini slice of smoked trout	st	st	st	st		-	st	st					-	-	NA	NA	-	4	b
2019	4082	Saumon fumé à l'aneth	Smoked salmon with dill	st	+d(2)	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		4	b
2019	4083	Petites pieuvres marinées	Small, marinated octopus	-	-	st	st		-	st	-					-	-	NA	NA	-	4	b
2019	4084	Bouchées au poulpe marinées	Marinated octopus bites	-	-	st	st		-	-	-					-	-	NA	NA	-	4	b
2019	4085	Bouchées au poulpe marinées	Marinated octopus bites	-	-	-	-		-	-	-					-	-	NA	NA	-	4	b
2019	**4175**	**Emincés de thon fumé aux zestes de citron et au thym**	**Sliced smoked tuna with lemon zest and thyme**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		4	b

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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C										Subculture in Fraser 1 on negative samples		
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement				
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h			
2019	**4176**	**Emincés de saumon fumé aux 5 baies fumés au bois de hêtre**	**Smoked salmon slices with 5 berries and beech wood**	H-	+	H-	+	*L.welshimeri*	+	st	-					-	-	**ND**	**ND**	**-**	4	b
2019	**4179**	**Filets de maquereaux fumés au bois de hêtre au poivre**	**Smoked mackerel fillets with beech wood and pepper**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**		4	b
2019	**4180**	**Filets de maquereaux fumés au bois de hêtre au poivre**	**Beechwood smoked mackerel fillets with pepper**	H-	+	H-	+	*L.innocua*	+	st	st					-	-	**ND**	**ND**	**-**	4	b
2019	5181	Saumon fumé élevé en Norvège	Smoked salmon farmed in Norway	H+/H-	+	H+	+	*L.monocytogenes/ L.seeligeri*	+	H+	H+/H-	+/+	+	+	*L.monocytogenes/ L.seeligeri*	+	+	**PA**	**PA**		4	b
2019	5182	Saumon fumé élevé en Norvège	Smoked salmon farmed in Norway	st	st	st	st		-	H+(2)	H+	+	+	+	*No identification by API colony confirmed on RLM and by PCR*	+	+	**PD**	**PD**		4	b
2019	5186	Filets de maquereaux fumés	Smoked mackerel fillets	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2018	8340	Bouchées au poulpe	Octopus bites	-	-	st	st		-	-	-					-	-	**NA**	**NA**	**-**	4	c
2018	8341	Poisson blanc gratiné au fromage	White fish with cheese au gratin	st	-	st	-		-	-	-					-	-	**NA**	**NA**	**-**	4	c
2019	185	California roll saumon	California roll salmon	st	-	st	st		-	-	-					-	-	**NA**	**NA**	**-**	4	c
2019	187	Surimi base colin	Surimi with hake	st	-	st	st		-	st	st					-	-	**NA**	**NA**	**-**	4	c
2019	188	Poisson sauce Chablis	Fish with Chablis sauce	st	-	st	st		-	st	st					-	-	**NA**	**NA**	**-**	4	c
2019	189	Colin Alaska sauce citron	Alaska hake with lemon sauce	st	-	-	-		-	-	-					-	-	**NA**	**NA**	**-**	4	c
2019	190	Pavé colin napolitain pré cuit	Pre-cooked Neapolitan hake steak	-	-	st	-		-	st	-					-	-	**NA**	**NA**	**-**	4	c
2019	192	Poisson blanc crumble	White fish crumble	st	-	st	-		-	st	-					-	-	**NA**	**NA**	**-**	4	c
2019	193	Colin sauce brésilienne	Hake with Brazilian sauce	st	-	st	-		-	st	st					-	-	**NA**	**NA**	**-**	4	c
2019	1113	Pavé de poisson blanc provençale	White fish steak Provençale	st	-	st	-		-	st	-					-	-	**NA**	**NA**	**-**	4	c
2019	1639	Surimi	Surimi	-	st	st	st		-	-	-					-	-	**NA**	**NA**	**-**	4	c
2019	1641	Filet de merlu panés	Breaded hake fillet	-	-	-	-		-	st	st					-	-	**NA**	**NA**	**-**	4	c
2019	1643	Poisson blanc gratiné au fromage	White fish with cheese au gratin	st	-	st	-		-	st	-					-	-	**NA**	**NA**	**-**	4	c
2019	1644	Cabillaud pané	Breaded cod	-	-	-	-		-	st	-					-	-	**NA**	**NA**	**-**	4	c
2019	4086	Pavé de colin napolitain pré-cuit	Pre-cooked Neapolitan hake steak	H+	-	H+	+	*L.monocytogenes*	+	st	-					-	-	**ND**	**ND**	**-**	4	c
2019	4087	Poisson blanc gratiné au fromage	White fish with cheese au gratin	-	-	-	-		-	H+	H+/H-d	+	+/-	+/-	*L.monocytogenes*	+	+	**PD**	**PD**		4	c
2019	4088	Pavé poisson blanc thym citron	White fish steak with lemon thyme	-	-	st	-		-	H-	H-	+	+	+	*L.innocua*	+	+	**PD**	**PD**		4	c
2019	4089	Portion de colin sauce brésilienne	Portion of hake with Brazilian sauce	H-	+	H-	+	*L.innocua*	+	st	st					-	-	**ND**	**ND**	**-**	4	c
2019	4090	Pavé de poisson sauce bordelaise	Fish steak with bordelaise sauce	st	-	st	-		-	-	-					-	-	**NA**	**NA**	**-**	4	c
2019	4091	Nigiri de thon saumon crevettes	Nigiri of tuna salmon shrimps	st	st	st	st		-	st	-					-	-	**NA**	**NA**	**-**	4	c
2019	4092	Filet de merlu blanc	Fillet of white hake	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	c
2019	**4181**	**Tielles Sétois**	**Tielles Sétois**	H+	+	H+	+	*L.monocytogenes*	+	H-	H-	+	+	+	*L.innocua*	+	+	**PA**	**PA**		4	c
2019	**4182**	**Plat préparé de pavé de saumon**	**Prepared dish of salmon steak**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H-	H-	+	+	+	*L.welshimeri*	+	+	**PA**	**PA**		4	c
2019	4558	Pavé de colin	Hake steak	-	-	H-	-	*L.innocua*	+	-	H-(1)	+	+	+	*L.innocua*	-	+	**ND**	**PA**	**-**	4	c
2019	5035	Calamars chorizo à poêler	Pan-fried chorizo squid	H+	+	H+	+	*L.monocytogenes*	+	H+	H+				*L.monocytogenes*	+	+	**PA**	**PA**		4	c
2019	5039	Verrine de saumon	Verrine of salmon	H-	-	H-	+	*L.innocua*	+	-	H-d	-	-	+	*coques*	-	-	**ND**	**ND**	**-**	4	c
2019	5189	Encornets farcis	Stuffed squid	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	c

VEGETABLES - Half Fraser Protocol- 37°C (*Listeria* spp.)																								
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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C													
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples			
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h				
2018	8343	Roquette	Arugula	st	-	st	-		-	-	-					-	-	NA	NA	-		5	a
2018	8344	Epinards	Spinach	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA			5	a
2018	8345	Mais grains	But grains	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA			5	a
2018	8346	Epinards en branches	Spinach in branches	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA			5	a
2019	**93**	**Epinards**	**Spinach**	H+	+	H+	+	*L.monocytogenes*	+	H+/H-	H+/H-	+/+	+	+/+	*L.monocytogenes*/ *L.innocua*	+	+	PA	PA			5	a
2019	**94**	**Mélange de jeunes pousses**	**Mixed baby greens**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA			5	a
2019	**95**	**Mélange de jeunes pousses**	**Mixed baby greens**	H+	+	H+	+	*L.monocytogenes*	+	-	H+d/H-d	-	/	/	NC on TSYEA	-	-	ND	PPND	-		5	a
2019	368	Ciboulette	Chives	-	-	st	-		-	st	-					-	-	NA	NA	-		5	a
2019	369	Roquette	Arugula	st	-	st	st		-	st	st					-	-	NA	NA	-		5	a
2019	370	Persil	Parsley	st	st	st	st		-	st	-					-	-	NA	NA	-		5	a
2019	371	Persil	Parsley	-	st	st	st		-	st	-					-	-	NA	NA	-		5	a
2019	2182	Maïs doux en grains	Sweet corn kernels	-	-	-	-		-	H+	H+	+	+	+	*L.monocytogenes*	+	+	PD	PD			5	a
2019	2183	Maïs doux en grains	Sweet corn in kernels	-	-	-	-		-	-	-					-	-	NA	NA	-		5	a
2019	2184	Maïs doux en grains	Sweet corn in kernels	H+	-	H+	+	*L.monocytogenes*	+	-	-					-	-	ND	ND	-		5	a
2019	2396	Pousses d'épinards	Spinach shoots	-	-	-	-		-	-	-					-	-	NA	NA	-		5	a
2019	2397	Epinards frais	Fresh spinach	-	-	-	-		-	-	-					-	-	NA	NA	-		5	a
2019	2398	Persil plat	Flat leaf parsley	-	-	st	-		-	H-d	-		-	-		-	-	PPNA	NA	-		5	a
2019	2399	Basilic	Basil	-	-	-	-		-	H-d	-		-	-		-	-	PPNA	NA	-		5	a
2019	2400	Fines pousses alfalfa (lentilles poireaux)	Baby greens of alfalfa (lentils, leeks)	-	-	-	st		-	H-d	-		-	-		-	-	PPNA	NA	-		5	a
2019	2401	Fines pousses alfalfa (radis fenouil)	Baby greens of alfalfa (radishes, fennel)	-	-	-	-		-	H-d	-		-	-		-	-	PPNA	NA	-		5	a
2019	2402	Melon	Melon	st	st	st	st		-	st	st					-	-	NA	NA	-		5	a
2019	2918	Ciboulette	Chives	st	st	st	st		-	st	-					-	-	NA	NA	-		5	a
2019	2926	Aubergine	Eggplant	-	-	-	-		-	-	-					-	-	NA	NA	-		5	a
2019	**3349**	**Poivron jaune**	**Yellow bell pepper**	-	+	H-	+	*L.seeligeri*	+	st	st					-	-	ND	ND	-		5	a
2019	**3350**	**Poivron jaune**	**Yellow bell pepper**	st	st	-	-		-	H-	H-	+	+	+	*L.welshimeri*	+	+	PD	PD			5	a
2019	**4583**	**Courgette crue**	**Raw zucchini**	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA			5	a
2018	8348	Mélange de légumes	Mixed vegetables	H+	+	H+	+	*L.monocytogenes*	+	-	-					-	-	ND	ND	-		5	b
2019	194	Poêlée campagnarde	Country style pan fried	st	-	st	-		-	st	-					-	-	NA	NA	-		5	b
2019	195	Légumes vapeurs (haricots, courgettes, poivrons)	Steamed vegetables (beans, zucchini, peppers)	-	-	-	-		-	H+	H+	+	+	+	*L.monocytogenes*	+	+	PD	PD			5	b
2019	196	Poivrons en cubes bicolore	Cubed two-tone peppers	st	-	st	-		-	st	st					-	-	NA	NA	-		5	b
2019	197	Concombre	Cucumber	-	-	-	-		-	st	-					-	-	NA	NA	-		5	b
2019	362	Brunoise méridionale	Southern brunoise	st	-	st	-		-	st	-					-	-	NA	NA	-		5	b
2019	363	Brunoise méridionale	Southern brunoise	-	-	st	-		-	st	st					-	-	NA	NA	-		5	b
2019	364	Poivrons bicolores	Bicolored peppers	st	-	st	st		-	st	st					-	-	NA	NA	-		5	b
2019	1119	Concombre	Cucumber	-	-	st	st		-	st	st					-	-	NA	NA	-		5	b
2019	1121	Pommes de terre grenaille	Grilled potatoes	st	-	st	-		-	st	st					-	-	NA	NA	-		5	b
2019	1651	Betterave rouge râpée	Grated red beet	st	st	st	st		-	st	st					-	-	NA	NA	-		5	b
2019	2186	Choux brocolis coupés	Broccoli, cut up	-	-	st	-		-	st	-					-	-	NA	NA	-		5	b
2019	2187	Choux brocolis coupés	Broccoli cabbage, cut	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA			5	b
2019	2188	Pommes de terre coupées carré	Potatoes, cut in squares	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA			5	b
2019	2189	Frites crues	French fries, raw	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA			5	b
2019	2190	Pommes de terre frites	Fried potatoes	H+ni/H-	+	H+d/H-	+	*L.monocytogenes*/ *L.innocua*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA			5	b
2019	2403	Crudités mélange chou blanc carottes céleri	Raw vegetables white cabbage carrot celery mix	st	-	st	st		-	st	-					-	-	NA	NA	-		5	b
2019	2404	Carottes Nantaises	Nantaise carrots	st	st	st	st		-	st	st					-	-	NA	NA	-		5	b
2019	2927	Crudités mélange chou blanc carottes céleri	White cabbage, carrots and celery mix	st	st	st	st		-	st	-					-	-	NA	NA	-		5	b

♦ Analyses performed according to the COFRAC accreditation

VEGETABLES - Half Fraser Protocol- 37°C (*Listeria* spp.)																							
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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C												
										COMPASS *Listeria* Agar		Confirmations				Final result L.spp		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria	22 h	48 h	22 h	48 h			
2019	2928	Crudités mélange chou rouge, carottes, choux blancs	Red cabbage, carrots and white cabbage mix	-	st	-	st		-	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PD	PD		5	b
2019	2929	Ratatouille	Ratatouille	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		5	b
2019	2935	Crudités mélange chou blanc carottes céleri	Creamy white cabbage, carrots and celery mix	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+d/H-	H-	+	+	+	*L.welshimeri*	+	+	PA	PA		5	b
2019	2936	Crudités mélange chou rouge, carottes, choux blancs	Red cabbage, carrots and white cabbage	H-	+	H-	+	*L.welshimeri*	+	H+d/H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		5	b
2018	8347	Pommes de terre au beurre	Buttered potatoes	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2018	8349	Salade de fruits	Fruit salad	st	-	-	-		-	-	-					-	-	NA	NA	-	5	c
2019	365	Pommes de terre sarladaises	Sarlatan potatoes	st	-	st	-		-	st	st					-	-	NA	NA	-	5	c
2019	367	Pommes de terre grenaille	Potatoes in a griddle	st	st	st	st		-	st	-					-	-	NA	NA	-	5	c
2019	1117	Poêlée à la bretonne	Pan-fried Breton style	st	-	st	-		-	st	-					-	-	NA	NA	-	5	c
2019	1118	Poêlée campagnarde	Country-style pan-fried potatoes	st	-	st	-		-	st	-					-	-	NA	NA	-	5	c
2019	1122	Chou à la crème mousseline	Cabbage with cream sauce	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	2191	Mélange trois poivrons	Three peppers mix	H+	+	H+	+	*L.monocytogenes*	+	st	-					-	-	ND	ND	-	5	c
2019	2192	Julienne de légumes	Julienne of vegetables	H-	+	H-	+	*L.innocua*	+	-	-					-	-	ND	ND	***L.innocua***	5	c
2019	2193	Légumes pour couscous	Vegetables for couscous	-	-	st	-		-	st	-					-	-	NA	NA	-	5	c
2019	2194	Légumes pour couscous	Vegetables for couscous	-	-	-	-		-	-	-					-	-	NA	NA	-	5	c
2019	2195	Mélange végétal	Vegetable mix	-	-	st	-		-	st	-					-	-	NA	NA	-	5	c
2019	2916	Feuilleté napolitain	Neapolitan puff pastry	-	-	-	-		-	st	-					-	-	NA	NA	-	5	c
2019	2917	Crêpes tatin	Crêpes tatin	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		5	c
2019	2919	Paillasson de pommes de terre Emmental	Emmental potato mat	st	-	st	-		-	-	-					-	-	NA	NA	-	5	c
2019	2920	Gratin dauphinois	Gratin dauphinois	st	st	st	-		-	-	-					-	-	NA	NA	-	5	c
2019	**3353**	**Tartare de légumes**	**Vegetable tartar**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3354**	**Tartare de légumes**	**Vegetable tartar**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3355**	**Gratin de quinoa et boulgour de légumes**	**Gratin of quinoa and bulgur vegetables**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3356**	**Houmous extra au basilic**	**Extra hummus with basil**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.seeligeri*	+	+	PA	PA		5	c
2019	**3357**	**Tomates semi-séchées**	**Semi-dried tomatoes**	H-	+	H-	+	*L.seeligeri*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3358**	**Gratin de quinoa et boulgour de légumes**	**Quinoa and bulgur vegetable gratin**	H-	+	H-	+	*L.seeligeri*	+	H-	H-	+	+	+	*L.seeligeri*	+	+	PA	PA		5	c

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 37°C (*Listeria* spp.)																								
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				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C										Agree-ment		Subculture in Fraser 1 on negative samples		
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp							
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria		22 h	48 h	22 h	48 h				
2019	**540**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cutting)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	a
2019	**542**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cutting)**	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	**543**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	**544**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	a
2019	**545**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	a
2019	**1188**	**Eau rinçage (préparation chantilly)**	**Rinsing water (whipped cream)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	a
2019	**1189**	**Eau rinçage (fromage)**	**Rinsing water (cheese)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	a
2019	**1190**	**Eau de rinçage marmite cuisson compote pomme rhubarbe**	**Rinsing water for cooking apple rhubarb compote**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	a
2019	**1191**	**Eau de rinçage marmite cuisson soupe haricots verts**	**Rinsing water for cooking green bean soup**	st	st	st	-		-	st	st						-	-	NA	NA	-	6	a
2019	1765	Eaux de lavage bacs (usine poisson)	Washing water from tanks (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	1766	Eau de lavage chariot (usine poisson)	Washing water from cart (fish plant)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	1768	Eau de process sortie désarêteuse (usine poisson)	Process water from de-ripper (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	1769	Eau de rinçage filet après parage (usine poisson)	Rinsing water after trimming (fish plant)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	2032	Eau de rinçage (porc)	Rinsing water (pig)	-	st	-	-		-	st	st						-	-	NA	NA	-	6	a
2019	2033	Eau de rinçage (porcs)	Rinsing water (pigs)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	2202	Eau de lavage (balancelle Porc Abattoir)	Washing water (pork slaughterhouse swing)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	2203	Eau bac échaudage (abattoir porcs)	Scalding tank water (slaughterhouse pigs)	st	-	-	-		-	st	st						-	-	NA	NA	-	6	a
2019	2204	Eau d'égout (abattoir porcs)	Sewage water (slaughterhouse pigs)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	a
2019	2938	Eau de rinçage (abattoir porcs)	Rinsing water (slaughterhouse pigs)	H-	+	H-	+	*L.welshimeri*	+	-	-						-	-	ND	ND	***L.innocua***	6	a
2019	2939	Eau de rinçage balance (abattoir porcs)	Rinsing water scales (slaughterhouse pigs)	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	PA	PA		6	a
2019	2940	Eau de lavage (abattoir porcs)	Washing water (slaughterhouse pigs)	H-	+	H-	+	*L.innocua*	+	H-d	H-	+	+	+	*L.innocua*		+	+	PA	PA		6	a
2019	356	Déchets farine de blé noir	Buckwheat flour waste	dni/-	+(1col)	H-d	+	NC on TSYEA	-	H-	H-ni				NC on TSYEA		-	-	NA	NA	-	6	b
2019	**521**	**Déchets découpe saumon**	**Waste Salmon Cutting**	st	st	st	st		-	st	-						-	-	NA	NA	-	6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	H-	+	H-	+	*L.seeligeri*	+	H-	H-	+	+	+	*L.welshimeri*		+	+	PA	PA		6	b
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	H+	+	H+	+	*L.monocytogenes*	+	st	-						-	-	ND	ND	-	6	b
2019	**525**	**Déchets poisson**	**Fish waste**	st	st	st			-	H+	H+	+	+	+	*L.monocytogenes*		+	+	PD	PD		6	b
2019	**526**	**Déchets mêlée de jambon végétal**	**Vegetable ham mix waste**	H-	+	H-	+	*L.seeligeri*	+	-	H-d	+	+	+	*L.seeligeri*		-	+	ND	PA	***L.seeligeri***	6	b
2019	**527**	**Déchets veggie**	**Veggie waste**	-	-	st	-		-	-	H-d	+	+	+	*L.seeligeri*		-	+	NA	PD	***L.seeligeri***	6	b
2019	**528**	**Déchets veggie**	**Veggie waste**	-	-	st	-		-	H+	H+	+	+	+	*L.monocytogenes*		+	+	PD	PD		6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (fish cut with spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	+	+	*L.monocytogenes*		+	+	PA	PA		6	b
2019	1763	Déchets Sol Scan (usine poisson)	Waste Sol Scan (fish factory)	st	st	-	st		-	st	st						-	-	NA	NA	-	6	b
2019	1764	Déchets nature bac maggy (usine poisson)	Waste (fish plant)	st	st	-	st		-	st	-						-	-	NA	NA	-	6	b
2019	1767	Eau d'égout (usine poisson)	Sewage (fish plant)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	b
2019	1770	Chiffonnette égout (usine poisson)	Sewer wipe (fish plant)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	b
2019	2030	Déchets découpe porc (abattoir porc)	Pork cutting waste (pork slaughterhouse)	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	+	+	*L.monocytogenes/ L.innocua*		+	+	PA	PA		6	b
2019	2031	Déchets découpe bœuf (abattoir bœuf)	Beef cutting waste (beef slaughterhouse)	H-	+d	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	PA	PA		6	b
2019	2205	Résidus zone sang (abattoir porcs)	Blood zone waste (pork slaughterhouse)	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	PA	PA		6	b
2019	2937	Eau d'égout (abattoir porcs)	Sewage water (hog slaughterhouse)	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*		+	+	PA	PA		6	b
2019	1771	Chiffonnette tapis maille sortie trancheuse avant nettoyage (usine poisson)	Slicer belt rag before cleaning (fish plant)	st	st	-	st		-	st	st						-	-	NA	NA	-	6	c

♦ Analyses performed according to the COFRAC accreditation

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 37°C (*Listeria* spp.)																									
Year	Sample No	Product (/French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar												Category	Type
				Half Fraser		Fraser 1		Confirmation	Final result L.spp	Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C										Agree-ment		Subculture in Fraser 1 on negative samples		
										COMPASS *Listeria* Agar		Confirmations					Final result L.spp							
				O&A	Palcam	O&A	Palcam			22 h	48 h	Palcam	Gram	Catalase	API Listeria		22 h	48 h	22 h	48 h				
2019	1772	Chiffonnette trancheuse avant nettoyage (usine poisson)	Slicer cloth before cleaning (fish plant)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	1773	Chiffonnette toasts sol sous-trancheuse avant nettoyage (usine poisson)	Slicer floor toast cloth before cleaning (fish plant)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	1774	Chiffonnette toasts lame trancheur avant nettoyage (usine poisson)	Slicer blade toast cloth before cleaning (fish factory)	st	st	st	st		-	st	-						-	-	NA	NA	-	6	c
2019	1775	Chiffonnette tartare baratte avant nettoyage (usine poisson)	Tartar churn before cleaning (fish factory)	st	-	-	-		-	st	st						-	-	NA	NA	-	6	c
2019	1776	Chiffonnette lardons couteaux de parage avant nettoyage (usine poisson)	Rags with larder knives before cleaning (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	1777	Chiffonnette lardons table de parage avant nettoyage (usine poisson)	Larder cloth for trimming table before cleaning (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	1778	Chiffonnette tapis maille sortie trancheuse après nettoyage (usine poisson)	Slicer output mesh belt after cleaning (fish factory)	st	st	-	st		-	st	st						-	-	NA	NA	-	6	c
2019	1779	Chiffonnette tartare baratte après nettoyage (usine poisson)	Tartar churn cloth after cleaning (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	1780	Chiffonnette égout après nettoyage (usine poisson)	Drain cloth after cleaning (fish factory)	-	-	-	-		-	st	st						-	-	NA	NA	-	6	c
2019	1781	Chiffonnette lame trancheur ligne toast après nettoyage (usine poisson)	Slicer blade toast line after cleaning (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	1782	Chiffonnette PN trancheur après nettoyage (usine poisson)	Slicer blade PN after cleaning (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	1783	Chiffonnette lardons table de parage après nettoyage (usine poisson)	Cleaning cloth for larder table after cleaning (fish factory)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	2196	Chiffonnette avant nettoyage (tapis inox Abattoir Carnés)	Cleaning cloth before cleaning (stainless steel slaughterhouse belt)	H+/H-	+	H+	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	+	+	*L.monocytogenes*	+	+	PA	PA		6	c
2019	2197	Chiffonnette avant nettoyage (tapis lattes Abattoir Carnés)	Cleaning cloth before cleaning (slatted mat Slaughterhouse Meat)	H-	+	H-	+	*L.innocua*	+	st	-						-	-	ND	ND	-	6	c
2019	2198	Chiffonnette avant nettoyage (tapis ATTEC sortie Abattoir Carnés)	Wipe before cleaning (ATTEC belt, exit from the slaughterhouse)	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		6	c
2019	2199	Chiffonnette après nettoyage (tapis dec poitrine Abattoir carnés)	Wipe after cleaning (carpet breast slaughterhouse)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	2200	Chiffonnette après nettoyage (tapis milieu de ligne Abattoir carnés)	Wipe after cleaning (mid-line slaughterhouse meat conveyor)	H-	+	H-	+	*L.welshimeri*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		6	c
2019	2201	Chiffonnette après nettoyage (Dec L1 abattoir carnés)	Wipe after cleaning (Dec L1 Slaughterhouse meat)	st	st	st	st		-	st	st						-	-	NA	NA	-	6	c
2019	2941	Chiffonnette avant nettoyage (fabrication mousse de foie mélangeur)	Rags before cleaning (production of liver mousse mixer)	H-	+	H-	+	*L.innocua*	+	-	-						-	-	ND	ND	-	6	c
2019	2942	Chiffonnette avant nettoyage (fabrication mousse de foie Stephan)	Rags before cleaning (production of liver mousse Stephan)	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		6	c
2019	2944	Chiffonnette avant nettoyage (abattoir porcs)	Rags before cleaning (slaughterhouse pigs)	H-	+	H-	+	*L.innocua*	+	H-	H-	+	+	+	*L.innocua*	+	+	PA	PA		6	c
2019	2945	Chiffonnette avant nettoyage (abattoir porcs)	Cleaning cloth before cleaning (slaughterhouse pigs)	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	+/+	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		6	c

Appendix 9 - Relative level of detection determination: raw data - *Listeria* spp - Half Fraser Protocol- 37°C

Composite: Deli salad (Piémontaise)
Strain: *Listeria welshimeri* Ad1175 **48 h at 5°C ± 3°C**
Aerobic mesophilic flora: 1,4 103 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			COMPASS	Palcam	COMPASS	Palcam			22 h	48 h	Confir-mation	22 h	48 h	22 h	48 h
824	0	0	st	st	st	-	-	0/5	-	-	/	-	-	0/5	0/5
825			st	st	st	st	-		-	-	/	-	-		
826			st	st	st	-	-		-	-	/	-	-		
827			st	-	st	st	-		-	-	/	-	-		
828			st	st	st	st	-		-	-	/	-	-		
888	1	1,5	+	+	+	+	+	12/20	-	-	/	-	-	10/20	10/20
889			-	+(L.monocytogenes)	-	+(L.monocytogenes)	-		-	-	/	-	-		
890			-	+(L.monocytogenes)	-	+(L.monocytogenes)	-		-	-	/	-	-		
891			st	st	-	-	-		st	st	/	-	-		
892			st	st	-	st	-		+	+	+	+	+		
893			+	+	+	+	+		+	+	+	+	+		
894			st	st	-	-	-		st	st	/	-	-		
895			st	st	st	st	-		st	st	/	-	-		
896			+	+	+	+	+		+	+	+	+	+		
897			+	+	+	+	+		+	+	+	+	+		
898			+	+	+	+	+		+	+	+	+	+		
899			+	+	+	+	+		st	st	/	-	-		
900			+	+	+	+	+		-	-	/	-	-		
901			+	+	+	+	+		+	+	+	+	+		
902			st	-	-	-	-		+	+	+	+	+		
903			+	+	+	+	+		+	+	+	+	+		
904			st	st	-	-	-		-	-	/	-	-		
905			+	+	+	+	+		+	+	+	+	+		
906			+	+	+	+	+		st	st	/	-	-		
907			+	+	+	+	+		+	+	+	+	+		
908	2	4,3	-	+(L.monocytogenes)	-	+(L.monocytogenes)	-	4/5	+	+	+	+	+	3/5	3/5
909			+	+	+	+	+		+	+	+	+	+		
910			+	+	+	+	+		+	+	+	+	+		
911			+	+	+	+	+		-	-	/	-	-		
912			+	+	+	+	+		-	-	/	-	-		

♦ Analyses performed according to the COFRAC accreditation

Meat products: Rillettes
Strain: *L.monocytogenes* Ad669
Aerobic mesophilic flora: 10 CFU/g

48 h at 5°C ± 3°C

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			COMPASS	Palcam	COMPASS	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
1795	0	0	st	st	st	st	-	0/5	st	st	/	-	-	0/5	0/5
1796			-	st	-	st	-		st	st	/	-	-		
1797			st	st	st	st	-		st	st	/	-	-		
1798			st	st	st	st	-		st	-	/	-	-		
1799			st	st	st	st	-		-	-	/	-	-		
1800	1	0,5	st	st	st	st	-	5/20	+	+	+	+	+	10/20	10/20
1801			+	+	+	+	+		+	+	+	+	+		
1802			+	+	+	+	+		+	+	+	+	+		
1803			st	st	st	st	-		st	-	/	-	-		
1804			st	st	st	st	-		+	+	+	+	+		
1805			st	st	st	st	-		st	-	/	-	-		
1806			st	st	st	st	-		st	st	/	-	-		
1807			st	st	st	st	-		st	st	/	-	-		
1808			+	+	+	+	+		-	-	/	-	-		
1809			-	st	st	st	-		+	+	+	+	+		
1810			+	+	+	+	+		st	st	/	-	-		
1811			st	st	st	st	-		+	+	+	+	+		
1812			-	st	st	st	-		st	st	/	-	-		
1813			st	st	st	st	-		+	+	+	+	+		
1814			st	st	st	st	-		st	st	/	-	-		
1815			-	st	-	st	-		+	+	+	+	+		
1816			-	st	st	st	-		st	st	/	-	-		
1817			-	st	st	st	-		st	st	/	-	-		
1818			+	+	+	+	+		+	+	+	+	+		
1819			-	st	st	st	-		+	+	+	+	+		
1820	2	1,4	+	+	+	+	+	4/5	st	st	/	-	-	2/5	2/5
1821			+	+	+	+	+		st	st	/	-	-		
1822			+	+	+	+	+		+	+	+	+	+		
1823			+	+	+	+	+		-	-	/	-	-		
1824			st	st	-	st	-		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Dairy products: raw milk
Strain: *L.ivanovii* Ad991 **48 h at 5°C ± 3°C**
Aerobic mesophilic flora: 2,6 105 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			COMPASS	Palcam	COMPASS	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
2048	0	0	st	-	st	st	-	0/5	st	-		-	-	0/5	0/5
2049			st	st	st	st	-		st	-		-	-		
2050			st	st	st	st	-		st	-		-	-		
2051			st	st	st	st	-		st	-		-	-		
2052			st	st	st	st	-		st	-		-	-		
2053	1	0,7	-	st	st	st	-	10/20	st	-		-	-	8/20	8/20
2054			st	st	st	st	-		+	+	+	+	+		
2055			st	st	-	st	-		+	+	+	+	+		
2056			st	st	-	st	-		st	-		-	-		
2057			+	+	/	+	+		st	-		-	-		
2058			+	+	/	/	+		st	-		-	-		
2059			+	+	/	/	+		st	-		-	-		
2060			+	+	/	/	+		st	-		-	-		
2061			+	+	/	/	+		+	+	+	+	+		
2062			-	-	H-	+	-		+	+	+	+	+		
2063			+	+	/	/	+		+	+	+	+	+		
2064			st	st	-	st	-		+	+	+	+	+		
2065			+	+	/	/	+		+	+	+	+	+		
2066			+	+	/	/	+		st	-		-	-		
2067			+	+	/	/	+		st	-		-	-		
2068			st	st	st	st	-		st	-		-	-		
2069			+	+	/	/	+		st	-		-	-		
2070			-	st	-	st	-		+	+	+	+	+		
2071			st	st	st	st	-		st	-		-	-		
2072			st	st	-	st	-		st	-		-	-		
2073	2	2,0	+	+	/	/	+	4/5	+	+	+	+	+	4/5	4/5
2074			+	+	/	/	+		+	+	+	+	+		
2075			st	st	st	-	-		st	-		-	-		
2076			+	+	/	/	+		+	+	+	+	+		
2077			+	+	/	/	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Fishery products: smoked salmon
Strain: *Listeria innocua* Ad1674 **48 h at 5°C ± 3°C**
Aerobic mesophilic flora: <10 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			COMPASS	Palcam	COMPASS	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
3643	0	0	st	st	st	st	-	0/5	-	-	/	-	-	0/5	0/5
3644			st	st	st	st	-		-	-	/	-	-		
3645			-	st	st	st	-		-	-	/	-	-		
3646			st	st	-	st	-		-	-	/	-	-		
3647			st	st	st	st	-		-	-	/	-	-		
3707	1	0,5	st	st	st	st	-	6/20	st	st		-	-	7/20	7/20
3708			-	-	-	-	-		+	+	+	+	+		
3709			-	-	-	-	-		st	st		-	-		
3710			+	+	+	+	+		-	-		-	-		
3711			-	-	-	-	-		-	-		-	-		
3712			-	-	-	-	-		+	+	+	+	+		
3713			-	-	-	-	-		+	+	+	+	+		
3714			+	+	+	+	+		-	-		-	-		
3715			+	+	+	+	+		+	+	+	+	+		
3716			st	st	st	st	-		+	+	+	+	+		
3717			+	+	+	+	+		st	st		-	-		
3718			+	+	+	+	+		st	st		-	-		
3719			-	st	st	st	-		+	+	+	+	+		
3720			st	st	st	st	-		st	st		-	-		
3721			-	-	-	-	-		+	+	+	+	+		
3722			+	+	+	+	+		-	-		-	-		
3723			-	-	-	-	-		-	-		-	-		
3724			-	-	-	-	-		-	-		-	-		
3725			-	-	-	-	-		-	-		-	-		
3726			-	-	-	-	-		st	st		-	-		
3727	2	3,8	+	+	+	+	+	5/5	+	+	+	+	+	5/5	5/5
3728			+	+	+	+	+		+	+	+	+	+		
3729			+	+	+	+	+		+	+	+	+	+		
3730			+	+	+	+	+		+	+	+	+	+		
3731			+	+	+	+	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Vegetables: frozen sliced zucchini
Strain: *Listeria seeligeri* Ad1754 **-20°C, 2 weeks**
Aerobic mesophilic flora: 4,8 10^4 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/ Total	Reading			Final result 22 h	Final result 48 h	Number of positive samples/ Total	
			COMPASS	Palcam	COMPASS	Palcam			22 h	48 h	Confirmation			22 h	48 h
5223	0	0	st	-	st	-	-	0/5	-			-	-	0/5	/5
5224			st	-	st	st	-		-			-	-		
5225			st	-	st	-	-		-			-	-		
5226			st	st	st	st	-		-			-	-		
5227			st	st	st	-	-		-			-	-		
5479	1	1,8	H-	+	H-	+	+	15/20	H-	H-	+	+	+	18/20	18/20
5480			H-	+	H-	+	+		st	-		-	-		
5481			H-	+	H-	+	+		H-	H-	+	+	+		
5482			H-	+	H-	+	+		H-	H-	+	+	+		
5483			H-	+	H-	+	+		H-	H-	+	+	+		
5484			H-	+	H-	+	+		H-	H-	+	+	+		
5485			st	st	st	st	-		H-	H-	+	+	+		
5486			H-	+	H-	+	+		H-	H-	+	+	+		
5487			-	-	-	st	-		H-	H-	+	+	+		
5488			st	st	-	st	-		H-	H-	+	+	+		
5489			st	st	st	st	-		H-	H-	+	+	+		
5490			H-	+	H-	+	+		H-	H-	+	+	+		
5491			H-	+	H-	+	+		H-	H-	+	+	+		
5492			H-	+	H-	+	+		H-	H-	+	+	+		
5493			H-	+	H-	+	+		H-	H-	+	+	+		
5494			H-	+	H-	+	+		H-	H-	+	+	+		
5495			st	-	-	-	-		st	st		-	-		
5496			H-	+	H-	+	+		H-	H-	+	+	+		
5497			H-	+	H-	+	+		H-	H-	+	+	+		
5498			H-	+	H-	+	+		H-	H-	+	+	+		
5499	2	6,0	H-	+	H-	+	+	5/5	H-	H-	+	+	+	5/5	5/5
5500			H-	+	H-	+	+		H-	H-	+	+	+		
5501			H-	+	H-	+	+		H-	H-	+	+	+		
5502			H-	+	H-	+	+		H-	H-	+	+	+		
5503			H-	+	H-	+	+		H-	H-	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Environment: Process water
Strain: *L.monocytogenes* Ad551 **48 h at 5°C ± 3°C**
Aerobic mesophilic flora: 5,6 10^2 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			COMPASS	Palcam	COMPASS	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
2484	0	0	-	st	-	-	-	0/5	st	st		-	-	0/5	0/5
2485			st	st	-	st	-		st	st		-	-		
2486			st	st	st	-	-		st	st		-	-		
2487			st	st	st	st	-		st	-		-	-		
2488			st	st	-	-	-		st	st		-	-		
2564	1	0,7	+	+	+	+	+	8/20	+	+	+	+	+	8/20	8/20
2565			+	+	+	+	+		st	st		-	-		
2566			+	+	+	+	+		st	st		-	-		
2567			st	st	st	st	-		st	st		-	-		
2568			st	st	st	st	-		st	st		-	-		
2569			st	st	st	st	-		st	st		-	-		
2570			+	+	+	+	+		st	st		-	-		
2571			st	st	st	st	-		st	st		-	-		
2572			st	st	st	st	-		st	st		-	-		
2573			st	st	st	st	-		+	+	+	+	+		
2574			+	+	+	+	+		st	st		-	-		
2575			st	st	st	st	-		st	st		-	-		
2576			+	+	+	+	+		+	+	+	+	+		
2577			st	st	st	st	-		+	+	+	+	+		
2578			st	st	st	st	-		+	+	+	+	+		
2579			st	st	st	st	-		st	st		-	-		
2580			-	-	-	st	-		+	+	+	+	+		
2581			+	+	+	+	+		+	+	+	+	+		
2582			st	st	st	st	-		+	+	+	+	+		
2583			+	+	+	+	+		st	st		-	-		
2584	2	4,5	+	+	+	+	+	5/5	+	+	+	+	+	5/5	5/5
2585			+	+	+	+	+		+	+	+	+	+		
2586			+	+	+	+	+		+	+	+	+	+		
2587			+	+	+	+	+		+	+	+	+	+		
2588			+	+	+	+	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Appendix 10 - Artificial contamination of samples - *Listeria monocytogenes* - Half Fraser Protocol- 30°C

HALF FRASER PROTOCOL - 30°C (*Listeria monocytogenes*)												
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2007	583	Salade Bretonne	Deli salad	*L.monocytogenes* Ad543	Sliced peppers	Spiking-pH3	0,3	5	+	+	1	a
2007	584	Piémontaise	Deli salad (Piémontaise)	*L.monocytogenes* Ad543	Sliced peppers	Spiking-pH3	0,3	5	+	+	1	a
2007	585	Salade Auvergnate	Auvergne Salad	*L.monocytogenes* Ad543	Sliced peppers	Spiking-pH3	0,3	5	+	+	1	a
2007	586	Taboulé à l'orientale	Oriental Tabbouleh	*L.monocytogenes* Ad543	Sliced peppers	Spiking-pH3	0,3	5	+	+	1	a
2019	724	Sandwich thon œuf	Tuna and egg sandwich	*L.monocytogenes* Ad1186	Breaded codfish fillet	Seeding 48h 3±2°C	/	2,0	-	-	1	a
2019	725	Sandwich jambon Emmental	Ham and Emmental sandwich	*L.monocytogenes* Ad270	Rosette de Lyon	Seeding 48h 3±2°C	/	1,8	+	+	1	a
2019	726	Sandwich jambon Emmental	Ham and Emmental sandwich	*L.monocytogenes* Ad271	Bacon	Seeding 48h 3±2°C	/	2,8	-	-	1	a
2019	727	Sandwich jambon Emmental	Ham and Emmental sandwich	*L.monocytogenes* Ad271	Bacon	Seeding 48h 3±2°C	/	2,8	+	+	1	a
2019	728	Sandwich saumon cuit et fumé	Cooked and smoked salmon sandwich	*L.monocytogenes* Ad1185	Fish (Panga) fillet	Seeding 48h 3±2°C	/	2,2	+	+	1	a
2019	1381	Taboulé au poulet rôti	Tabbouleh with roasted chicken	*L.monocytogenes* Ad668	Chicken wings	Seeding 48h 3±2°C	/	1,8	+	+	1	a
2019	1382	Taboulé au poulet rôti	Tabbouleh with roasted chicken	*L.monocytogenes* Ad2453	Volaille	Seeding 48h 3±2°C	/	2,2	+	+	1	a
2019	1383	Piémontaise au jambon	Deli salad (Piémontaise)	*L.monocytogenes* Ad291	Bacon	Seeding 48h 3±2°C	/	1,2	+	+	1	a
2019	1384	Salade et crudités jambon Emmental	Salad and raw vegetables with ham and Emmental cheese	*L.monocytogenes* Ad291	Bacon	Seeding 48h 3±2°C	/	1,2	+	+	1	a
2018	8613	Paella	Paella	*L.monocytogenes* Ad2599	Salmon	Seeding 48h 3±2°C	/	3,4	+	+	1	b
2018	8614	Paella	Paella	*L.innocua* Ad1675	Fish	Seeding 48h 3±2°C	/	3,0	-	-	1	b
2018	8615	Pizza jambon fromage	Ham and cheese pizza	*L.monocytogenes* Ad2154	Pâté with pepper	Seeding 48h 3±2°C	/	1,6	+	+	1	b
2018	8616	Pizza jambon fromage	Ham and cheese pizza	*L.monocytogenes* Ad1494	Sausage	Seeding 48h 3±2°C	/	2,4	-	-	1	b
2018	8617	Quiche Lorraine	Quiche Lorraine	*L.monocytogenes* Ad2154	Pepper Pâté	Seeding 48h 3±2°C	/	1,6	+	+	1	b
2018	8618	Quiche Lorraine	Quiche Lorraine	*L.welshimeri* Ad1671	Pork	Seeding 48h 3±2°C	/	4,0	-	-	1	b
2018	8619	Quiche saumon brocolis	Salmon and broccoli quiche	*L.monocytogenes* Ad2599	Salmon	Seeding 48h 3±2°C	/	3,4	+	+	1	b
2018	8620	Quiche saumon brocolis	Salmon and broccoli quiche	*L.monocytogenes* Ad1279	Smoked salmon	Seeding 48h 3±2°C	/	3,0	+	+	1	b
2019	79	Quiche Lorraine	Quiche Lorraine	*L.monocytogenes* Ad2154 +*L.welshimeri* Ad1670	Green pepper pâté + Sausage (Rosette)	Seeding 48h 3±2°C	/	0,4+1,2	-	-	1	b
2019	80	Pizza jambon fromage	Ham and cheese pizza	*L.monocytogenes* Ad2154 +*L.welshimeri* Ad1670	Green pepper pâté + Sausage (Rosette)	Seeding 48h 3±2°C	/	0,4+1,2	+	+	1	b
2019	81	Feuilleté jambon Emmental	Ham and Emmental puff pastry	*L.monocytogenes* Ad2154 +*L.welshimeri* Ad1670	Green pepper pâté + Sausage (Rosette)	Seeding 48h 3±2°C	/	0,4+1,2	-	-	1	b
2019	529	Couscous trois viandes	Couscous with three meats	*L.monocytogenes* Ad1494	Strasbourg sausage	Seeding 48h 3±2°C	/	1,0	+	+	1	b
2019	530	Croissant au jambon	Ham Croissant	*L.monocytogenes* Ad1494	Strasbourg sausage	Seeding 48h 3±2°C	/	1,0	-	-	1	b
2019	531	Quiche Lorraine	Quiche Lorraine	*L.monocytogenes* Ad669	Rillettes	Seeding 48h 3±2°C	/	0,6	-	-	1	b
2007	507	Coule d'œuf	Egg roll	*L.monocytogenes* Ad547	Pancake dough	Spiking-pH10	>4,30	2	-	-	1	c
2018	8621	Eclair vanille	Pastry (Vanilla éclair)	*L.monocytogenes* Ad1195	Egg products	Seeding 48h 3±2°C	/	5,2	+	+	1	c
2018	8622	Eclair vanille	Pastry (Vanilla éclair)	*L.monocytogenes* Ad1757	Egg products	Seeding 48h 3±2°C	/	1,8	+	+	1	c
2018	8623	Eclair chocolat	Pastry (Chocolate éclair)	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48h 3±2°C	/	1,6	-	-	1	c
2018	8624	Eclair chocolat	Pastry (Chocolate éclair)	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48h 3±2°C	/	2,8	-	-	1	c
2018	8625	Flan	Custard	*L.monocytogenes* JL2862 +*L.innocua* Ad644	Egg white + pastry	Seeding 48h 3±2°C	/	1,0+1,4	+	+	1	c
2018	8626	Tortilla espagnole aux oignons	Spanish tortilla with onions	*L.monocytogenes* Ad1195	Egg products	Seeding 48h 3±2°C	/	5,2	+	+	1	c
2018	8627	Tortilla espagnole	Spanish Tortilla	*L.monocytogenes* JL2862	Egg white	Seeding 48h 3±2°C	/	3,2	+	+	1	c
2018	8628	Tortilla aux oignons	Tortilla with onions	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48h 3±2°C	/	2,8	-	-	1	c
2018	8629	Tortilla aux oignons	Tortilla with onions	*L.monocytogenes* Ad1757 +*L.welshimeri* Ad1270	Egg products + poultry slaughterhouse	Seeding 48h 3±2°C	/	1,0+1,6	+	+	1	c
2018	8630	Tortilla espagnole aux oignons	Spanish tortilla with onions	*L.monocytogenes* Ad1195 +*L.innocua* Ad644	Egg products + pastry	Seeding 48h 3±2°C	/	2,0+1,4	+	+	1	c
2018	8631	Clafoutis aux cerises griottes	Morello cherry clafoutis	*L.monocytogenes* Ad1757	Egg products	Seeding 48h 3±2°C	/	1,8	+	+	1	c
2018	8632	Clafoutis aux cerises griottes	Morello cherry clafoutis	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48h 3±2°C	/	1,6	-	-	1	c
2018	8633	Crème aux œufs vanille	Vanilla egg cream	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48h 3±2°C	/	1,6	-	-	1	c

HALF FRASER PROTOCOL - 30°C (*Listeria monocytogenes*)												
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2018	**8634**	**Crème aux œufs vanille**	**Vanilla egg cream**	*L.monocytogenes* Ad1195 +*L.innocua* Ad1277	Egg products + poultry slaughterhouse	Seeding 48h 3±2°C	/	2,0+2,0	+	+	1	c
2018	**8635**	**Ile flottante**	**Ile flottante**	*L.monocytogenes* JL2862 +*L.innocua* Ad644	Egg white + pastry	Seeding 48h 3±2°C	/	1,0+1,4	+	+	1	c
2019	**74**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	*L.monocytogenes* Ad1218 +*L.innocua* Ad643	Raw beef + veal olives	Seeding 48h 3±2°C	/	6,2+1,0	+	+	2	b
2019	**75**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	*L.monocytogenes* Ad1208 +*L.welshimeri* Ad1202	Frozen minced steak + minced veal	Seeding 48h 3±2°C	/	4,8+1,8	-	-	2	b
2019	**76**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in the old style**	*L.monocytogenes* Ad1206 + *L.innocua* Ad643	Frozen minced steak + veal olives	Seeding 48h 3±2°C	/	1,4+1,0	+	+	2	b
2019	**77**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in old fashioned style**	*L.monocytogenes* Ad1218 + *L.welshimeri* Ad1202	Minced steak + minced veal	Seeding 48h 3±2°C	/	6,2+1,8	+	+	2	b
2019	**78**	**Paupiette de veau sauce tomate**	**Veal paupiette with tomato sauce**	*L.monocytogenes* Ad1208 + *L.innocua* Ad643	Frozen minced steak + veal olives	Seeding 48h 3±2°C	/	4,8+1,0	-	-	2	b
2019	**82**	**Camembert au lait cru**	**Camembert (raw milk cheese)**	*L.monocytogenes* Ad2757	Dairy product	Seeding 48h 3±2°C	/	4,6	-	-	3	a
2019	**83**	**Camembert au lait cru**	**Camembert (raw milk cheese)**	*L.monocytogenes* Ad2858	Milk	Seeding 48h 3±2°C	/	2,2	+	+	3	a
2019	**84**	**Emmental français au lait cru**	**Emmental (raw milk cheese)**	*L.monocytogenes* Ad1785	Ewe's milk	Seeding 48h 3±2°C	/	1,4	-	-	3	a
2019	**85**	**Emmental français au lait cru**	**Emmental (raw milk cheese)**	*L.monocytogenes* Ad2757	Dairy product	Seeding 48h 3±2°C	/	4,6	+	+	3	a
2019	**532**	**Brie de Meaux au lait cru**	**Brie de Meaux (raw milk cheese)**	*L.monocytogenes* Ad1236	Gouda au lait cru	Seeding 48h 3±2°C	/	0,6	-	-	3	a
2019	**533**	**Brie de Meaux au lait cru**	**Brie de Meaux (raw milk cheese)**	*L.monocytogenes* Ad2603	Dairy product	Seeding 48h 3±2°C	/	0,6	-	-	3	a
2019	**534**	**Roquefort au lait cru**	**Roquefort (raw milk cheese)**	*L.monocytogenes* Ad2642	Emmental	Seeding 48h 3±2°C	/	0,4	-	-	3	a
2019	**730**	**Emmental français au lait cru**	**Emmental (raw milk cheese)**	*L.monocytogenes* Ad665	Raw milk	Seeding 48h 3±2°C	/	2,4	-	-	3	a
2019	**731**	**Coulommiers au lait cru**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad977	Dairy product	Seeding 48h 3±2°C	/	1,8	+	+	3	a
2019	**732**	**Coulommiers au lait cru**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48h 3±2°C	/	0,8	+	+	3	a
2019	**1180**	**Coulommiers au lait cru**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad1201	Cheese (Brie de Meaux)	Seeding 48h 3±2°C	/	3,0	+	+	3	a
2019	**1181**	**Coulommiers au lait cru**	**Coulommiers (raw milk cheese)**	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48h 3±2°C	/	4,4	-	-	3	a
2019	**1182**	**Emmental français au lait cru**	**Emmental (raw milk cheese)**	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48h 3±2°C	/	5,2	+	+	3	a
2019	**1183**	**Brie de Meaux au lait cru**	**Brie de Meaux (raw milk cheese)**	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48h 3±2°C	/	5,2	+	+	3	a
2019	**1184**	**Petit reblochon au lait cru**	**Small Reblochon (raw milk cheese)**	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48h 3±2°C	/	4,4	+	+	3	a
2019	**535**	**Lait cru fermier**	**Raw milk farm**	*L.monocytogenes* Ad2642	Emmental	Seeding 48h 3±2°C	/	0,4	-	-	3	b
2019	**536**	**Lait cru fermier**	**Raw milk farmhouse**	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48h 3±2°C	/	0,6	+	+	3	b
2019	**733**	**Beurre doux au lait cru**	**Sweet butter with raw milk**	*L.monocytogenes* Ad665	Raw milk	Seeding 48h 3±2°C	/	2,4	+	+	3	b
2019	**734**	**Beurre cru demi-sel**	**Raw semi-salted butter**	*L.monocytogenes* Ad977	Dairy product	Seeding 48h 3±2°C	/	1,8	-	-	3	b
2019	**735**	**Beurre cru demi-sel**	**Raw semi-salted butter**	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48h 3±2°C	/	0,8	-	-	3	b
2019	**1185**	**Lait cru fermier**	**Farmhouse raw milk**	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48h 3±2°C	/	4,4	+	+	3	b
2019	**1186**	**Lait cru fermier**	**Raw farm milk**	*L.monocytogenes* Ad1201	Cheese (Brie de Meaux)	Seeding 48h 3±2°C	/	3,0	-	-	3	b
2019	**1187**	**Lait cru de vache**	**Raw cow's milk**	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48h 3±2°C	/	5,2	+	+	3	b
2019	**86**	**Lait frais entier**	**Fresh whole milk**	*L.monocytogenes* Ad2858	Milk	Seeding 48h 3±2°C	/	2,2	+	+	3	c
2019	**87**	**Lait frais demi-écrémé**	**Fresh semi-skimmed milk**	*L.monocytogenes* Ad1785	Ewe's milk	Seeding 48h 3±2°C	/	1,4	+	+	3	c
2019	**88**	**Lait frais de montagne**	**Fresh mountain milk**	*L.monocytogenes* Ad2757	Dairy product	Seeding 48h 3±2°C	/	4,6	+	+	3	c
2019	**537**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	*L.monocytogenes* Ad2603	Dairy product	Seeding 48h 3±2°C	/	0,6	+	+	3	c
2019	**538**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	*L.monocytogenes* Ad2642	Emmental	Seeding 48h 3±2°C	/	0,4	+	+	3	c
2019	**539**	**Lait frais**	**Fresh milk**	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48h 3±2°C	/	0,6	+	+	3	c
2019	**736**	**Coulommiers**	**Coulommiers**	*L.monocytogenes* Ad665	Raw milk	Seeding 48h 3±2°C	/	2,4	-	-	3	c
2019	**737**	**Cousteron**	**Cousteron**	*L.monocytogenes* Ad977	Dairy product	Seeding 48h 3±2°C	/	1,8	+	+	3	c
2019	**1654**	**Lait frais demi-écrémé pasteurisé**	**Fresh pasteurized semi-skimmed milk**	*L.monocytogenes* Ad252	Dairy product	Seeding 48h 3±2°C	/	1,6	+	+	3	c
2019	**1655**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	*L.monocytogenes* Ad253	Dairy product	Seeding 48h 3±2°C	/	1,2	-	-	3	c
2019	**1656**	**Brie pasteurisé**	**Brie (pasteurized cheese)**	*L.monocytogenes* Ad252	Dairy product	Seeding 48h 3±2°C	/	1,6	+	+	3	c
2019	**1657**	**Coulommiers pasteurisé**	**Coulommiers (pasteurized cheese)**	*L.monocytogenes* Ad253	Dairy product	Seeding 48h 3±2°C	/	1,2	+	+	3	c
2007	**228**	**Chutes de saumon fumé**	**Smoked salmon scraps**	Cross contamination with smoked salmon					+	+	4	b
2007	**229**	**Darnes de saumon fumé**	**Smoked salmon steaks**	Cross contamination with smoked salmon					-	-	4	b

HALF FRASER PROTOCOL - 30°C (*Listeria monocytogenes*)													
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2007	230	Filets de Haddock fumés	Smoked Haddock fillets	Cross contamination with smoked salmon					+	+	4	b
2007	231	Filets de hareng fumé	Smoked herring fillets	Cross contamination with smoked salmon					+	+	4	b
2007	232	Filets de Haddock fumés	Smoked Haddock fillets	Cross contamination with smoked salmon					+	+	4	b
2007	233	Saumon fumé	Smoked salmon	Cross contamination with smoked salmon					+	+	4	b
2007	129	Terrine de coquille St Jacques	Terrine of scallops	*L.monocytogenes* Ad128	Smoked salmon	Spiking-(-20°C);TT 30min 55°C	0,9	23	+	+	4	c
2007	130	Terrine de poison à la Bretonne	Poison terrine Breton style	*L.monocytogenes* Ad128	Smoked salmon	Spiking-(-20°C);TT 30min 55°C	0,9	23	+	+	4	c
2007	131	Rillettes de thon	Rillettes of tuna	*L.monocytogenes* Ad128	Smoked salmon	Spiking-(-20°C);TT 30min 55°C	0,9	23	+	+	4	c
2007	180	Terrine de St Jacques	Scallop terrine	L.monocytogenes A00M0114	Smoked salmon	Spiking-TT 30min 55°C	0,3	5	+	+	4	c
2007	181	Rillettes de thon	Potted tuna	L.monocytogenes A00M0114	Smoked salmon	Spiking-TT 30min 55°C	0,3	5	+	+	4	c
2007	182	Terrine de saumon	Salmon terrine	L.monocytogenes A00M0114	Smoked salmon	Spiking-TT 30min 55°C	0,3	5	+	+	4	c
2007	143	Choux brocolis	Broccoli cabbage	Cross contamination with naturally contaminated vegetables					-	-	5	a
2007	145	Brocolis	Broccoli	Cross contamination with naturally contaminated vegetables					-	-	5	a
2007	185	Chou blanc	White cabbage	L.monocytogenes 1016/1413	Frozen broccolis	Spiking-TT 30min 55°C	0,5	2	+	+	5	a
2007	587	Tomates en dés	Diced tomatoes	*L.monocytogenes* Ad543	Sliced peppers	Spiking-pH3	0,3	5	+	+	5	a
2007	590	Tomates en dés	Diced tomatoes	*L.monocytogenes* Ad544	Prefried onions	Spiking-pH3	0,4	2	+	+	5	a
2019	93	Epinards	Spinach	*L.monocytogenes* Ad2598	Salad	Seeding 48h 3±2°C	/	4,2	+	+	5	a
2019	94	Mélange de jeunes pousses	Mixed baby greens	*L.monocytogenes* Ad2598	Salad	Seeding 48h 3±2°C	/	4,2	+	+	5	a
2019	95	Mélange de jeunes pousses	Mixed baby greens	*L.monocytogenes* Ad2643	Salad	Seeding 48h 3±2°C	/	1,4	+	+	5	a
2007	138	Pommes de terre- carottes	Potato and carrot mix	*L.monocytogenes* 1011/1410	Frozen broccolis	Spiking-(-20°C);+4°C	0,2	16	+	+	5	b
2007	139	Mélange carottes poireaux	Carrot and leek mix	*L.monocytogenes* 1011/1410	Frozen broccolis	Spiking-(-20°C);+4°C	0,2	16	+	+	5	b
2007	141	Mélange de légumes en julienne	Mix of julienned vegetables	Cross contamination with naturally contaminated vegetables					-	-	5	b
2007	142	Epinards en branches	Spinach Branches	Cross contamination with naturally contaminated vegetables					-	-	5	b
2007	144	Julienne de légumes	Vegetable Julienne	Cross contamination with naturally contaminated vegetables					-	-	5	b
2007	146	Poêlée champêtre	Country-style pan-fried vegetables	Cross contamination with naturally contaminated vegetables					-	-	5	b
2007	186	Carottes rondelles	Carrot slices	L.monocytogenes 1016/1413	Frozen broccolis	Spiking-TT 30min 55°C	0,5	2	+	+	5	b
2007	588	Poivrons rouges surgelés	Frozen red peppers	*L.monocytogenes* Ad544	Prefried onions	Spiking-pH3	0,4	2	+	+	5	b
2007	589	Haricots verts surgelés	Frozen green beans	*L.monocytogenes* Ad544	Prefried onions	Spiking-pH3	0,4	2	+	+	5	b
2007	591	Poivrons verts surgelés	Frozen green peppers	*L.monocytogenes* Ad544	Prefried onions	Spiking-pH3	0,4	2	+	+	5	b
2007	592	Navets surgelés	Frozen turnips	*L.monocytogenes* Ad544	Prefried onions	Spiking-pH3	0,4	2	+	+	5	b
2007	595	Julienne de légumes surgelée	Frozen Julienne vegetables	*L.monocytogenes* Ad545	Vegetables	Spiking-pH3	0,4	4	+	+	5	b
2007	596	Carottes en rondelles surgelées	Frozen carrot slices	*L.monocytogenes* Ad545	Vegetables	Spiking-pH3	0,4	4	+	+	5	b
2007	140	Salade de tomates poivrons	Tomato and bell pepper salad	*L.monocytogenes* 1011/1410	Frozen broccolis	Spiking-(-20°C);+4°C	0,2	16	+	+	5	c
2007	183	Salade de lentilles cuisinées	Cooked lentil salad	L.monocytogenes 1016/1413	Frozen broccolis	Spiking-TT 30min 55°C	0,5	2	+	+	5	c
2007	184	Potiron, pommes de terre cuisinés	Cooked pumpkin and potato salad	L.monocytogenes 1016/1413	Frozen broccolis	Spiking-TT 30min 55°C	0,5	2	+	+	5	c
2007	503	Petits pois cuisinés	Cooked peas	*L.monocytogenes* Ad547	Pancake dough	Spiking-pH10	>4,30	2	-	-	5	c
2007	504	Purée de brocolis	Broccoli purée	*L.monocytogenes* Ad547	Pancake dough	Spiking-pH10	>4,30	2	-	-	5	c
2007	505	Epinards hachés à la crème	Chopped spinach with cream sauce	*L.monocytogenes* Ad547	Pancake dough	Spiking-pH10	>4,30	2	-	-	5	c
2007	506	Purée d'artichauts nature	Plain artichoke purée	*L.monocytogenes* Ad547	Pancake dough	Spiking-pH10	>4,30	2	-	-	5	c
2007	593	Petits pois cuisinés surgelés	Frozen cooked peas	*L.monocytogenes* Ad545	Salad cubbage, carrots	Spiking-pH3	0,4	4	+	+	5	c
2007	594	Epinards hachés à la crème surgelés	Frozen chopped spinach with cream	*L.monocytogenes* Ad545	Salad cubbage, carrots	Spiking-pH3	0,4	4	+	+	5	c
2007	537	Louche	Ladle	*L.monocytogenes* Ad551	Pastry environment	Spiking-pH10	>3,6	9	+	+	6	a
2019	540	Eau de rinçage (découpe saumon)	Rinsing water (salmon cutting)	*L.monocytogenes* Ad2599	Salmon	Seeding 48h 3±2°C	/	1,2	+	+	6	a
2019	541	Eau de rinçage (fabrication thon tomates en conserve)	Rinsing water (canned tomato tuna)	*L.monocytogenes* Ad2599	Salmon	Seeding 48h 3±2°C	/	1,2	-	-	6	a
2019	542	Eau de rinçage (découpe saumon)	Rinsing water (salmon cutting)	*L.monocytogenes* Ad1191	Fish dry food	Seeding 48h 3±2°C	/	0,6	-	-	6	a
2019	543	Eau de rinçage (découpe saumon)	Rinsing water (salmon cutting)	*L.monocytogenes* Ad1191	Fish dry food	Seeding 48h 3±2°C	/	0,6	-	-	6	a
2019	544	Eau de rinçage (Veggie)	Rinsing water (Veggie)	*L.monocytogenes* Ad2643	Salad	Seeding 48h 3±2°C	/	1,0	+	+	6	a
2019	545	Eau de rinçage (Veggie)	Rinsing water (Veggie)	*L.monocytogenes* Ad2643	Salad	Seeding 48h 3±2°C	/	1,0	+	+	6	a
2019	1188	Eau rinçage (préparation chantilly)	Rinsing water (whipped cream preparation)	*L.monocytogenes* Ad1201	Cheese (Brie de Meaux)	Seeding 48h 3±2°C	/	3,0	+	+	6	a

HALF FRASER PROTOCOL - 30°C (*Listeria monocytogenes*)												
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2019	**1189**	**Eau rinçage (fromage)**	**Rinsing water (cheese)**	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48h 3±2°C	/	5,2	+	+	6	a
2019	**1190**	**Eau de rinçage marmitte cuisson compote pomme rhubarbe**	**Rinsing water for cooking apple rhubarb compote**	*L.monocytogenes* Ad1493	Cube red peppers	Seeding 48h 3±2°C	/	3,0	+	+	6	a
2019	**1191**	**Eau de rinçage marmitte cuisson soupe haricots verts**	**Rinsing water for cooking green bean soup**	*L.monocytogenes* Ad1493	Cube red peppers	Seeding 48h 3±2°C	/	3,0	-	-	6	a
2007	**386**	**Grille d'égoût**	**Drip rack**	*L.monocytogenes* Ad 548	Fish environment	Spiking-pH10	>4,15	6	+	+	6	b
2007	**538**	**Grille d'égout biscuiterie**	**Drainage grid for cookie factory**	*L.monocytogenes* Ad551	Pastry environment	Spiking-pH10	>3,6	9	+	+	6	b
2019	**521**	**Déchets découpe saumon**	**Salmon cutting waste**	*L.innocua* Ad1674	Smoked salmon	Seeding 48h 3±2°C	/	0,4	-	-	6	b
2019	**522**	**Déchets poisson avec épices**	**Fish waste with spices**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48h 3±2°C	/	2,0	-	-	6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48h 3±2°C	/	2,0	-	-	6	b
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	*L.monocytogenes* Ad2599	Salmon	Seeding 48h 3±2°C	/	1,2	+	+	6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (fish cutting with spices)**	*L.monocytogenes* Ad994	Trout	Seeding 48h 3±2°C	/	1,6	+	+	6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	*L.monocytogenes* Ad994	Trout	Seeding 48h 3±2°C	/	1,6	+	+	6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	*L.monocytogenes* Ad995	Smoked trout	Seeding 48h 3±2°C	/	3	+	+	6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	*L.monocytogenes* Ad995	Smoked trout	Seeding 48h 3±2°C	/	3	+	+	6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	*L.monocytogenes* Ad994	Trout	Seeding 48h 3±2°C	/	1,6	+	+	6	b
2007	**384**	**Surface table**	**Table surface**	*L.monocytogenes* Ad 548	Fish environment	Spiking-pH10	>4,15	6	+	+	6	c
2007	**385**	**Balance**	**Scale**	*L.monocytogenes* Ad 548	Fish environment	Spiking-pH10	>4,15	6	+	+	6	c
2007	**387**	**Bac**	**Bin**	*L.monocytogenes* Ad 548	Fish environment	Spiking-pH10	>4,15	6	+	+	6	c
2007	**388**	**Lame de couteau**	**Knife blade**	*L.monocytogenes* Ad 549	Salting environment	Spiking-pH10	>4,74	2	+	+	6	c
2007	**389**	**Chariot**	**Cart**	*L.monocytogenes* Ad 549	Salting environment	Spiking-pH10	>4,74	2	+	+	6	c
2007	**390**	**Plan de travail**	**Work surface**	*L.monocytogenes* Ad 549	Salting environment	Spiking-pH10	>4,74	2	+	+	6	c
2007	**391**	**Evier**	**Sink**	*L.monocytogenes* Ad 549	Salting environment	Spiking-pH10	>4,74	2	+	+	6	c
2007	**392**	**Tapis**	**Carpet**	*L.monocytogenes* Ad 550	Dairy environment	Spiking-pH10	>4,58	8	+	+	6	c
2007	**393**	**Plan de travail**	**Work surface**	*L.monocytogenes* Ad 550	Dairy environment	Spiking-pH10	>4,58	8	+	+	6	c
2007	**394**	**Tapis**	**Carpet**	*L.monocytogenes* Ad 550	Dairy environment	Spiking-pH10	>4,58	8	+	+	6	c
2007	**395**	**Evier**	**Sink**	*L.monocytogenes* Ad 550	Dairy environment	Spiking-pH10	>4,58	8	+	+	6	c
2007	**539**	**Chariot salle conditionnement**	**Conditioning room cart**	*L.monocytogenes* Ad551	Pastry environment	Spiking-pH10	>3,6	9	+	+	6	c
2007	**540**	**Bac plonge**	**Dishwasher bin**	*L.monocytogenes* Ad548	Fish environment	Spiking-pH3	>2,7	3	+	+	6	c
2007	**541**	**Sol salle de cuisson**	**Cooking room floor**	*L.monocytogenes* Ad548	Fish environment	Spiking-pH3	>2,7	3	+	+	6	c
2007	**542**	**Tapis salle de cuisson**	**Baking room carpet**	*L.monocytogenes* Ad548	Fish environment	Spiking-pH3	>2,7	3	+	+	6	c
2007	**543**	**Tapis salle biscuiterie**	**Baking room carpet**	*L.monocytogenes* Ad549	Salting environment	Spiking-pH3	0,3	2	+	+	6	c
2007	**544**	**Table salle de cuisson**	**Baking room table**	*L.monocytogenes* Ad549	Salting environment	Spiking-pH3	0,3	2	-	-	6	c
2007	**545**	**Evier salle de cuisson**	**Sink in the cooking room**	*L.monocytogenes* Ad549	Salting environment	Spiking-pH3	0,3	2	+	+	6	c
2007	**546**	**Chariot salle conditionnement**	**Cart in the packaging room**	*L.monocytogenes* Ad550	Dairy environment	Spiking-pH3	0,6	10	+	+	6	c
2007	**547**	**Plan de travail salle de cuisson**	**Baking room work surface**	*L.monocytogenes* Ad550	Dairy environment	Spiking-pH3	0,6	10	+	+	6	c
2007	**548**	**Balance salle de cuisson**	**Baking room scale**	*L.monocytogenes* Ad550	Dairy environment	Spiking-pH3	0,6	10	+	+	6	c

Appendix 11 - Sensitivity study: raw data - *Listeria monocytogenes* - Half Fraser Protocol- 30°C

FOOD COMPOSITE- Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
Year	No.	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser- 22h at 30°C								Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2007	2590	Chèvre au saumon fumé	Goat cheese with smoked salmon	-	+	-	+	-	-	-	-		/	/	-	-	NA	NA	1	a
2007	2601	Salade poireaux poulet	Leek and chicken salad	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	1	a
2007	2706	Taboulé à l'orientale	Oriental Tabbouleh	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	1	a
2007	**583**	**Salade Bretonne**	**Deli salad**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	1	a
2007	**584**	**Piémontaise**	**Deli salad (Piémontaise)**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	1	a
2007	**585**	**Salade Auvergnate**	**Auvergne salad**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	1	a
2007	**586**	**Taboulé à l'orientale**	**Oriental Tabbouleh**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	1	a
2019	180	Salade pamplemousse	Grapefruit salad	-	+d(2col)	H+	+	*L.monocytogenes*	+	H+d	H+(2col)	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2019	181	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	-	-		-	st	st	/			-	-	NA	NA	1	a
2019	182	Sandwich jambon crudités œuf	Ham and egg sandwich	st	-	st	-		-	-	-				-	-	NA	NA	1	a
2019	183	Sandwich poulet crudités	Chicken and vegetables sandwich	st	st	st	st		-	st	st	/			-	-	NA	NA	1	a
2019	184	Salade de riz	Rice salad	st	st	st	st		-	st	st	/			-	-	NA	NA	1	a
2019	353	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	st	-		-	st	-				-	-	NA	NA	1	a
2019	354	Sandwich jambon Emmental	Ham and Emmental sandwich	st	st	st	st		-	st	st	/			-	-	NA	NA	1	a
2019	355	Sandwich jambon crudités œuf	Ham and egg sandwich	st	st	H+	+	*L.monocytogenes*	+	st	st	/			-	-	ND	ND	1	a
2019	**724**	**Sandwich thon œuf**	**Tuna and egg sandwich**	st	st	st	st		-	st	st	/			-	-	NA	NA	1	a
2019	**725**	**Sandwich jambon Emmental**	**Emmental ham sandwich**	st	st	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2019	**726**	**Sandwich jambon Emmental**	**Emmental ham sandwich**	st	st	st	st		-	st	-				-	-	NA	NA	1	a
2019	**727**	**Sandwich jambon Emmental**	**Ham sandwich Emmental**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2019	**728**	**Sandwich saumon cuit et fumé**	**Cooked and smoked salmon sandwich**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2019	**1381**	**Taboulé au poulet rôti**	**Tabbouleh with roasted chicken**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2019	**1382**	**Taboulé au poulet rôti**	**Tabbouleh with roasted chicken**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2019	**1383**	**Piémontaise au jambon**	**Deli salad (Piémontaise)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2019	**1384**	**Salade et crudités jambon Emmental**	**Salad and raw vegetables with ham and Emmental**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	a
2007	2659	Paella	Paella	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	1	b
2007	2707	Tomates farcies	Stuffed tomatoes	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	1	b
2007	306	Pâte à baguette	Baguette dough	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	1	b
2018	**8613**	**Paëlla**	**Paella**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	b
2018	**8614**	**Paëlla**	**Paella**	H-	+	H-	+	*L.innocua*	-	H-	H-	/	+	*L.innocua*	-	-	NA	NA	1	b
2018	**8615**	**Pizza jambon fromage**	**Ham and cheese pizza**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	b
2018	**8616**	**Pizza jambon fromage**	**Pizza ham and cheese**	st	-	H+/H-d	-	*Enterococcus faecium*	-	st	H-d	/	-	*Enterococcus faecium*	-	-	NA	NA	1	b
2018	**8617**	**Quiche Lorraine**	**Quiche Lorraine**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	b
2018	**8618**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	/	+	*L.welshimeri*	-	-	NA	NA	1	b
2018	**8619**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	1	b

♦ Analyses performed according to the COFRAC accreditation

FOOD COMPOSITE- Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
Year	No.	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser- 22h at 30°C								Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2018	**8620**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	b
2019	**79**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	/	-	*L.welshimeri*	-	-	**NA**	**NA**	1	b
2019	**80**	**Pizza jambon fromage**	**Ham and cheese pizza**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-	/	+/-	*L.monocytogenes/ L.welshimeri*	+	+	**PA**	**PA**	1	b
2019	**81**	**Feuilleté jambon Emmental**	**Puff pastry with ham and mint**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	/	-	*L.welshimeri*	-	-	**NA**	**NA**	1	b
2019	**529**	**Couscous trois viandes**	**Couscous three meats**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	b
2019	**530**	**Croissant au jambon**	**Ham Croissant**	-	st	st	st		-	st	-				-	-	**NA**	**NA**	1	b
2019	**531**	**Quiche Lorraine**	**Quiche Lorraine**	-	st	st	st		-	st	-				-	-	**NA**	**NA**	1	b
2019	738	Pizza jambon fromage	Ham and cheese pizza	-	st	-	-		-	-	-				-	-	**NA**	**NA**	1	b
2019	739	Quiche Lorraine	Quiche Lorraine	st	-	st	-		-	st	st	/			-	-	**NA**	**NA**	1	b
2019	740	Tarte aux poireaux	Leek pie	st	-	st	-		-	st	st	/			-	-	**NA**	**NA**	1	b
2007	2625	Pancake doughs	Pancake doughs	-	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	1	c
2007	2643	Miche de pain (pâte crue)	Miche de pain (raw dough)	-	-	-	-	/	-	+d weak halo	+d weak halo		/	/	-	-	**PPNA**	**PPNA**	1	c
2007	**507**	**Coule d'œuf**	**Egg roll**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	1	c
2018	**8621**	**Eclair vanille**	**Pastry (Vanilla éclair)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	c
2018	**8622**	**Eclair vanille**	**Pastry (Vanilla éclair)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	c
2018	**8623**	**Eclair chocolat**	**Pastry (chocolate éclair)**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	/	+	*L.welshimeri*	-	-	**NA**	**NA**	1	c
2018	**8624**	**Eclair chocolat**	**Pastry (chocolate éclair)**	H-	+	H-	+	*L.innocua*	-	H-	H-	/	+	*L.innocua*	-	-	**NA**	**NA**	1	c
2018	**8625**	**Flan**	**Custard**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	/	+/+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**	1	c
2018	**8626**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	c
2018	**8627**	**Tortilla espagnole**	**Spanish Tortilla**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	c
2018	**8628**	**Tortilla aux oignons**	**Tortilla with onions**	H-	+	H-	+	*L.innocua*	-	H-	H-	/	+	*L.innocua*	-	-	**NA**	**NA**	1	c
2018	**8629**	**Tortilla aux oignons**	**Tortilla with onions**	H+	+	H+	+	*L;monocytogenes/ L.welshimeri*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	c
2018	**8630**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	H+	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	/	+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**	1	c
2018	**8631**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	1	c
2018	**8632**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	/	+	*L.welshimeri*	-	-	**NA**	**NA**	1	c
2018	**8633**	**Crème aux œufs vanille**	**Vanilla egg cream**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	/	+	*L.welshimeri*	-	-	**NA**	**NA**	1	c
2018	**8634**	**Crème aux œufs vanille**	**Vanilla egg cream**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	/	+/+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**	1	c
2018	**8635**	**Ile flottante**	**Ile flottante**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	/	+/+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**	1	c
2019	741	Œufs au lait vanille	Vanilla eggs in milk	st	st	st	st		-	st	st	/			-	-	**NA**	**NA**	1	c
2019	742	Clafoutis aux cerises	Cherry clafoutis	st	-	st	st		-	st	st	/			-	-	**NA**	**NA**	1	c
2019	743	Crème aux œufs	Egg cream	st	-	st	-		-	st	st	/			-	-	**NA**	**NA**	1	c

MEAT PRODUCTS - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
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				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	**22 h**	**48 h**		
2007	2591	Blanc de poulet	Chicken breast	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2592	Blanc de poulet	Chicken breast	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2593	Blanc de poulet	Chicken breast	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2594	Blanc de poulet	Chicken breast	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2615	Poitrine de veau	Veal breast	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2623	Escalope de veau hachée	Minced veal cutlet	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2636	Côtelette de veau	Veal chop	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2648	Collier	Necklace	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2649	Escalope de veau hachée	Minced veal cutlet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2650	Escalope de veau hachée	Minced veal cutlet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2651	Escalope de veau hachée	Minced veal cutlet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2652	Escalope de veau hachée	Minced veal cutlet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2653	Escalope de veau hachée	Veal cutlet, minced	-	+	-	+	-	-	-	+2col (48h)		/	/	-	+	**NA**	**PD**	2	a
2007	2654	Escalope de veau hachée	Veal cutlet, minced	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2655	Escalope de veau hachée	Minced veal schnitzel	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2661	Poitrine de veau	Veal breast	-	+	-	+	-	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2667	Epaule	Shoulder	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2672	Escalope de veau hachée	Veal cutlet, minced	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2673	Escalope de veau hachée	Minced veal schnitzel	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2676	Poule	Chicken	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2677	Poule	Chicken	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2678	Poule	Chicken	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2681	Escalope 1ère de veau	Veal schnitzel 1st	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2682	Sauté de veau	Sauté of veal	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2683	Sauté de veau	Veal Sauté	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	2715	Poule	Chicken	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2716	Poule	Chicken	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	2717	Quasi	Quasi	-	-	-	+	-	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	15	Dinde	Turkey	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	21	Pané de dinde	Turkey breaded	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	24	Gésiers de poulet	Chicken gizzards	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2007	25	Escalope de veau hachée	Minced veal cutlet	+	-	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	26	Escalope de veau hachée	Minced veal cutlet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	a
2007	31	Poule	Chicken	+	+	-	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	2	a
2007	33	Escalope de veau	Veal cutlet	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	a
2018	8323	Côte de porc à la provençale	Pork chop Provencal style	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	a
2018	8324	Côte de porc thym romarin	Pork chop with thyme and rosemary	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	a
2018	8716	Côte de porc provençale	Pork chop provencale	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	a
2018	8717	Côte de porc marinées tex mex	Pork chop marinated in tex mex	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	a
2007	2584	Paupiettes nature	Plain paupiettes	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	b
2007	2634	Foie gras	Foie gras	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	b
2007	2656	Poulet cuisiné	Cooked chicken	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	b
2007	2657	Poulet cuisiné	Cooked chicken	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	b
2007	2658	Canard sauce aigre douce	Duck with sweet and sour sauce	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	b
2007	2660	Paupiettes	Paupiettes	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	b
2007	2662	Paupiettes	Paupiettes	-	+	-	+	-	-	-	+ 1col (48h)		/	/	-	+	**NA**	**PD**	2	b
2007	2666	Paupiettes	Paupiettes	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	b
2007	2668	Paupiettes	Paupiettes	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	b
2007	2704	Paupiettes	Paupiettes	+	+	+	+	L.*monocytogenes*	+	+4col	+4col		/	/	+	+	**PA**	**PA**	2	b
2007	2705	Paupiettes	Paupiettes	-	+	-	+	-	-	-	-		/	/	-	-	**NA**	**NA**	2	b

♦ Analyses performed according to the COFRAC accreditation

MEAT PRODUCTS - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																			
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				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement				
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	**22 h**	**48 h**		
2007	2718	Roti de veau Orloff	Veal Roast Orloff	-	+	-	+	-	-	-	+2co l(48h)		/	/	-	+	**NA**	**PD**	2	b
2007	11	Poulet aux herbes	Chicken with herbs	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	b
2007	12	Poulet à l'indienne	Indian style chicken	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	b
2007	13	Cordon bleu de dindonneau	Turkey Cordon Bleu	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	b
2007	14	Poulet mexicain	Mexican chicken	-	+	-	+	-	-	-	-		/	/	-	-	**NA**	**NA**	2	b
2007	17	Cuisse de poulet	Chicken leg	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	b
2018	8321	Steak haché Tex Mex	Tex Mex ground steak	st	-	st	-		-	st	st	/			-	-	**NA**	**NA**	2	b
2018	8322	Paupiette lapin moutarde	Rabbit and mustard paupiette	-	st	-	st		-	st	H-d (Gram-)	/			-	-	**NA**	**NA**	2	b
2018	8325	Manchons de poulet rôti	Roasted chicken wings	st	st	st	st		-	st	st	/			-	-	**NA**	**NA**	2	b
2018	8328	Terrine chapon miel châtaigne	Honey chestnut capon terrine	st	st	st	st		-	st	st	/			-	-	**NA**	**NA**	2	b
2018	8718	Farce tomate	Tomato stuffing	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	b
2019	**74**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+d/H-	H+/H-	/	+/-	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**	2	b
2019	**75**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	/	-	*L.welshimeri*	-	-	**NA**	**NA**	2	b
2019	**76**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in the old style**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-d	/	+/-	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**	2	b
2019	**77**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in old fashioned sauce**	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-d	/	+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**	2	b
2019	**78**	**Paupiette de veau sauce tomate**	**Veal paupiette with tomato sauce**	H-	+	H-	+	*L.innocua*	-	H-	H-	/	-	*L.innocua*	-	-	**NA**	**NA**	2	b
2007	2581	Tête roulée	Rolled head	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	c
2007	2617	Saucisse fumée	Smoked sausage	-	-	-	+	-	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2007	2619	Chipolatas	Chipolatas	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2007	2620	Merguez	Merguez	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2007	2621	Merguez	Merguez	+	+	-	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	c
2007	2622	Saucisse	Sausage	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2007	2624	Merguez	Merguez	-	-	-	-	/	-	+d	+d		/	/	-	-	**PPNA**	**PPNA**	2	c
2007	2628	Chorizo	Chorizo	-	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	c
2007	2637	Jambon tranché	Sliced ham	-	+	-	+	-	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2007	2663	Saucisse sèche	Dry sausage	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2007	2664	Jambonneau	Ham	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2007	2665	Saucisses de Toulouse	Sausages of Toulouse	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	2	c
2007	16	Mousse de canard	Duck mousse	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	2	c
2018	8326	Chipolatas	Chipolatas	H-	+	H-	+	*L.innocua/ L.welshimeri*	-	H-	H-	/	-	*L.innocua*	-	-	**NA**	**NA**	2	c
2018	8327	Saucisse fumée	Smoked sausage	-	st	st	st		-	-	-				-	-	**NA**	**NA**	2	c
2018	8719	Chorizo	Chorizo	-	st	H-	+	*L.welshimeri*	-	st	H-	/	-	*L.welshimeri*	-	-	**NA**	**NA**	2	c
2018	8720	Chipolatas	Chipolatas	st	st	st	-		-	st	st	/			-	-	**NA**	**NA**	2	c
2018	8721	Merguez	Merguez	st	-	st	-		-	st	-				-	-	**NA**	**NA**	2	c
2018	8722	Saucisse de Strasbourg tranchée	Sliced Strasbourg sausage	st	st	st	st		-	st	st	/			-	-	**NA**	**NA**	2	c
2018	8723	Chipolatas	Chipolatas	st	st	H-	+	*L.welshimeri*	-	st	st	/			-	-	**NA**	**NA**	2	c
2019	178	Pâté de campagne	Country style pâté	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	c
2019	179	Pâté de lapin	Rabbit pâté	st	st	st	st		-	st	st	/			-	-	**NA**	**NA**	2	c
2019	345	Saucisses de Strasbourg	Strasbourg sausages	st	st	st	st		-	st	st	/			-	-	**NA**	**NA**	2	c
2019	346	Saucisses cocktail	Cocktail sausages	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	c
2019	347	Merguez	Merguez	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	c
2019	348	Lardons cuits fumés	Cooked and smoked bacon	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	c
2019	349	Bacon cuits	Cooked bacon	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	2	c

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				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2018	8334	Fromage de brebis	Sheep cheese	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	a
2018	8335	Fromage de brebis	Sheep cheese	st	-	st	-		-	st	st	/			-	-	NA	NA	3	a
2018	8336	Saint Nectaire	Saint Nectaire	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	a
2019	**82**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	st	-		-	st	-				-	-	NA	NA	3	a
2019	**83**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	H+	+	*L.monocytogenes*	+	st	-				-	-	ND	ND	3	a
2019	**84**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	-	st	st	st		-	st	-				-	-	NA	NA	3	a
2019	**85**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	a
2019	**532**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	st	st		-	st	-				-	-	NA	NA	3	a
2019	**533**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux**	-	-	H-d	st		-	st	-				-	-	NA	NA	3	a
2019	**534**	**Roquefort au lait cru**	**Raw milk cheese (Roquefort)**	-	-	H-d	-	NC sur TSYEA	-	-	-				-	-	NA	NA	3	a
2019	**730**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	-	st	st	st		-	-	H-d	/			-	-	NA	NA	3	a
2019	**731**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	a
2019	**732**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	H+ (2col)	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	a
2019	**1180**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	st	st	H+	+	*L.monocytogenes*	+	st	H+(1col)	/	+	*L.monocytogenes*	-	+	ND	PA	3	a
2019	**1181**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	st	-	st	-		-	st	st	/			-	-	NA	NA	3	a
2019	**1182**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	-	st	H+(2col)	+	*L.monocytogenes*	+	-	-				-	-	ND	ND	3	a
2019	**1183**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	-	-		-	H+(3col)	H+(3col)	/	+	*L.monocytogenes*	+	+	PD	PD	3	a
2019	**1184**	**Petit reblochon au lait cru**	**Raw milk cheese (Small reblochon)**	H+ (2col)	-	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	a
2019	1192	Fromage au lait cru de vache	Raw cow's milk cheese	st	-	st	-		-	st	-				-	-	NA	NA	3	a
2019	1193	Fromage au lait cru de vache	Raw cow's milk cheese	st	st	st	st		-	st	-				-	-	NA	NA	3	a
2019	1194	Morbier au lait cru	Raw milk cheese (Morbier)	-	-	-	-		-	st	-				-	-	NA	NA	3	a
2019	1197	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	st	st	st	st		-	st	st	/			-	-	NA	NA	3	a
2019	1198	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	st	-	st	st		-	st	st	/			-	-	NA	NA	3	a
2019	1199	Emmental au lait cru	Raw milk cheese (Emmental)	-	st	st	st		-	st	-				-	-	NA	NA	3	a
2019	1200	Brie de Meaux au lait cru	Raw milk cheese (Brie de Meaux)	-	st	-	-		-	-	-				-	-	NA	NA	3	a
2018	8329	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	b
2018	8330	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	b
2018	8331	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	b
2018	8332	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	b
2018	8333	Lait de brebis	Ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	b
2019	352	Lait de vache	Cow's milk	H-	+	H-	+	*L.innocua*	-	H-	H-	/	-	*L.innocua*	-	-	NA	NA	3	b
2019	**535**	**Lait cru fermier**	**Raw farm milk**	H-	+	H-	+	*L.innocua*	-	H-	H-	/	-	*L.innocua*	-	-	NA	NA	3	b
2019	**536**	**Lait cru fermier**	**Farm raw milk**	H+/H-	+	H+/H-	+	*L.monocytogenes*	+	H+/H-	H+/H-	/	+/-	*L.monocytogenes/ L.seeligeri*	+	+	PA	PA	3	b
2019	**733**	**Beurre doux au lait cru**	**Raw milk sweet butter**	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	b
2019	**734**	**Beurre cru demi-sel**	**Raw semi-salted butter**	H-d	-	H-d	-	Gram -	-	-	H-d	/			-	-	NA	NA	3	b
2019	**735**	**Beurre cru demi-sel**	**Raw semi-salted butter**	H-d	-	H-d	-	Gram -	-	-	H-d	/			-	-	NA	NA	3	b
2019	**1185**	**Lait cru fermier**	**Farmhouse raw milk**	H+/H-	+	H+	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	/	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA	3	b
2019	**1186**	**Lait cru fermier**	**Raw farm milk**	-	st	st	st		-	st	-				-	-	NA	NA	3	b
2019	**1187**	**Lait cru de vache**	**Raw cow's milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	b
2019	1201	Lait cru fermier de vache	Raw cow's farm milk	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	/	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA	3	b
2019	1202	Lait cru fermier de vache	Raw cow's farm milk	H-	+	H-	+	*L.innocua*	-	H-	H-	/	+	*L.innocua*	-	-	NA	NA	3	b
2019	1203	Lait cru de vache	Raw cow's milk	-	st	st	st		-	st	-				-	-	NA	NA	3	b
2019	1204	Beurre à la crème au lait cru	Raw milk cream butter	st	st	st	st		-	st	st	/			-	-	NA	NA	3	b

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DAIRY PRODUCTS - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
Year	No.	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser- 22h at 30°C								Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2019	1205	Beurre cru fermier	Raw farm butter	H-	+	H-	+	*L.innocua*	-	H-	H-	/	+	*L.innocua*	-	-	NA	NA	3	b
2019	1206	Beurre cru	Raw butter	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	/	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA	3	b
2019	**86**	**Lait frais entier**	**Fresh whole milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	**87**	**Lait frais demi-écrémé**	**Fresh semi-skimmed milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	**88**	**Lait frais de montagne**	**Fresh mountain milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	350	Feta bio	Organic feta cheese	-	-	st	-		-	H-d	-				-	-	NA	NA	3	c
2019	351	Profiteroles	Profiteroles	st	st	st	st		-	st	st	/			-	-	NA	NA	3	c
2019	**537**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	**538**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	**539**	**Lait frais**	**Fresh milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	**736**	**Coulommiers**	**Coulommiers**	st	-	st	-		-	st	st	/			-	-	NA	NA	3	c
2019	**737**	**Cousteron**	**Cousteron**	st	st	st	st		-	H+(1col)	H+(1col)	/	+	*L.monocytogenes*	+	+	PD	PD	3	c
2019	1398	Glace vanille	Vanilla ice cream	st	-	st	-		-	st	st	/			-	-	NA	NA	3	c
2019	1399	Lait frais demi-écrémé pasteurisé	Fresh pasteurized semi-skimmed milk	st	st	st	st		-	st	st	/			-	-	NA	NA	3	c
2019	1588	Brie au lait pasteurisé	Brie with pasteurized milk	st	-	st	st		-	st	st	/			-	-	NA	NA	3	c
2019	1589	Coulommiers au lait pasteurisé	Coulommiers with pasteurized milk	st	st	st	st		-	st	st	/			-	-	NA	NA	3	c
2019	1590	Lait frais pasteurisé	Fresh pasteurized milk	st	st	st	st		-	st	st	/			-	-	NA	NA	3	c
2019	1591	Lait frais entier pasteurisé	Fresh pasteurized whole milk	st	st	st	st		-	st	st	/			-	-	NA	NA	3	c
2019	1592	Breizh lait chocolat pasteurisé	Breizh pasteurized chocolate milk	st	st	st	st		-	st	st	/			-	-	NA	NA	3	c
2019	**1654**	**Lait frais demi-écrémé pasteurisé**	**Fresh pasteurized semi-skimmed milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	**1655**	**Lait frais pasteurisé**	**Fresh pasteurized milk**	st	st	-	st		-	st		/			-	-	NA	NA	3	c
2019	**1656**	**Brie pasteurisé**	**Brie (pasteurized cheese)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c
2019	**1657**	**Coulommiers pasteurisé**	**Coulommiers (pasteurized cheese)**	H+	+	H+	+	*L.monocytogenes*	+	H+/H-d	H+	/	+	*L.monocytogenes*	+	+	PA	PA	3	c

FISHERY PRODUCTS - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
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				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2007	2669	Filet de merlan	Fillet of whiting	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2670	Pulpe de cabillaud	Cod pulp	-	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2671	Filet de merlan	Whiting fillet	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	2679	Filet de merlan	Whiting fillet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2680	Saumon	Salmon	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2703	Filet de merlan	Fillet of whiting	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2712	Filet de pangosius	Pangosius fillet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2713	Filet de pangosius	Pangosius fillet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2714	Filet de raie	Fillet of skate	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	2719	Merlu blanc	White hake	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	2720	Merlu pelé	Peeled hake	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	2721	Filet de sandre	Pike-perch fillet	-	+	-	+	-	-	-	-		/	/	-	-	NA	NA	4	a
2007	2722	Filet de raie	Fillet of skate	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	22	Darnes de saumon	Salmon steaks	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	27	Filet de colin	Hake fillet	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	a
2007	28	Filet de merlan	Whiting fillet	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	29	Darne de saumon	Salmon steak	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	30	Filet de grenadier	Fillet of grenadier	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	32	Longes de thon	Tuna loins	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	66	Raie	Skate	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	a
2007	67	Brochettes de saumon	Salmon skewers	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	68	Pièce de saumon	Salmon piece	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	a
2007	305	Filet de limande	Flounder fillet	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	a
2007	2598	Saumon fumé de l'Atlantique	Smoked Atlantic salmon	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	b
2007	2599	Dés de saumon fumé	Diced smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2600	Chutes de saumon fumé	Scraps of smoked salmon	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	b
2007	2626	Chutes de saumon fumé	Scraps of smoked salmon	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	4	b
2007	2627	Saumon fumé	Smoked salmon	-	+	-	+	-	-	-	-		/	/	-	-	NA	NA	4	b
2007	2629	Saumon fumé	Smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2630	Saumon fumé	Smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2631	Saumon fumé	Smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2632	Saumon fumé	Smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2633	Saumon fumé	Smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2684	Saumon fumé Norvégien	Norwegian smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2685	Saumon fumé Norvégien	Norwegian smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2686	Saumon fumé Norvégien	Norwegian smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2687	Saumon fumé Norvégien	Norwegian smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2688	Saumon fumé Norvégien	Norwegian smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2689	Saumon fumé Atlantique	Atlantic smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2690	Saumon fumé Atlantique	Smoked salmon Atlantic	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2691	Saumon fumé Atlantique	Smoked salmon Atlantic	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2692	Saumon fumé Irlande	Smoked salmon Ireland	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2693	Saumon fumé Ecosse	Smoked salmon Scotland	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2694	Saumon fumé Norvège	Smoked salmon Norway	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	2695	Saumon fumé Royaume Uni	Smoked salmon United Kingdom	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	69	Saumon fumé	Smoked salmon	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	70	Saumon fumé Atlantique	Smoked salmon Atlantic	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b
2007	71	Saumon fumé Atlantique	Smoked salmon Atlantic	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b

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				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement		
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h	
2007	72	Saumon fumé Norvège	Smoked salmon Norway	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b
2007	**228**	**Chutes de saumon fumé**	**Smoked salmon scraps**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b
2007	**229**	**Darnes de saumon fumé**	**Smoked salmon steaks**	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	b
2007	**230**	**Filets de Haddock fumés**	**Smoked Haddock fillets**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b
2007	**231**	**Filets de hareng fumé**	**Smoked herring fillets**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b
2007	**232**	**Filets de Haddock fumés**	**Smoked Haddock fillets**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b
2007	**233**	**Saumon fumé**	**Smoked salmon**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	b
2018	8342	Saumon	Salmon	st	st	st	st		-	st	st	/			-	-	NA	NA	4	b
2019	186	Saumon fumé aneth	Dill smoked salmon	H+	+	H+	+	*L.monocytogenes*	+	H+d	H+	/	+	*L.monocytogenes*	+	+	PA	PA	4	b
2007	2582	Filets de limande meunière	Flounder fillets	-	-	-	+	-	-	-	-		/	/	-	-	NA	NA	4	c
2007	18	Rillettes de thon	Tuna rillettes	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	c
2007	19	Soufflé au brochet	Pike soufflé	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	c
2007	34	Merlu blanc sauce au curry et riz	White hake with curry sauce and rice	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	c
2007	**129**	**Terrine de coquille St Jacques**	**Terrine of scallops**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	c
2007	**130**	**Terrine de poison à la Bretonne**	**Poison terrine Breton style**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	c
2007	**131**	**Rillettes de thon**	**Potted tuna**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	c
2007	**180**	**Terrine de St Jacques**	**Scallop terrine**	+	+	-	-	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	c
2007	**181**	**Rillettes de thon**	**Potted tuna**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	c
2007	**182**	**Terrine de saumon**	**Salmon terrine**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	4	c
2007	303	Galette de saumon aux petits légumes	Salmon patty with small vegetables	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	c
2007	304	Galette de saumon aux petits légumes	Salmon patty with vegetables	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	4	c
2018	8337	Poisson blanc crumble	White fish crumble	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	4	c
2018	8338	Pané de poisson blanc provençale	Breaded white fish Provençale	H-	+d	H-	+	*L.innocua*	-	H-	H-	/	-	*L.innocua*	-	-	NA	NA	4	c
2018	8339	Pavé de poisson blanc thym citron	White fish steak with lemon thyme	st	-	st	-		-	st	st	/			-	-	NA	NA	4	c
2018	8340	Bouchées au poulpe	Bites of octopus	-	-	st	st		-	st	-				-	-	NA	NA	4	c
2018	8341	Poisson blanc gratiné au fromage	White fish with cheese au gratin	st	-	st	-		-	st	st	/			-	-	NA	NA	4	c
2019	185	California roll saumon	California roll salmon	st	-	st	st		-	st	st	/			-	-	NA	NA	4	c
2019	187	Surimi base colin	Surimi with hake	st	-	st	st		-	st	-				-	-	NA	NA	4	c
2019	188	Poisson sauce Chablis	Fish with Chablis sauce	st	-	st	st		-	st	st	/			-	-	NA	NA	4	c
2019	189	Colin Alaska sauce citron	Alaska Pollack with lemon sauce	st	-	-	-		-	st	st	/			-	-	NA	NA	4	c

VEGETABLES - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
Year	No	Product (French)	Product (English name	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser- 22h at 30°C								Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	**22 h**	**48 h**		
2007	2583	Poivrons rouges	Red peppers	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	2595	Sliced peppers	Sliced peppers	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	5	a
2007	2616	Poivrons rouges	Red peppers	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	5	a
2007	2644	Poivrons rouges	Red peppers	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	2645	Persil surgelé	Frozen parsley	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	2646	Poivrons rouges	Red peppers	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	2647	Poivrons verts	Green peppers	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	20	Poivrons rouges	Red peppers	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	75	Petits pois	Peas	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	76	Brocolis	Broccoli	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	77	Choux de Bruxelles	Brussels sprouts	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	**143**	**Choux brocolis**	**Broccoli cabbage**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	**145**	**Brocolis**	**Broccoli**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	**185**	**Chou blanc**	**White cabbage**	+	-	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	a
2007	582	Poivrons verts	Green peppers	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2007	**587**	**Tomates en dés**	**Diced tomatoes**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	a
2007	**590**	**Tomates en dés**	**Diced tomatoes**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	a
2007	665	Légumes pour pot au feu	Vegetables for pot au feu	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	a
2018	8343	Roquette	Arugula	st	-	st	-		-	st	st	/			-	-	**NA**	**NA**	5	a
2018	8344	Epinards	Spinach	H-	+	H-	+	*L.innocua*	-	H-	H-	/	-	*L.innocua*	-	-	**NA**	**NA**	5	a
2018	8345	Mais grains	But grains	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	5	a
2018	8346	Epinards en branches	Spinach branches	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	5	a
2019	**93**	**Epinards**	**Spinach**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	5	a
2019	**94**	**Mélange de jeunes pousses**	**Mixed baby greens**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	5	a
2019	**95**	**Mélange de jeunes pousses**	**Mixed baby greens**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	5	a
2007	2596	Macédoine de légumes	Mixed vegetables	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2007	2597	Oignons préfrits	Pre-fried onions	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	5	b
2007	73	Carottes en rondelles	Carrot slices	-	-	+	+	*L.monocytogenes*	+	-	-		/	/	-	-	**ND**	**ND**	5	b
2007	74	Courgettes rondelles	Zucchini slices	-	-	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**138**	**Pommes de terre- carottes**	**Potatoes and carrots**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**139**	**Mélange carottes poireaux**	**Carrot and leek mixture**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**141**	**Mélange de légumes en julienne**	**Mixed vegetables in julienne**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2007	**142**	**Epinards en branches**	**Spinach leaves**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2007	**144**	**Julienne de légumes**	**Julienne vegetables**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2007	**146**	**Poêlée champêtre**	**Country-style pan-fried vegetables**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2007	**186**	**Carottes rondelles**	**Carrot slices**	-	-	+	+	*L.monocytogenes*	+	-	-		/	/	-	-	**ND**	**ND**	5	b
2007	**588**	**Poivrons rouges surgelés**	**Frozen red peppers**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**589**	**Haricots verts surgelés**	**Frozen green beans**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**591**	**Poivrons verts surgelés**	**Frozen green peppers**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**592**	**Navets surgelés**	**Frozen turnips**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**595**	**Julienne de légumes surgelée**	**Frozen Julienne vegetables**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	**596**	**Carottes en rondelles surgelées**	**Frozen carrot slices**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	5	b
2007	597	Courgettes en rondelles surgelées	Frozen zucchini slices	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2007	598	Brocolis en fleurettes surgelés	Frozen broccoli florets	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2007	666	Julienne de légumes surgelés	Frozen Julienne Vegetables	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	5	b
2018	8348	Mélange de légumes	Mixed vegetables	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	**PA**	**PA**	5	b
2007	2602	Salade choux carottes	Cabbage and carrot salad	+	-	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	**PA**	**PA**	5	c
2007	2618	Farine de blé noir	Buckwheat flour	-	+	-	+	-	-	+	+		/	/	+	+	**PD**	**PD**	5	c

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VEGETABLES - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
Year	No	Product (French)	Product (English name	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser- 22h at 30°C								Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS Listeria Agar		Confirmations			Final result		Agreement				
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2007	23	Salade de carottes, haricots verts, petits pois	Carrot, green bean and pea salad	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2007	**140**	**Salade de tomates poivrons**	**Tomato and bell pepper salad**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	5	c
2007	**183**	**Salade de lentilles cuisinées**	**Salad of cooked lentils**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	5	c
2007	**184**	**Potiron, pommes de terre cuisinés**	**Cooked pumpkin, potatoes**	-	-	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	5	c
2007	**503**	**Petits pois cuisinés**	**Cooked peas**	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2007	**504**	**Purée de brocolis**	**Broccoli purée**	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2007	**505**	**Epinards hachés à la crème**	**Chopped spinach with cream sauce**	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2007	**506**	**Purée d'artichauts nature**	**Plain artichoke purée**	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2007	**593**	**Petits pois cuisinés surgelés**	**Frozen cooked peas**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	5	c
2007	**594**	**Epinards hachés à la crème surgelés**	**Frozen chopped spinach with cream**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	5	c
2007	599	Purée de brocolis nature	Plain broccoli purée	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2007	600	Purée d'artichaut nature	Plain artichoke purée	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2007	601	Poêlée champêtre	Country style pan fried potatoes	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	5	c
2018	8347	Pommes de terre au beurre	Buttered potatoes	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	5	c
2018	8349	Salade de fruits	Fruit salad	st	-	-	-		-	st	st	/			-	-	NA	NA	5	c
2019	1390	Purée de carottes	Carrot purée	st	st	st	st		-	st	st	/			-	-	NA	NA	5	c
2019	1391	Julienne de légumes	Julienne of vegetables	-	-	-	-		-	st	-				-	-	NA	NA	5	c
2019	1392	Poivronnade	Bell pepper salad	st	st	st	st		-	st	st	/			-	-	NA	NA	5	c

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
Year	No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser- 22h at 30°C								Category	Type
				Half Fraser		Fraser		Confirmation	Final resut	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2007	396	Eau bac échaudage	Scalding tank water	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	a
2007	397	Eau pédiluve entrée abattoir	Foot bath water at the slaughterhouse entrance	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	a
2007	399	Eau abat foie	Slaughter liver water	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	a
2007	**537**	**Louche**	**Ladle**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	a
2019	**540**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cutting)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	a
2019	**541**	**Eau de rinçage (fabrication thon tomates en conserve)**	**Rinsing water (canned tomato tuna production)**	st	-	st	-		-	st	st	/			-	-	NA	NA	6	a
2019	**542**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cutting)**	st	st	st	st		-	st	st	/			-	-	NA	NA	6	a
2019	**543**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cutting)**	st	st	st	st		-	st	st	/			-	-	NA	NA	6	a
2019	**544**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	a
2019	**545**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	a
2019	**1188**	**Eau rinçage (préparation chantilly)**	**Rinsing water (whipped cream preparation)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	a
2019	**1189**	**Eau rinçage (fromage)**	**Rinsing water (cheese)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	a
2019	**1190**	**Eau de rinçage marmite cuisson compote pomme rhubarbe**	**Rinsing water for cooking apple rhubarb compote**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	a
2019	**1191**	**Eau de rinçage marmite cuisson soupe haricots verts**	**Rinsing water for cooking green bean soup**	st	st	st	-		-	st	st	/			-	-	NA	NA	6	a
2019	1765	Eaux de lavage bacs (usine poisson)	Washing water from tanks (fish factory)	st	st	st	st		-	st	st	/			-	-	NA	NA	6	a
2019	1766	Eau de lavage chariot (usine poisson)	Washing water from cart (fish plant)	st	st	st	st		-	st	st	/			-	-	NA	NA	6	a
2019	1768	Eau de process sortie désarrêteuse (usine poisson)	Process water from the de-ripper (fish factory)	st	st	st	st		-	st	st	/			-	-	NA	NA	6	a
2019	1769	Eau de rinçage filet après parage (usine poisson)	Rinsing water after trimming (fish plant)	st	st	st	st		-	st	st	/			-	-	NA	NA	6	a
2019	2032	Eau de rinçage porc (abattoir porcs)	Pig rinsing water (pig slaughterhouse)	-	st	-	-		-	-	-				-	-	NA	NA	6	a
2019	2033	Eau de rinçage porc (abattoir porcs)	Rinsing water for pigs (pig slaughterhouse)	st	st	st	st		-	st	st	/			-	-	NA	NA	6	a
2007	59	Lingette égout -laiterie	Dairy drain wipe	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	b
2007	60	Lingette égout extérieur-laiterie	Drainage wipe outside the dairy	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	b
2007	61	Lingette égout salle-laiterie	Dairy room drain wipe	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	b
2007	62	Lingette égout extérieur-laiterie	Outdoor dairy drain wipe	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	b
2007	63	Lingette égout salle-laiterie	Drainage wipe dairy room	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	b
2007	**386**	**Grille d'égout**	**Sewer grate**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	b
2007	**538**	**Grille d'égout biscuiterie**	**Cookie factory draining grid**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	b
2019	356	Déchets farine de blé noir	Buckwheat flour waste	dni/-	+(1col)	H-d	+	NC on TSYEA	-	H-	H-dni	/	-	*L.innocua*	-	-	NA	NA	6	b
2019	**521**	**Déchets découpe saumon**	**Salmon cutting waste**	st	st	st	st		-	st	-				-	-	NA	NA	6	b
2019	**522**	**Déchets poisson avec épices**	**Waste fish with spices**	st	-	st	-		-	st	-				-	-	NA	NA	6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	H-	+	H-	+	*L.seeligeri*	-	H-	H-	/	-	*L.welshimeri*	-	-	NA	NA	6	b
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (cut fish with spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	/	+	*L.monocytogenes*	+	+	PA	PA	6	b
2019	1763	Déchets Sol Scan (usine poisson)	Waste Sol Scan (fish factory)	st	st	-	st		-	st	st	/			-	-	NA	NA	6	b
2019	1764	Déchets nature bac maggy (usine poisson)	Waste (fish plant)	st	st	-	st		-	st	st	/			-	-	NA	NA	6	b
2019	1767	Eau d'égout (usine poisson)	Sewage (fish plant)	st	st	st	st		-	st	st	/			-	-	NA	NA	6	b

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				Half Fraser		Fraser		Confirmation	Final resut	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2007	2605	Chiffonnette salle désarrêtage	Rags from the de-heading room	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	6	c
2007	2606	Chiffonnette salle dosage (doseur)	Dosing room rag (doser)	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2607	Chiffonnette salle laverie(bennes)	Washing room rag (skips)	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2608	Chiffonnette salle cutter (évacuation)	Rags in the cutter room (evacuation)	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	6	c
2007	2609	Lingette surface atelier Pastisserie	Wipe surface workshop Pastry	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2610	Lingette surface atelier Pastisserie	Pastry workshop surface wipe	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2611	Lingette surface atelier Pastisserie	Pastry workshop surface wipe	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2612	Lingette surface atelier Pastisserie	Wipe workshop surface Pastry	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2613	Lingette surface atelier Pastisserie	Wipe workshop surface Pastry	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2614	Lingette surface atelier Pastisserie	Wipe workshop surface Pastry	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2696	Lingette-Atelier charcuterie de poisson	Wipe workshop fish delicatessen	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2697	Lingette-Atelier charcuterie de poisson	Wipe workshop fish delicatessen	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2698	Lingette-Atelier charcuterie de poisson	Wipe workshop fish delicatessen	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2699	Lingette-Atelier charcuterie de poisson	Wipe workshop delicatessen fish	+	+	+	+	L.*monocytogenes*	+	+	+		/	/	+	+	PA	PA	6	c
2007	2700	Lingette-Atelier charcuterie de poisson	Wipe-Workshop delicatessen fish	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2701	Lingette-Atelier charcuterie de poisson	Wipe-Workshop delicatessen fish	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	2702	Lingette-Atelier charcuterie de poisson	Wipe-Workshop fish delicatessen	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	166	Lingette tapis-Pâtisserie	Wipe mat-Pastry	-	+	-	-	-	-	-	-		/	/	-	-	NA	NA	6	c
2007	167	Lingette tapis-Pâtisserie	Wipe carpet-pastry	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	168	Lingette lave semelles-Pâtisserie	Wipe sole wash - Pastry	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	169	Lingette tapis pétrin-Pâtisserie	Wipe carpet kneader-Pastry		+	-	+	-	-	-	-		/	/	-	-	NA	NA	6	c
2007	170	Lingette dosette levure-Pâtisserie	Wipe dosette yeast-baking	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	171	Lingette poche balance-Pâtisserie	Wipe pocket scale-Pastry	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	172	Lingette tapis façonneuse-Pâtisserie	Wipe mat shaper-pastry	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	264	Lingette-atelier transformation poisson	Wipe-workshop fish processing	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	265	Lingette surface tapis-Pâtisserie	Wipe mat surface-pastry	-	-	-	+	-	-	-	-		/	/	-	-	NA	NA	6	c
2007	266	Lingette surface tapis-Pâtisserie	Wipe mat surface pastry	-	-	-	+	-	-	-	-		/	/	-	-	NA	NA	6	c
2007	267	Lingette surface tapis-Pâtisserie	Wipe mat surface - Pastry	+	+	+	-	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	268	Lingette doseur levure-Pâtisserie	Wipe yeast dosing device for bakery	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**384**	**Surface table**	**Table surface**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**385**	**Balance**	**Scale**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**387**	**Bac**	**Tray**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**388**	**Lame de couteau**	**Knife blade**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**389**	**Chariot**	**Cart**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**390**	**Plan de travail**	**Work surface**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**391**	**Evier**	**Sink**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**392**	**Tapis**	**Carpet**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**393**	**Plan de travail**	**Work surface**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**394**	**Tapis**	**Carpet**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	**395**	**Evier**	**Sink**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	PA	PA	6	c
2007	398	Caniveau salle des machines	Machine room gutter	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	400	Banc de Ven -cutter	Bench of Ven -cutter	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c
2007	401	Sol salle emballage	Packaging room floor	-	-	-	-	/	-	-	-		/	/	-	-	NA	NA	6	c

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 30°C (*Listeria monocytogenes*)																				
Year	No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* agar Half Fraser- 22h at 30°C								Category	Type
				Half Fraser		Fraser		Confirmation	Final resut	COMPASS Listeria Agar		Confirmations			Final result		Agreement			
				O&A	PALCAM	O&A	PALCAM			22h	48h	Tests ISO	β-haemolyse	API Listeria	22 h	48 h	22 h	48 h		
2007	**539**	**Chariot salle conditionnement**	**Packaging room cart**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**540**	**Bac plonge**	**Dishwashing bin**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**541**	**Sol salle de cuisson**	**Cooking room floor**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**542**	**Tapis salle de cuisson**	**Baking room carpet**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**543**	**Tapis salle biscuiterie**	**Baking room carpet**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**544**	**Table salle de cuisson**	**Baking room table**	-	-	-	-	/	-	-	-		/	/	-	-	**NA**	**NA**	6	c
2007	**545**	**Evier salle de cuisson**	**Sink in the cooking room**	-	-	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**546**	**Chariot salle conditionnement**	**Cart in the packaging room**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**547**	**Plan de travail salle de cuisson**	**Baking room work surface**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c
2007	**548**	**Balance salle de cuisson**	**Baking room scale**	+	+	+	+	L.*monocytogenes*	+	+	+	+	/	/	+	+	**PA**	**PA**	6	c

Appendix 12 - Relative level of detection determination: raw data - *Listeria monocytogenes*- Half Fraser Protocol- 30°C

Composite: Deli salad (Piémontaise)
Strain: *Listeria monocytogenes* Ad494
Aerobic mesophilic flora: 1,4 10^3 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1/A1♦						COMPASS Listeria agar				
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading		Confirmation	Final result	Number of positive samples/Total
			COMPASS	Palcam	COMPASS	Palcam			22h	48h			
824	0	0	st	st	st	-	-	0/5	-	-	/	-	0/20
825			st	st	st	st	-		-	-	/	-	
826			st	st	st	-	-		-	-	/	-	
827			st	-	st	st	-		-	-	/	-	
828			st	st	st	st	-		-	-	/	-	
888	1	0,8	+	+	+	+	+	9/20	+	+	+	+	9/20
889			+	+	+	+	+		+	+	+	+	
890			+	+	+	+	+		+	+	+	+	
891			st	st	-	-	-		st	st	/	-	
892			st	st	-	st	-		st	st	/	-	
893			-	+(L.welshimeri)	-	+(L.welshimeri)	-		-	-	/	-	
894			st	st	-	-	-		st	st	/	-	
895			st	st	st	st	-		st	st	/	-	
896			+	+	+	+	+		+	+	+	+	
897			+	+	+	+	+		+	+	+	+	
898			+	+	+	+	+		+	+	+	+	
899			-	+	-	+	-		-	-	/	-	
900			+	+	+	+	+		+	+	+	+	
901			+	+	+	+	+		+	+	+	+	
902			st	-	-	-	-		st	st	/	-	
903			-	+	-	+	-		-	-	/	-	
904			st	st	-	-	-		st	st	/	-	
905			-	+	-	+	-		-	-	/	-	
906			+	+	+	+	+		+	+	+	+	
907			-	+(L.welshimeri)	-	+(L.welshimeri)	-		-	-	/	-	
908	2	2,2	+	+	+	+	+	5/5	+	+	+	+	5/5
909			+	+	+	+	+		+	+	+	+	
910			+	+	+	+	+		+	+	+	+	
911			+	+	+	+	+		+	+	+	+	
912			+	+	+	+	+		+	+	+	+	

♦ Analyses performed according to the COFRAC accreditation

Rillettes

Listeria monocytogenes 1/2 V2/124

Level	Inoculation level (CFU/25g)	No	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	1214	-	-	-	-	-	0/6	-	-	0/6
		1215	-	-	-	-	-		-	-	
		1216	-	-	-	-	-		-	-	
		1217	-	-	-	-	-		-	-	
		1218	-	-	-	-	-		-	-	
		1219	-	-	-	-	-		-	-	
1	0,2	1480	+	+	+	+	+	3/6	+	+	3/6
		1481	+	+	+	+	+		+	+	
		1482	+	+	+	+	+		+	+	
		1483	-	-	-	-	-		-	-	
		1484	-	-	-	-	-		-	-	
		1485	-	-	-	-	-		-	-	
2	0,4	1486	-	-	-	-	-	2/6	-	-	2/6
		1487	-	-	-	-	-		-	-	
		1488	-	-	-	-	-		-	-	
		1489	+	+	+	+	+		+	+	
		1490	+	+	+	+	+		+	+	
		1491	-	-	-	-	-		-	-	
3	0,9	1492	+	+	+	+	+	5/6	+	+	5/6
		1493	+	+	+	+	+		+	+	
		1494	-	-	-	-	-		-	-	
		1495	+	+	+	+	+		+	+	
		1496	+	+	+	+	+		+	+	
		1497	+	+	+	+	+		+	+	
4	2,3	1498	+	+	+	+	+	4/6	+	+	4/6
		1499	-	-	-	-	-		-	-	
		1500	+	+	+	+	+		+	+	
		1501	+	+	+	+	+		+	+	
		1502	-	-	-	-	-		-	-	
		1503	+	+	+	+	+		+	+	
5	4,1	2028	+	+	+	+	+	6/6	+	+	6/6
		2029	+	+	+	+	+		+	+	
		2030	+	+	+	+	+		+	+	
		2031	+	+	+	+	+		+	+	
		2032	+	+	+	+	+		+	+	
		2033	+	+	+	+	+		+	+	

♦ Analyses performed according to the COFRAC accreditation

Raw milk
Listeria monocytogenes 4b 153

Level	Inoculation level (CFU/25g)	Sample No.	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	1220	-	-	-	-	-	0/6	-	-	0/6
		1221	-	-	-	-	-		-	-	
		1222	-	-	-	-	-		-	-	
		1223	-	-	-	-	-		-	-	
		1224	-	-	-	-	-		-	-	
		1225	-	-	-	-	-		-	-	
1	0,1	1954	+	+	+	+	+	5/6	+	+	5/6
		1955	+	+	+	+	+		+	+	
		1956	-	-	-	-	-		-	-	
		1957	+	+	+	+	+		+	+	
		1958	+	+	+	+	+		+	+	
		1959	+	+	+	+	+		+	+	
2	0,3	1960	-	-	-	-	-	0/6	-	-	0/6
		1961	-	-	-	-	-		-	-	
		1962	-	-	+?	-	-		-	-	
		1963	-	+	-	+	-		-	-	
		1964	-	-	-	-	-		-	-	
		1965	-	+	-	+	-		-	-	
3	0,5	1966	+	+	+	-	+	4/6	+	+	3/6
		1967	+	+	+	+	+		+	+	
		1968	-	-	-	-	-		-	-	
		1969	+	+	+	+	+		+	+	
		1970	-	-	-	-	-		-	-	
		1971	-	-	+	+	+		-	-	
4	1,4	1972	+	+	+	+	+	5/6	+	+	5/6
		1973	-	+	-	+	-		-	-	
		1974	+	+	+	+	+		+	+	
		1975	+	+	+	+	+		+	+	
		1976	+	+	+	+	+		+	+	
		1977	+	+	+	+	+		+	+	
5	2,2	2022	+	+	+	+	+	6/6	+	+	6/6
		2023	+	+	+	+	+		+	+	
		2024	+	+	+	+	+		+	+	
		2025	+	+	+	+	+		+	+	
		2026	+	+	+	+	+		+	+	
		2027	+	+	+	+	+		+	+	

♦ Analyses performed according to the COFRAC accreditation

Smoked salmon

Listeria monocytogenes 1/2 a BR32

Level	Inoculation level (CFU /25g)	No	NF EN ISO 11290-1♦				Result	Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser						
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	1208	-	-	-	-	-	0/6	-	-	0/6
		1209	-	-	-	-	-		-	-	
		1210	-	-	-	-	-		-	-	
		1211	-	-	-	-	-		-	-	
		1212	-	-	-	-	-		-	-	
		1213	-	-	-	-	-		-	-	
1	0,3	1757	+	+	+	+	+	1/6	+	+	1/6
		1758	-	-	-	-	-		-	-	
		1759	-	-	-	-	-		-	-	
		1760	-	-	-	-	-		-	-	
		1761	-	-	-	-	-		-	-	
		1762	-	-	-	-	-		-	-	
2	0,5	1763	-	-	-	-	-	2/6	-	-	2/6
		1764	+	+	+	+	+		+	+	
		1765	-	-	-	-	-		-	-	
		1766	-	-	-	-	-		-	-	
		1767	+	+	+	+	+		+	+	
		1768	-	-	-	-	-		-	-	
3	1,1	1769	-	-	-	-	-	2/6	-	-	2/6
		1770	-	-	-	-	-		-	-	
		1771	-	-	-	-	-		-	-	
		1772	-	-	-	-	-		-	-	
		1773	+	+	+	+	+		+	+	
		1774	+	+	+	+	+		+	+	
4	2,7	1775	+	+	+	+	+	6/6	+	+	6/6
		1776	+	+	+	+	+		+	+	
		1777	+	+	+	+	+		+	+	
		1778	+	+	+	+	+		+	+	
		1779	+	+	+	+	+		+	+	
		1780	+	+	+	+	+		+	+	
5	1	2034	+	+	+	+	+	5/6	+	+	5/6
		2035	-	-	-	-	-		-	-	
		2036	+	+	+	+	+		+	+	
		2037	+	+	+	+	+		+	+	
		2038	+	+	+	+	+		+	+	
		2039	+	+	+	+	+		+	+	
6	2,5	2040	+	+	+	+	+	5/6	+	+	5/6
		2041	+	+	+	+	+		+	+	
		2042	+	+	+	+	+		+	+	
		2043	+	+	+	+	+		+	+	
		2044	+	+	+	+	+		+	+	
		2045	-	-	-	-	-		-	-	

♦ Analyses performed according to the COFRAC accreditation

Green beans
Listeria monocytogenes 1/2 1011/14/10
Aerobic mesophilic flora:3,7.10^5 CFU/g

Level	Inoculation level (CFU/25g)	Sample No	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	2392	-	-	-	-	-	0/6	-	-	0/6
		2393	-	-	-	-	-		-	-	
		2394	-	-	-	-	-		-	-	
		2395	-	-	-	-	-		-	-	
		2396	-	-	-	-	-		-	-	
		2397	-	-	-	-	-		-	-	
1	0,2	2398	+	+	+	+	+	4/6	+	+	4/6
		2399	-	-	-	-	-		-	-	
		2400	+	+	+	+	+		+	+	
		2401	-	-	-	-	-		-	-	
		2402	+	+	+	+	+		+	+	
		2403	+	+	+	+	+		+	+	
2	0,3	2404	-	-	-	-	-	3/6	-	-	3/6
		2405	-	-	-	-	-		-	-	
		2406	+	+	+	+	+		+	+	
		2407	+	+	+	+	+		+	+	
		2408	-	-	-	-	-		-	-	
		2409	+	+	+	+	+		+	+	
3	0,7	2410	+	+	+	+	+	4/6	+	+	4/6
		2411	-	-	-	-	-		-	-	
		2412	+	+	+	+	+		+	+	
		2413	+	+	+	+	+		+	+	
		2414	+	+	+	+	+		+	+	
		2415	-	-	-	-	-		-	-	
4	1,7	2416	+	+	+	+	+	6/6	+	+	6/6
		2417	+	+	+	+	+		+	+	
		2418	+	+	+	+	+		+	+	
		2419	+	+	+	+	+		+	+	
		2420	+	+	+	+	+		+	+	
		2421	+	+	+	+	+		+	+	
5	3,4	2422	+	+	+	+	+	6/6	+	+	6/6
		2423	+	+	+	+	+		+	+	
		2424	+	+	+	+	+		+	+	
		2425	+	+	+	+	+		+	+	
		2426	+	+	+	+	+		+	+	
		2427	+	+	+	+	+		+	+	

♦ Analyses performed according to the COFRAC accreditation

Process water

Listeria monocytogenes 877/113

Level	Inoculation level (CFU/25g)	Sample No	NF EN ISO 11290-1♦					Positive/total	COMPASS Listeria Agar (22h and 48 h)		Positive/total
			Half Fraser		Fraser		Result				
			O&A	PALCAM	O&A	PALCAM					
			Typical colonies	Typical colonies	Typical colonies	Typical colonies			Typical colonies	Result	
0	/	1783	-	-	-	-	-	0/6	-	-	
		1784	-	-	-	-	-		-	-	
		1785	-	-	-	-	-		-	-	
		1786	-	-	-	-	-		-	-	
		1787	-	-	-	-	-		-	-	
		1788	-	-	-	-	-		-	-	
1	0,2	1789	+	+	+	+	+	3/6	+	+	3/6
		1790	-	-	-	-	-		-	-	
		1791	-	-	-	-	-		-	-	
		1792	+	+	+	+	+		+	+	
		1793	-	-	-	-	-		-	-	
		1794	+	+	+	+	+		+	+	
2	0,3	1795	-	-	-	-	-	0/6	-	-	0/6
		1796	-	-	-	-	-		-	-	
		1797	-	-	-	-	-		-	-	
		1798	-	-	-	-	-		-	-	
		1799	-	-	-	-	-		-	-	
		1800	-	-	-	-	-		-	-	
3	0,7	1801	-	-	-	-	-	4/6	-	-	4/6
		1802	+	+	+	+	+		+	+	
		1803	+	+	+	+	+		+	+	
		1804	+	+	+	+	+		+	+	
		1805	+	+	+	+	+		+	+	
		1806	-	-	-	-	-		-	-	
4	1,7	1807	+	+	+	+	+	6/6	+	+	6/6
		1808	+	+	+	+	+		+	+	
		1809	+	+	+	+	+		+	+	
		1810	+	+	+	+	+		+	+	
		1811	+	+	+	+	+		+	+	
		1812	+	+	+	+	+		+	+	
5	0,3	2046	-	-	-	-	-	0/6	-	-	0/6
		2047	-	-	-	-	-		-	-	
		2048	-	-	-	-	-		-	-	
		2049	-	-	-	-	-		-	-	
		2050	-	-	-	-	-		-	-	
		2051	-	-	-	-	-		-	-	
6	0,5	2052	-	-	-	-	-	1/6	-	-	1/6
		2053	-	-	-	-	-		-	-	
		2054	+	+	+	+	+		+	+	
		2055	-	-	-	-	-		-	-	
		2056	-	-	-	-	-		-	-	
		2057	-	-	-	-	-		-	-	

♦ Analyses performed according to the COFRAC accreditation

Appendix 13 – Inclusivity / Exclusivity: raw data
(Initial validation study, 2007)

Negative strains						
N°	Strain	Reference	Origin	COMPASS® *Listeria* Agar 22h		
				Colour of the colony	Size	Opacification halo
1	*Listeria innocua*	SICC 4202	/	Blue	1-2	-
2	*Listeria innocua*	CIP106065 (NCTC 10528)	/	Blue	1-2	-
3	*Listeria innocua*	T727	Meat product	Blue	1-2	-
4	*Listeria innocua*	17993	Milk	Blue	1-2	-
5	*Listeria ivanovii*	CIP 103466 (ATCC49954)	/	Blue	0,5	+(1)
6	*Listeria ivanovii*	CIP7842T (ATCC19119)	/	Blue	0,5	+(1)
7	*Listeria ivanovii*	103505	Fish	Blue	0,5	+(1)
8	*Listeria ivanovii*	BR11	Environment (fish)	Blue	0,5	+(2)
9	*Listeria ivanovii*	BR14	Environment (fish)	Blue	0,5	+(1)
10	*Listeria ivanovii*	BR22	Environment (fish)	Blue	0,5	+(1)
11	*Listeria ivanovii*	BR23	Environment (fish)	Blue	0,5	+(2)
12	*Listeria ivanovii*	Ad466	Veal kidneys	Blue	1,5	+
13	*Listeria seeligeri*	CIP 100100T (ATCC35967)	/	Blue	<0,5	-
14	*Listeria seeligeri*	CNR 936133	/	Blue	0,5	-
15	*Listeria welshimeri*	CIP 10413	/	Blue	1	-
16	*Listeria welshimeri*	CIP 8149T (ATCC35897)	/	Blue	0,5-1,0	-
17	*Listeria grayi*	CIP 6818T (ATCC19120)	/	Blue	1,5	-
18	*Listeria murrayi*	CIP 76124 (ATCC25401)	/	Blue	1,5	-
19	*Lactobacillus brevis*	86L126	Ham	/	/	/
20	*Lb plantarum*	89L319	Cheese	/	/	/
21	*Enterococcus faecalis*	CIP A186	/	/	/	/
22	*Enterococcus faecium*	Ad 180	Egg liquid product	/	/	/
23	*Micrococcus luteus*	ATCC 10240	/	Blue	µcolonies	-
24	*Staphylococcus aureus*	Adria501	Raw milk	White	0,5	-
25	*Staphylococcus aureus*	ATCC 25923	/	White	0,5	-
26	*Brochothrix thermosphacta*	CIP 696	/	/	/	/
27	*Brochothrix thermosphacta*	EN 15129	Trout	/	/	/
28	*Bacillus cereus*	Adria17	Rice with milk	/	/	/
29	*Bacillus subtilis*	CIP5262 (ATCC6635)	/	/	/	/
30	*Bacillus pumilus*	A00V124	Vegetables	Blue plate	2	-

Positive strains						
N°	Strain	Reference	Origin	COMPASS® *Listeria* Agar 22h		
				Colour of the colony	Size	Opacification halo
1	*L.monocytogenes*	CIP 7831	/	Blue	2	+
2	*L.monocytogenes*	CIP87/6172	/	Blue	2	+
3	*L.monocytogenes*	88/5087	/	Blue	2	+
4	*L.monocytogenes*	88/6396	/	Blue	2	+
5	*L.monocytogenes*	1011/140	Frozen broccoli	Blue	2	+
6	*L.monocytogenes*	V2/124	Pork	Blue	2	+
7	*L.monocytogenes*	V5/126	Veal	Blue	2	+
8	*L.monocytogenes*	V8/127	Beef	Blue	2	+
9	*L.monocytogenes*	38/181	Smoked sausage	Blue	2	+
10	*L.monocytogenes*	2760/3145	Pork	Blue	2	+
11	*L.monocytogenes*	850/109	Nordic meal	Blue	2	+
12	*L.monocytogenes*	877/113	Environment	Blue	2	+
13	*L.monocytogenes*	CIP7840 (ATCC19117)	Human	Blue	2	+
14	*L.monocytogenes*	CIP 55143	/	Blue	2	+
15	*L.monocytogenes*	CIP 7832	/	Blue	2	+
16	*L.monocytogenes*	CIP 7833	/	Blue	2	+
17	*L.monocytogenes*	CNR 910314	/	Blue	2	+
18	*L.monocytogenes*	CIP7834 (ATCC19113)	/	Blue	2	+
19	*L.monocytogenes*	CIP 7835	/	Blue	2	+
20	*L.monocytogenes*	CIP 7836	/	Blue	2	+
21	*L.monocytogenes*	913/1408	Blood sausage	Blue	2	+
22	*L.monocytogenes*	5721/6179	Bacon	Blue	2	+
23	*L.monocytogenes*	1016/1413	Frozen broccolis	Blue	2	+
24	*L.monocytogenes*	7111/7516	Rillettes	Blue	2	+
25	*L.monocytogenes*	7972/2399	Mushrooms puff pastry	Blue	2	+
26	*L.monocytogenes*	1973/2400	Quiche Lorraine	Blue	2	+
27	*L.monocytogenes*	2407/3139	Tripes with tomatoes	Blue	2	+
28	*L.monocytogenes*	Ad 268	Vendée ham	Blue	2	+
29	*L.monocytogenes*	CIP7837 (ATCC19114)	Human	Blue	2	+
30	*L.monocytogenes*	CIP 7838 (ATCC19115)	/	Blue	2	+
31	*L.monocytogenes*	86/690	/	Blue	2	+
32	*L.monocytogenes*	88/7137	/	Blue	2	+
33	*L.monocytogenes*	153	Munster	Blue	2	+
34	*L.monocytogenes*	CIP 7839 (ATCC19116)	Chicken	Blue	2	+
35	*L.monocytogenes*	CIP 7843	/	Blue	2	+
36	*L.monocytogenes*	17501	Milk	Blue	2	+
37	*L.monocytogenes*	Ad 141	Salmon	Blue	2	+
38	*L.monocytogenes*	Ad 140	Duck	Blue	2	+
39	*L.monocytogenes*	Ad 148	Salmon	Blue	2	+
40	*L.monocytogenes*	A00 L098	Dairy product	Blue	2	+
41	*L.monocytogenes*	A00 L101	Dairy product	Blue	2	+
42	*L.monocytogenes*	A00 C022	Merguez	Blue	2	+
43	*L.monocytogenes*	A00 C043	Bacon	Blue	2	+
44	*L.monocytogenes*	A00 M047	Fish	Blue	2	+
45	*L.monocytogenes*	18312	Milk	Blue	2	+
46	*L.monocytogenes*	A00 M011	Fish	Blue	2	+
47	*L.monocytogenes*	A00 M080	Fish	Blue	2	+
48	*L.monocytogenes*	A00 L105	Dairy product	Blue	2	+
49	*L.monocytogenes*	Ad 267	Poultry	Blue	2	+
50	*L.monocytogenes*	Ad 285	Pepper	Blue	2	+

Appendix 14 – Inclusivity/Exclusivity: raw data
(Extension study for CONFIRM'L'. mono, 2007)

POSITIVE STRAINS												
n°	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose +)
1.	*Listeria*	*monocytogenes*	153	Munster	Blue	2	+	Blue	3	+	+	+
2.	*Listeria*	*monocytogenes*	909	Milk	Blue	2	+	Blue	3	+	+	+
3.	*Listeria*	*monocytogenes*	910	Milk	Blue	2	+	Blue	3	+	+	+
4.	*Listeria*	*monocytogenes*	917	Milk	Blue	2	+	Blue	3	+	+ weak	+
5.	*Listeria*	*monocytogenes*	18023	Milk	Blue	2	+	Blue	3	+	+	+
6.	*Listeria*	*monocytogenes*	18024	Milk	Blue	2	+	Blue	3	+	+	+
7.	*Listeria*	*monocytogenes*	1011/1410	Frozen broccolis	Blue	2	+	Blue	3	+	+	+
8.	*Listeria*	*monocytogenes*	1016/1413	Frozen broccolis	Blue	2	+	Blue	3	+	+	+
9.	*Listeria*	*monocytogenes*	17501	Milk	Blue	2	+	Blue	3	+	+	+
10.	*Listeria*	*monocytogenes*	1972/2399	Mushrooms puff pastry	Blue	2	+	Blue	3	+	+	+
11.	*Listeria*	*monocytogenes*	1973/2400	Quiche Lorraine	Blue	2	+	Blue	3	+	+	+
12.	*Listeria*	*monocytogenes*	2407/3139	tripes with tomatoes	Blue	2	+	Blue	3	+	+	+
13.	*Listeria*	*monocytogenes*	2760/3145	Pork meat	Blue	2	+	Blue	3	+	+	+
14.	*Listeria*	*monocytogenes*	32.183	Croque Monsieur	Blue	2	+	Blue	3	+	+	+
15.	*Listeria*	*monocytogenes*	38/181	Toulouse sausage	Blue	2	+	Blue	3	+	+	+
16.	*Listeria*	*monocytogenes*	5721/6179	Bacon	Blue	2	+	Blue	3	+	+	+
17.	*Listeria*	*monocytogenes*	6072	Smoked salmon	No growth	/	/	No growth	/	/	/	/
18.	*Listeria*	*monocytogenes*	7111/7516	Rillettes	Blue	2	+	Blue	3	+	+	+
19.	*Listeria*	*monocytogenes*	850/109	Smoked fishes	Blue	2	+	Blue	3	+	+	+
20.	*Listeria*	*monocytogenes*	86/690	Food product	Blue	2	+	Blue	3	+	+	+
21.	*Listeria*	*monocytogenes*	87/6172	Food product	Blue	2	+	Blue	3	+	+	+
22.	*Listeria*	*monocytogenes*	877/113	Environmental sample	Blue	2	+	Blue	3	+	+	+
23.	*Listeria*	*monocytogenes*	88/7137	Food product	Blue	2	+	Blue	3	+	+	+
24.	*Listeria*	*monocytogenes*	913/1 048	Blood sausage	Blue	2	+	Blue	3	+	+	+

POSITIVE STRAINS												
n°	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose +)
25.	*Listeria*	*monocytogenes*	A00C014	Chipolatas	Blue	2	+	Blue	3	+	+	+
26.	*Listeria*	*monocytogenes*	A00C015	Chipolatas	Blue	2	+	Blue	3	+	+	+
27.	*Listeria*	*monocytogenes*	A00C022	Merguez	Blue	2	+	Blue	3	+	+	+
28.	*Listeria*	*monocytogenes*	A00C024	Chipolatas with herbs	Blue	2	+	Blue	3	+	+	+
29.	*Listeria*	*monocytogenes*	A00C036	Guineafowl	Blue	2	+	Blue	3	+	+	+
30.	*Listeria*	*monocytogenes*	A00C039	Sausages	Blue	2	+	Blue	3	+	+	+
31.	*Listeria*	*monocytogenes*	A00C040	Delicatessen	Blue	2	+	Blue	3	+	+	+
32.	*Listeria*	*monocytogenes*	A00C041	Sausage meat	Blue	2	+	Blue	3	+	+	+
33.	*Listeria*	*monocytogenes*	A00C042	Toulouse sausage	Blue	2	+	Blue	3	+	+	+
34.	*Listeria*	*monocytogenes*	A00C043	Bacon	Blue	2	+	Blue	3	+	+	+
35.	*Listeria*	*monocytogenes*	A00C044	Duck meat	Blue	2	+	Blue	3	+	+	+
36.	*Listeria*	*monocytogenes*	A00C052	Turkey meat	Blue	2	+	Blue	3	+	+	+
37.	*Listeria*	*monocytogenes*	A00C053	Gizzards	Blue	2	+	Blue	3	+	+	+
38.	*Listeria*	*monocytogenes*	A00C054	Beef heart	Blue	2	+	Blue	3	+	+	+
39.	*Listeria*	*monocytogenes*	A00C055	Toulouse sausage	Blue	2	+	Blue	3	+	+	+
40.	*Listeria*	*monocytogenes*	A00E008	Environmental sample	Blue	2	+	Blue	3	+	+	+
41.	*Listeria*	*monocytogenes*	A00E033	Environmental sample	Blue	2	+	Blue	3	+	+	+
42.	*Listeria*	*monocytogenes*	A00E049	Environmental sample	Blue	2	+	Blue	3	+	+	+
43.	*Listeria*	*monocytogenes*	A00E082	Environment (smoked salmon)	Blue	2	+	Blue	3	+	+	+
44.	*Listeria*	*monocytogenes*	A00L097	Milk	Blue	2	+	Blue	3	+	+	+
45.	*Listeria*	*monocytogenes*	A00L101	Milk	Blue	2	+	Blue	3	+	+	+
46.	*Listeria*	*monocytogenes*	A00L107	Milk	Blue	2	+	Blue	3	+	+	+
47.	*Listeria*	*monocytogenes*	A00M009	Smoked salmon	Blue	2	+	Blue	3	+	+	+
48.	*Listeria*	*monocytogenes*	A00M019	Smoked salmon	Blue	2	+	Blue	3	+	+	+
49.	*Listeria*	*monocytogenes*	A00M020	Smoked salmon	Blue	2	+	Blue	3	+	+	+
50.	*Listeria*	*monocytogenes*	A00M021	Smoked salmon	Blue	2	+	Blue	3	+	+	+
51.	*Listeria*	*monocytogenes*	A00M023	Smoked salmon	Blue	2	+	Blue	3	+	+	+
52.	*Listeria*	*monocytogenes*	A00M029	Smoked salmon	Blue	2	+	Blue	3	+	+	+

POSITIVE STRAINS												
n°	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose +)
53.	*Listeria*	*monocytogenes*	A00M030	Raw material (smoked salmon)	Blue	2	+	Blue	3	+	+	+
54.	*Listeria*	*monocytogenes*	A00M032	Norwegian salmon	Blue	2	+	Blue	3	+	+	+
55.	*Listeria*	*monocytogenes*	A00M045	Smoked salmon	Blue	2	+	Blue	3	+	+	+
56.	*Listeria*	*monocytogenes*	A00M050	Raw material (swordfish)	Blue	2	+	Blue	3	+	+	+
57.	*Listeria*	*monocytogenes*	A00M051	Smoked salmon	Blue	2	+	Blue	3	+	+	+
58.	*Listeria*	*monocytogenes*	A00M080	Raw material (smoked salmon)	Blue	2	+	Blue	3	+	+	+
59.	*Listeria*	*monocytogenes*	A00M081	Smoked salmon	Blue	2	+	Blue	3	+	+	+
60.	*Listeria*	*monocytogenes*	A00M088	Irish smoked salmon	Blue	2	+	Blue	3	+	+	+
61.	*Listeria*	*monocytogenes*	A00M089	Norwegian smoked salmon	Blue	2	+	Blue	3	+	+	+
62.	*Listeria*	*monocytogenes*	A00M096	Scottish smoked salmon	Blue	2	+	Blue	3	+	+	+
63.	*Listeria*	*monocytogenes*	A00M111	Scottish smoked salmon	Blue	2	+	Blue	3	+	+	+
64.	*Listeria*	*monocytogenes*	A00M112	Norwegian smoked salmon	Blue	2	+	Blue	3	+	+	+
65.	*Listeria*	*monocytogenes*	A00M113	Irish smoked salmon	Blue	2	+	Blue	3	+	+	+
66.	*Listeria*	*monocytogenes*	A00M123	Smoked salmon	Blue	2	+	Blue	3	+	+	+
67.	*Listeria*	*monocytogenes*	Ad148	Fishery product	Blue	2	+	Blue	3	+	+	+
68.	*Listeria*	*monocytogenes*	Ad235	Poultry	Blue	2	+	Blue	3	+	+	+
69.	*Listeria*	*monocytogenes*	Ad252	Dairy product	Blue	2	+	Blue	3	+	+	+
70.	*Listeria*	*monocytogenes*	Ad253	Cheese	Blue	2	+	Blue	3	+	+	+
71.	*Listeria*	*monocytogenes*	Ad255	Dairy product	Blue	2	+	Blue	3	+	+	+
72.	*Listeria*	*monocytogenes*	Ad258	Dairy product	Blue	2	+	Blue	3	+	+	+
73.	*Listeria*	*monocytogenes*	Ad260	Cheese	Blue	2	+	Blue	3	+	+	+
74.	*Listeria*	*monocytogenes*	Ad262	Dairy product	Blue	2	+	Blue	3	+	+	+
75.	*Listeria*	*monocytogenes*	Ad265	Tongue	Blue	2	+	Blue	3	+	+	+
76.	*Listeria*	*monocytogenes*	Ad266	Chicken	Blue	2	+	Blue	3	+	+	+
77.	*Listeria*	*monocytogenes*	Ad267	Dry sausage	Blue	2	+	Blue	3	+	+	+
78.	*Listeria*	*monocytogenes*	Ad268	Vendée ham	Blue	2	+	Blue	3	+	+	+
79.	*Listeria*	*monocytogenes*	Ad270	Rosette de Lyon	Blue	2	+	Blue	3	+	+	+
80.	*Listeria*	*monocytogenes*	Ad271	Bacon	Blue	2	+	Blue	3	+	+	+

POSITIVE STRAINS												
n°	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose +)
81.	*Listeria*	*monocytogenes*	Ad272	Dry sausage from Auvergne	Blue	2	+	Blue	3	+	+	+
82.	*Listeria*	*monocytogenes*	Ad273	Dry ham from Savoie	Blue	2	+	Blue	3	+	+	+
83.	*Listeria*	*monocytogenes*	Ad274	Asian mix	Blue	2	+	Blue	3	+	+	+
84.	*Listeria*	*monocytogenes*	Ad275	Sausage	Blue	2	+	Blue	3	+	+	+
85.	*Listeria*	*monocytogenes*	Ad276	Strasbourg sausage	Blue	2	+	Blue	3	+	+	+
86.	*Listeria*	*monocytogenes*	Ad277	Chorizo	Blue	2	+	Blue	3	+	+	+
87.	*Listeria*	*monocytogenes*	Ad278	Smoked belly	Blue	2	+	Blue	3	+	+	+
88.	*Listeria*	*monocytogenes*	Ad279	Vegetable mix	Blue	2	+	Blue	3	+	+	+
89.	*Listeria*	*monocytogenes*	Ad280	Bacon	Blue	2	+	Blue	3	+	+	+
90.	*Listeria*	*monocytogenes*	Ad281	Pasta with cheese	Blue	2	+	Blue	3	+	+	+
91.	*Listeria*	*monocytogenes*	Ad285	Green pepper	Blue	2	+	Blue	3	+	+	+
92.	*Listeria*	*monocytogenes*	Ad291	Bacon	Blue	2	+	Blue	3	+	+	+
93.	*Listeria*	*monocytogenes*	Ad292	Knacky	Blue	2	+	Blue	3	+	+	+
94.	*Listeria*	*monocytogenes*	Ad293	Sliced coppa	Blue	2	+	Blue	3	+	+	+
95.	*Listeria*	*monocytogenes*	Ad294	Clinical	Blue	2	+	Blue	3	+	+	+
96.	*Listeria*	*monocytogenes*	Ad295	Clinical	Blue	2	+	Blue	3	+	+	+
97.	*Listeria*	*monocytogenes*	Ad299	Cockle	Blue	2	+	Blue	3	+	+	+
98.	*Listeria*	*monocytogenes*	Ad470	Cheese	Blue	2	+	Blue	3	+	+	+
99.	*Listeria*	*monocytogenes*	Ad474	Smoked salmon	Blue	2	+	Blue	3	+	+	+
100.	*Listeria*	*monocytogenes*	Ad494	Deli salad (Piémontaise)	Blue	2	+	Blue	3	+	+	+
101.	*Listeria*	*monocytogenes*	Ad523	Raclette cheese	Blue	2	+	Blue	3	+	+	+
102.	*Listeria*	*monocytogenes*	Ad532	Fruits	Blue	2	+	Blue	3	+	+	+
103.	*Listeria*	*monocytogenes*	Ad534	Fruits	Blue	2	+	Blue	3	+	+	+
104.	*Listeria*	*monocytogenes*	Ad543	Sliced pepper	Blue	2	+	Blue	3	+	+	+
105.	*Listeria*	*monocytogenes*	Ad544	Prefried onion	Blue	2	+	Blue	3	+	+	+
106.	*Listeria*	*monocytogenes*	Ad545	Cabbage carrot salad	Blue	2	+	Blue	3	+	+	+
107.	*Listeria*	*monocytogenes*	Ad546	Buckwheat flour	Blue	2	+	Blue	3	+	+	+
108.	*Listeria*	*monocytogenes*	Ad548	Environmental sample	Blue	2	+	Blue	3	+	+	+

POSITIVE STRAINS												
n°	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose +)
109.	*Listeria*	*monocytogenes*	Ad549	Fish delicatessen workshop	Blue	2	+	Blue	3	+	+	+
110.	*Listeria*	*monocytogenes*	Ad550	Sewer outside	Blue	2	+	Blue	3	+	+	+
111.	*Listeria*	*monocytogenes*	Ad551	Environmental sample	Blue	2	+	Blue	3	+	+	+
112.	*Listeria*	*monocytogenes*	Ad610	Milk	Blue	2	+	Blue	3	+	+	+
113.	*Listeria*	*monocytogenes*	Ad611	Milk	Blue	2	+	Blue	3	+	+	+
114.	*Listeria*	*monocytogenes*	Ad612	Livarot	Blue	2	+	Blue	3	+	+	+
115.	*Listeria*	*monocytogenes*	Ad613	Munster	Blue	2	+	Blue	3	+	+	+
116.	*Listeria*	*monocytogenes*	Ad614	Dairy environment	Blue	2	+	Blue	3	+	+	+
117.	*Listeria*	*monocytogenes*	Ad615	Dairy environment	Blue	2	+	Blue	3	+	+	+
118.	*Listeria*	*monocytogenes*	Ad617	Dairy environment	Blue	2	+	Blue	3	+	+	+
119.	*Listeria*	*monocytogenes*	Ad618	Munster	Blue	2	+	Blue	3	+	+	+
120.	*Listeria*	*monocytogenes*	Ad619	Cheese	Blue	2	+	Blue	3	+	+	+
121.	*Listeria*	*monocytogenes*	Ad620	Dairy environment	Blue	2	+	Blue	3	+	+	+
122.	*Listeria*	*monocytogenes*	Ad621	Dairy environment (floor)	Blue	2	+	Blue	3	+	+	+
123.	*Listeria*	*monocytogenes*	Ad622	Cheese	Blue	2	+	Blue	3	+	+	+
124.	*Listeria*	*monocytogenes*	Ad623	Breadcrumb (Dairy)	Blue	2	+	Blue	3	+	+	+
125.	*Listeria*	*monocytogenes*	Ad624	Dairy environment	Blue	2	+	Blue	3	+	+	+
126.	*Listeria*	*monocytogenes*	Ad625	Dairy environment	Blue	2	+	Blue	3	+	+	+
127.	*Listeria*	*monocytogenes*	Ad626	Gorgonzola	Blue	2	+	Blue	3	+	+	+
128.	*Listeria*	*monocytogenes*	Ad627	Dairy product packaging	Blue	2	+	Blue	3	+	+	+
129.	*Listeria*	*monocytogenes*	Ad628	Dairy product packaging	Blue	2	+	Blue	3	+	+	+
130.	*Listeria*	*monocytogenes*	Ad629	Cantal	Blue	2	+	Blue	3	+	+	+
131.	*Listeria*	*monocytogenes*	Ad630	Cantal	Blue	2	+	Blue	3	+	+	+
132.	*Listeria*	*monocytogenes*	Ad631	Dairy environment	Blue	2	+	Blue	3	+	+	+
133.	*Listeria*	*monocytogenes*	Ad632	Milk	Blue	2	+	Blue	3	+	+	+
134.	*Listeria*	*monocytogenes*	Ad633	Dairy environment	Blue	2	+	Blue	3	+	+	+
135.	*Listeria*	*monocytogenes*	Ad634	Dairy environment (floor)	Blue	2	+	Blue	3	+	+	+
136.	*Listeria*	*monocytogenes*	ADQP105	Smoked salmon	Blue	2	+	Blue	3	+	+	+

POSITIVE STRAINS												
n°	Strain	Species	Reference	Origin	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
					Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose +)
137.	*Listeria*	*monocytogenes*	AER100	Chicken	Blue	2	+	Blue	3	+	+	+
138.	*Listeria*	*monocytogenes*	AER101	Milk	Blue	2	+	Blue	3	+	+	+
139.	*Listeria*	*monocytogenes*	AER102	Brine	Blue	2	+	Blue	3	+	+	+
140.	*Listeria*	*monocytogenes*	AER103	Poultry	Blue	2	+	Blue	3	+	+	+
141.	*Listeria*	*monocytogenes*	BR32	Trout	Blue	2	+	Blue	3	+	+	+
142.	*Listeria*	*monocytogenes*	CL3:29	Meat product environment	Blue	2	+	Blue	3	+	+	+
143.	*Listeria*	*monocytogenes*	LMH180	Salad	Blue	2	+	Blue	3	+	+	+
144.	*Listeria*	*monocytogenes*	V2/124	Pork	Blue	2	+	Blue	3	+	+	+
145.	*Listeria*	*monocytogenes*	V5/126	Beef	Blue	2	+	Blue	3	+	+	+
146.	*Listeria*	*monocytogenes*	V8/127	Beef	Blue	2	+	Blue	3	+	+	+
147.	*Listeria*	*monocytogenes*	Ad 664	Unripened raw milk cheese	Blue	2	+	Blue	3	+	+	+
148.	*Listeria*	*monocytogenes*	Ad 665	Raw milk	Blue	2	+	Blue	3	+	+	+
149.	*Listeria*	*monocytogenes*	Ad 666	Cockerel	Blue	2	+	Blue	3	+	+	+
150.	*Listeria*	*monocytogenes*	Ad 667	Chicken leg	Blue	2	+	Blue	3	+	+	+
151.	*Listeria*	*monocytogenes*	Ad 668	Chicken wings	Blue	2	+	Blue	3	+	+	+
152.	*Listeria*	*monocytogenes*	Ad 669	Rillettes	Blue	2	+	Blue	3	+	+	+
153.	*Listeria*	*monocytogenes*	Ad 670	Smoked salmon	Blue	2	+	Blue	3	+	+	+

NEGATIVE STRAINS													
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose+)
1	*Listeria*	*innocua*	1	Smoked salmon	+	Blue	2	-	Blue	2	-	-	+
2	*Listeria*	*innocua*	T727	Meat product	+	Blue	2	-	Blue	2	-	-	+
3	*Listeria*	*innocua*	NCTC10528	/	+	Blue	2	-	Blue	2	-	-	-
4	*Listeria*	*innocua*	T654	Cheese	+	Blue	0,5-1	-	Blue	1-2	-	-	+
5	*Listeria*	*innocua*	ATCC33090	Beef brain	+	Blue	2	-	Blue	2	-	-	+
6	*Listeria*	*innocua*	CIP8012	/	+	Blue	2	-	Blue	2	-	-	+
7	*Listeria*	*innocua*	17765	Pork meat	+	Blue	2	-	Blue	2	-	-	+
8	*Listeria*	*innocua*	16969	Milk	+	Blue	2	-	Blue	2	-	-	+
9	*Listeria*	*innocua*	18313	Milk	+	Blue	2	-	Blue	2	-	-	+
10	*Listeria*	*innocua*	Ad 658	Gorgonzola	+	Blue	2	-	Blue	2	-	-	+
11	*Listeria*	*innocua*	Transporteur fromagerie	Environmental sample	+	Blue	2	-	Blue	2	-	-	+
12	*Listeria*	*innocua*	902	Dairy product	+	Blue	2	-	Blue	2	-	-	+
13	*Listeria*	*innocua*	DSM20649	/	+	Blue	2	-	Blue	2	-	-	+
14	*Listeria*	*innocua*	Ad663	Environmental sample	+	Blue	2	-	Blue	2	-	-	+
15	*Listeria*	*innocua*	Ad660	Breadcrumbs	+	Blue	2	-	Blue	2	-	-	+
16	*Listeria*	*innocua*	Ad657	Cantal	+	Blue	2	-	Blue	2	-	-	+ very weak
17	*Listeria*	*innocua*	As661	Pont L'Evêque (Cheese)	+	Blue	2	-	Blue	2	-	-	+
18	*Listeria*	*innocua*	Ad656	Cheese	+	Blue	2	-	Blue	2	-	-	+
19	*Listeria*	*innocua*	Ad655	Brine	+	Blue	2	-	Blue	2	-	-	+
20	*Listeria*	*innocua*	Ad653	Environment	+	Blue	2	-	Blue	2	-	-	+
21	*Listeria*	*innocua*	Ad654	Dairy product	+	Blue	2	-	Blue	2	-	-	+
22	*Listeria*	*innocua*	Ad671	Bacon	+	Blue	2	-	Blue	2	-	-	+
23	*Listeria*	*ivanovii*	CIP103466	/	+	Blue	µcolonie	+	Blue	1-2	+	+ weak	-
24	*Listeria*	*ivanovii*	CIP7842T	/	+	Blue	0,5-1	+	Blue	1-2	+	+	-
25	*Listeria*	*ivanovii*	CIP103212	/	+	Blue	0,5-1	+	Blue	1-2	+	+	-
26	*Listeria*	*ivanovii*	CIP103505	Trout	+	Blue	0,5-1	+	Blue	1-2	+	-	-

NEGATIVE STRAINS														
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose+)
27	*Listeria*	*ivanovii*	BR11	Fish farm environment, anti-bird net	+	Blue	0,5-1	+	Blue	1-2	+	+ weak	-
28	*Listeria*	*ivanovii*	BR15	Fish farm environment, dock wall	+	Blue	0,5-1	+	Blue	1-2	+	+ weak	-
29	*Listeria*	*ivanovii*	Ad466	Veal kidney	+	Blue	0,5-1	+	Blue	1-2	+	+ weak	-
30	*Listeria*	*ivanovii*	Ad662	Packaging	+	Blue	1-2	-	Blue	1-2	-	No growth	
31	*Listeria*	*ivanovii*	Ad648 (AERIAL 28)	Collection	+	Blue	1	+	Blue	1-2	+	+ at inoculation point	-
32	*Listeria*	*ivanovii*	L2-2	Poultry	+	Blue	1-2	+	Blue	1-2	+	+	-
33	*Listeria*	*ivanovii*	L2-9	Ewe's milk	+	Blue	1-2	+	Blue	1-2	+	+ weak	-
34	*Listeria*	*ivanovii*	L2-11	Raw milk cheese	+	Blue	1-2	+	Blue	1-2	+	+	-
35	*Listeria*	*ivanovii*	L2-12	Milk powder	+	Blue	1-2	+	Blue	1-2	+	+	-
36	*Listeria*	*ivanovii*	L41	Raw milk	+	Blue	1-2	+	Blue	1-2	+	+	-
37	*Listeria*	*ivanovii*	Ad616	Dairy environment (floor)	+	Blue	1-2	+ weak	Blue	1-2	+	+ at inoculation point	-
38	*Listeria*	*seeligeri*	CIP100100	/	+	Blue	µcolony	-	Blue	0,1-1	-	-	+ weak
39	*Listeria*	*seeligeri*	CNR936133	/	+	Blue	0,1-0,5	-	Blue	0,5-1	-	-	+ weak
40	*Listeria*	*seeligeri*	BR1	Trout	+	Blue	0,1-0,5	-	Blue	0,5-1	-	-	+ weak
41	*Listeria*	*seeligeri*	BR4	Fish	+	Blue	0,1-0,5	-	Blue	0,5-1	-	-	+ weak
42	*Listeria*	*seeligeri*	BR18	Fish farm environment, dock wall	+	Blue	0,1-0,5	-	Blue	0,5-1	-	-	+ weak
43	*Listeria*	*seeligeri*	Ad652	Foot bath	+	Blue	µcolony	-	Blue	0,5-1	-	-	+
44	*Listeria*	*seeligeri*	Ad649 (AERIAL 26)	Cheese	+	Blue	µcolony	-	Blue	0,5-2	-	No growth	
45	*Listeria*	*seeligeri*	Ad651 (AERIAL 46)	Environment	+	Blue	µcolony	-	Blue	1-2	+ weak	-	+
46	*Listeria*	*seeligeri*	Ad674	Munster	+	Blue	µcolony	-	Blue	1-2	-	Very weak growth	
47	*Listeria*	*welshimeri*	CIP10413	/	+	Blue	2	-	Blue	2	-	-	+
48	*Listeria*	*welshimeri*	CIP8149	/	+	Blue	0,1-0,5	-	Blue	0,1-1	-	-	+ weak

NEGATIVE STRAINS														
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose+)
49	*Listeria*	*welshimeri*	Ad650 (AERIAL 45)	Poultry	+	Blue	0,5	-	Blue	1-2	-	-	+
50	*Listeria*	*welshimeri*	191424	Poultry	+	Blue	2	-	Blue	1-2	-	-	+
51	*Listeria*	*grayi*	ATCC19120	/	+	Pale blue	0,5-1	-	Blue	3	-	-	+ weak
52	*Listeria*	*grayi*	CIP76124	/	+	Pale blue	0,5-1	-	Blue	3	-	-	+
53	*Bacillus*	*cereus*	1	Liquid egg	+	No growth	/	-	No growth	/	+	+	No growth
54	*Bacillus*	*cereus*	8	Spanish style pasta	+	No growth	/	-	No growth	/	/	No growth	
55	*Bacillus*	*cereus*	11	Rice purée	+	No growth	/	-	No growth	/	+ at inoculation point	No growth	
56	*Bacillus*	*cereus*	14.2	Ile flottante	+	No growth	/	-	No growth	/	/	No growth	
57	*Bacillus*	*cereus*	16	Spaghetti with seafood	+	No growth	/	+	No growth	/	+	No growth	
58	*Bacillus*	*cereus*	17	Rice pudding	+	No growth	/	+	No growth	/	+	No growth	
59	*Bacillus*	*cereus*	20	Chicken and carrot sauce	+	No growth	/	+	No growth	/	+ at inoculation point	+ at inoculum	No growth
60	*Bacillus*	*cereus*	21	Rice with curry	+	No growth	/	-	No growth	/	+ at inoculation point	-	+
61	*Bacillus*	*cereus*	22	Wheat flour	+	White spread colonies, blue center	>2	+	White spread colonies, blue center	>2	+	No growth	
62	*Bacillus*	*cereus*	26	Raw cow's milk	+	No growth	/	+	No growth	/	+	+ at inoculation point	No growth
63	*Bacillus*	*cereus*	30	Raw peeled shrimp ionized at 3Kgray	+	No growth	/	+ at inoculation point	No growth	/	+ at inoculation point	+	No growth
64	*Bacillus*	*cereus*	31	Powdered butter	+	No growth	/	+	No growth	/	+	+	No growth
65	*Bacillus*	*cereus*	Ad420	Caseinate powder	+	White spread colonies, blue center	>2	+	White spread colonies, blue center	>2	+	No growth	
66	*Bacillus*	*cereus*	Ad465	Salmon terrine	+	No growth	/	-	No growth	/	-	+	No growth
67	*Bacillus*	*cereus*	Ad483	Punch	+	No growth	/	+	No growth	/	+	No growth	

NEGATIVE STRAINS														
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose+)
68	*Bacillus*	*cereus*	Ad495	Rice flour	+	White spread colonies, green center	>2	+	White spread colonies, green center	>2	+	No growth	
69	*Bacillus*	*cereus*	INRA104	Cold-stored purée	+	No growth	/	-	No growth	/	-	No growth	
70	*Bacillus*	*cereus*	Ad608	Baguette dough	+	White spread colonies, blue center	>2	+	White spread colonies, blue center	>2	+	+	No growth
71	*Bacillus*	*cereus*	54	Dairy product	+	No growth	/	-	Few white spread colonies	>2	-	+	No growth
72	*Bacillus*	*cereus*	Ad607	Environment	+	Turquoise spread colonies	>2	+	Turquoise spread colonies	>2	+	+ light	No growth
73	*Bacillus*	*cereus*	Ad609	Sewage wipe, dairy workshop	+	White with green center	>2	-	White with green center	>2	-	No growth	
74	*Bacillus*	*weihenstephanensis*	N12	Egg product	+	No growth	/	-	No growth	/	-	No growth	
75	*Bacillus*	*weihenstephanensis*	INRA87	Cold-stored purée	+	No growth	/	-	No growth	/	-	No growth	
76	*Bacillus*	*weihenstephanensis*	INRA140	Ready-made meal	+	No growth	/	-	No growth	/	-	No growth	
77	*Bacillus*	*weihenstephanensis*	INRA171	Pasteurized vegetable	+	No growth	/	-	No growth	/	-	No growth	
78	*Bacillus*	*weihenstephanensis*	A1	Egg product	+	No growth	/	-	No growth	/	+ at inoculation point	No growth	
79	*Bacillus*	*weihenstephanensis*	SDA NFFE640	Dairy product	+	No growth	/	-	No growth	/	+ at inoculation point	No growth	
80	*Bacillus*	*thuringiensis*	IEBC T31	Vegetables	+	No growth	/	-	No growth	/	-	No growth	
81	*Bacillus*	*licheniformis*	7600	Dairy product	+	White spread colonies	>2	-	White spread colonies	>2	-	No growth	
82	*Bacillus*	*licheniformis*	LMSA 049	Egg product	+	White spread colonies with green center	>2	-	White spread colonies with green center	White spread colonies with green center	-	No growth	
83	*Bacillus*	*pumilus*	7572	Dairy product	+	White	01-0,5	-	Blue	1-2	-	No growth	

NEGATIVE STRAINS														
No	Strain	Species	Reference	Origin	TSYEA	COMPASS® *Listeria* Agar 22 h			COMPASS® *Listeria* Agar 48 h			CONFIRM' *L. mono* Agar	
						Colony colour	Size	Opacification halo	Colony colour	Size	Opacification halo	Opacification halo	Yellow coloration (Rhamnose+)
84	*Bacillus*	*pumilus*	INRA 260	Vegetables	+	Light green	1-2	-	White spread colonies with blue center	>2	-	No growth	
85	*Bacillus*	*circulans*	B8	Dairy product	+	Turquoise	1	-	Blue	1-2	Lightening halo	-	+
86	*Bacillus*	*coagulans*	7179	Dairy product	+	No growth	/	-	No growth	/	-	-	+
87	*Bacillus*	*sphaericus*	/	Dairy product	+	White	1	-	Brown spread colonies	>2	-	No growth	
88	*Bacillus*	*subtilis*	7750	Dairy product	+	No growth	/	-	No growth	/	-	No growth	
89	*Bacillus*	*subtilis*	LMSA 092	Egg product	+	No growth	/	-	No growth	/	-	No growth	
90	*Bacillus*	*mycoïdes*	NFSO60	Milk	+	No growth	/	-	No growth	/	-	No growth	
91	*Bacillus*	*pseudomycoides*	S38	Vegetables	+	No growth	/	-	No growth	/	-	No growth	
92	*Enterococcus*	*durans*	Ad 149	Ham	+	No growth	/	-	No growth	/	-	No growth	
93	*Enterococcus*	*durans*	Ad181	Pasteurized liquid egg	+	No growth	/	-	No growth	/	-	-	+ light
94	*Enterococcus*	*faecalis*	89L326	Vacherin	+	No growth	/	-	No growth	/	-	-	+
95	*Enterococcus*	*faecalis*	89L333	Appenzel	+	No growth	/	-	No growth	/	-	No growth	
96	*Enterococcus*	*faecalis*	F4	Cheese	+	No growth	/	-	No growth	/	-	-	-
97	*Enterococcus*	*faecalis*	25	Chicken wings	+	No growth	/	-	No growth	/	-	No growth	
98	*Enterococcus*	*faecalis*	Ad289	Ready-made meal	+	No growth	/	-	Turquoise	Trace	-	-	+
99	*Enterococcus*	*faecium*	Ad180	Pasteurized liquid egg	+	Green	µcolony	-	Pale turquoise	<1	-	-	+
100	*Enterococcus*	*faecium*	CNRZ1391	Cheese	+	No growth	/	-	Turquoise	Trace	-	-	+
101	*Enterococcus*	*hirae*	CNRZ1380	Cheese	+	Green	µcolony	-	Pale turquoise	<1	-	-	+ at inoculation point
102	*Enterococcus*	*avium*	Ad183	Raw liquid egg	+	No growth	/	-	No growth	/	-	No growth	
103	*Lactococcus*	*lactis cremoris*	91G030	Fermented milk	+	No growth	/	-	No growth	/	-	-	-
104	*Lactococcus*	*lactis*	89L335	Reblochon	+	No growth	/	-	No growth	/	-	No growth	
105	*Streptococcus*	*salivarius*	Ad441	Lait	+	No growth	/	-	No growth	/	-	No growth	
106	*Streptococcus*	*bovis*	92L613	Cheese	+	No growth	/	-	No growth	/	-	No growth	

Appendix 15 - Inclusivity/Exclusivity: raw data (Extension study, 2013)

st: sterile H- : typical blue colonies without halo H+ : typical colonies with opacification halo
+: CONFIRM'Lmono broth : yellow broth +/- : CONFIRM'Lmono broth : doubtfull result (brown coloring)

Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
1	*Listeria*	*monocytogenes*	153	Munster	VI b	H+	+	+	+	+	+
2	*Listeria*	*monocytogenes*	909	Milk		H+	+	+	+	+	+
3	*Listeria*	*monocytogenes*	910	Milk		H+	+	+	+	+	+
4	*Listeria*	*monocytogenes*	917	Milk		H+ (small colonies)	+	+	+	+	+
5	*Listeria*	*monocytogenes*	17501	Milk		H+	+	+	+	+	+
6	*Listeria*	*monocytogenes*	18023	Milk		H+	+	+	+	+	+
7	*Listeria*	*monocytogenes*	18024	Milk		H+	+	+	+	+	+
8	*Listeria*	*monocytogenes*	1011/1410	Frozen broccoli	II a	H+	+	+	+	+	+
9	*Listeria*	*monocytogenes*	1016/1413	Frozen broccoli		H+	+	+	+	+	+
10	*Listeria*	*monocytogenes*	1972/2399	Mushroom pie	VI b	H+	+	+	+	+	+
11	*Listeria*	*monocytogenes*	1973/2400	Quiche lorraine	VI b	H+	+	+	+	+	+
12	*Listeria*	*monocytogenes*	2407/3139	Tomato tripe	IV b	H+	+	+	+	+	+
13	*Listeria*	*monocytogenes*	2760/3145	Chest ornaments	II a	H+	+	+	+	+	+
14	*Listeria*	*monocytogenes*	32.183	Sandwich	II b	H+	+	+	+	+	+

st: sterile H- : typical blue colonies without halo H+ : typical colonies with opacification halo
+: CONFIRM'Lmono broth : yellow broth +/- : CONFIRM'Lmono broth : doubtfull result (brown coloring)

Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
15	*Listeria*	*monocytogenes*	38/181	Toulouse sausage	II a	H+	+	+	+	+	+
16	*Listeria*	*monocytogenes*	5721/6179	Smoked bacon	IV b	H+	+	+	+	+	+
17	*Listeria*	*monocytogenes*	7111/7516	Rillettes	IV b	H+	+/-	+/-	+	+/-	+/-
18	*Listeria*	*monocytogenes*	850/109	Nordic plate	II a	H+	+	+	+	+	+
19	*Listeria*	*monocytogenes*	86/690	Foodstuff		H+ (weak halo)	+	+	+	+	+
20	*Listeria*	*monocytogenes*	87/6172	Foodstuff		H+	+	+	+	+	+
21	*Listeria*	*monocytogenes*	877/113	Carpet swab on icing tunnel	II a	H+	+	+	+	+	+
22	*Listeria*	*monocytogenes*	88/7137	Foodstuff		H+	+	+	+	+	+
23	*Listeria*	*monocytogenes*	913/1 048	Blood sausage	IV b	H+	+	+	+	+	+
24	*Listeria*	*monocytogenes*	A00C014	Chipolatas	II a	H+	+	+	+	+	+
25	*Listeria*	*monocytogenes*	A00C015	Chipolatas		H+	+	+	+	+	+
26	*Listeria*	*monocytogenes*	A00C022	Merguez	II a	H+	+	+	+	+	+
27	*Listeria*	*monocytogenes*	A00C024	Herbal chipolatas	II a	H+	+	+	+	+	+
28	*Listeria*	*monocytogenes*	A00C036	Guinea fowl	II a	H+	+/-	+	+	+	+
29	*Listeria*	*monocytogenes*	A00C039	Sausage	II a	H+	+	+	+	+	+
30	*Listeria*	*monocytogenes*	A00C040	Block	IV b	H+	+	+	+	+	+
31	*Listeria*	*monocytogenes*	A00C041	Sausage meat	La	H+	+	+	+	+	+

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Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
32	*Listeria*	*monocytogenes*	A00C042	Toulouse sausage	IV b	H+	+	+	+	+	+
33	*Listeria*	*monocytogenes*	A00C043	Smoked bacon	II a	H+	+	+	+	+	+
34	*Listeria*	*monocytogenes*	A00C044	Can of barbary	II b	H+	+	+	+	+	+
35	*Listeria*	*monocytogenes*	A00C052	Turkey osso bucco	II b	H+	+	+	+	+	+
36	*Listeria*	*monocytogenes*	A00C053	Gizzard	II a	H+	+	+	+	+	+
37	*Listeria*	*monocytogenes*	A00C054	Beef heart	IV b	H+	+/-	+/-	+	+/-	+/-
38	*Listeria*	*monocytogenes*	A00C055	Toulouse sausage	II a	H+	+	+	+	+	+
39	*Listeria*	*monocytogenes*	A00E008	Carpet reconstitution	II a	H+	+	+	+	+	+
40	*Listeria*	*monocytogenes*	A00E033	Slicer		H+	+	+	+	+	+
41	*Listeria*	*monocytogenes*	A00E049	Threading mat support	II a	H+	+	+	+	+	+
42	*Listeria*	*monocytogenes*	A00E082	Smoked salmon environment	II a	H+	+	+	+	+	+
43	*Listeria*	*monocytogenes*	A00L097	Milk	II a	H+	+	+	+	+	+
44	*Listeria*	*monocytogenes*	A00L101	Milk		H+	+	+	+	+	+
45	*Listeria*	*monocytogenes*	A00L107	Milk		H+	+	+	+	+	+
46	*Listeria*	*monocytogenes*	A00M009	Smoked salmon	II a	H+	+	+	+	+	+
47	*Listeria*	*monocytogenes*	A00M019	Smoked salmon		H+	+	+	+	+	+
48	*Listeria*	*monocytogenes*	A00M020	Smoked salmon		H+	+	+	+	+	+

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Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
49	*Listeria*	*monocytogenes*	A00M021	Smoked salmon		H+	+	+	+	+	+
50	*Listeria*	*monocytogenes*	A00M023	Smoked salmon		H+	+	+	+	+	+
51	*Listeria*	*monocytogenes*	A00M029	Smoked salmon		H+	+	+	+	+	+
52	*Listeria*	*monocytogenes*	A00M030	Raw material smoked salmon		H+	+	+	+	+	+
53	*Listeria*	*monocytogenes*	A00M032	Norwegian salmon	IV b	H+	+	+	+	+	+
54	*Listeria*	*monocytogenes*	A00M045	Smoked salmon	II a	H+	+	+	+	+	+
55	*Listeria*	*monocytogenes*	A00M050	Smoked fish		H+	+	+	+	+	+
56	*Listeria*	*monocytogenes*	A00M051	Smoked salmon		H+	+	+	+	+	+
57	*Listeria*	*monocytogenes*	A00M080	Raw material salmon		H+	+	+	+	+	+
58	*Listeria*	*monocytogenes*	A00M081	Smoked salmon		H+	+	+	+	+	+
59	*Listeria*	*monocytogenes*	A00M088	Irish smoked salmon	II a	H+	+	+	+	+	+
60	*Listeria*	*monocytogenes*	A00M089	Norwegian smoked salmon		H+	+	+	+	+	+
61	*Listeria*	*monocytogenes*	A00M096	Scottish smoked salmon		H+	+	+	+	+	+
62	*Listeria*	*monocytogenes*	A00M111	Scottish smoked salmon		H+	+	+	+	+	+
63	*Listeria*	*monocytogenes*	A00M112	Norwegian smoked salmon		H+	+	+	+	+	+
64	*Listeria*	*monocytogenes*	A00M113	Irish smoked salmon		H+	+	+	+	+	+
65	*Listeria*	*monocytogenes*	A00M123	Smoked salmon		H+	+	+	+	+	+

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Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY												
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar						
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)			
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth		
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C	
66	*Listeria*	*monocytogenes*	Ad 664	Cheese not matured with raw milk		H+	+	+	+	+	+	
67	*Listeria*	*monocytogenes*	Ad 665	Raw milk		H+	+	+	+	+	+	
68	*Listeria*	*monocytogenes*	Ad 666	Cockerel		H+	+	+	+	+	+	
69	*Listeria*	*monocytogenes*	Ad 667	Chicken leg		H+ (microscopic colonies)	+	+	+	+	+	
70	*Listeria*	*monocytogenes*	Ad 668	Chicken wing		H+	+	+	+	+	+	
71	*Listeria*	*monocytogenes*	Ad 669	Rillettes		H+	+	+	+	+	+	
72	*Listeria*	*monocytogenes*	Ad148	Seafood		H+	+	+	+	+	+	
73	*Listeria*	*monocytogenes*	Ad235	Poultry	II b	H+ (microscopic colonies)	+/-	+	+	+	+	
74	*Listeria*	*monocytogenes*	Ad249	Meat product environment	II b	H+	+	+	+	+	+	
75	*Listeria*	*monocytogenes*	Ad252	Dairy product		H+	+	+	+	+	+	
76	*Listeria*	*monocytogenes*	Ad253	Cooked pressed dough	II b	H- (H+ à 48 h)	+	+	+	+	+	
77	*Listeria*	*monocytogenes*	Ad255	Dairy product		H+	+	+	+	+	+	
78	*Listeria*	*monocytogenes*	Ad258	Dairy product		H+	+	+	+	+	+	
79	*Listeria*	*monocytogenes*	Ad260	Pressed dough	II a	H+	+	+	+	+	+	
80	*Listeria*	*monocytogenes*	Ad262	Dairy product		H+	+	+	+	+	+	
81	*Listeria*	*monocytogenes*	Ad265	Tongue	II b	H+	+	+	+	+	+	

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Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
82	*Listeria*	*monocytogenes*	Ad266	Chicken	II a	H+	+	+	+	+	+
83	*Listeria*	*monocytogenes*	Ad267	Dry sausage	II b	H+	+	+	+	+	+
84	*Listeria*	*monocytogenes*	Ad268	Vendée ham	IV b	H+	+	+	+	+	+
85	*Listeria*	*monocytogenes*	Ad270	Sausage	IV b	H+	+	+	+	+	+
86	*Listeria*	*monocytogenes*	Ad270	Rosette of Lyon	IV b	H+	+	+	+	+	+
87	*Listeria*	*monocytogenes*	Ad271	Bacon fillet		H+	+	+	+	+	+
88	*Listeria*	*monocytogenes*	Ad272	Dry sausage from Auvergne	IV b	H+	+	+	+	+	+
89	*Listeria*	*monocytogenes*	Ad273	Savoy dry ham	II b	H+	+	+	+	+	+
90	*Listeria*	*monocytogenes*	Ad274	Asian assortment	II a	H+	+	+	+	+	+
91	*Listeria*	*monocytogenes*	Ad275	Pisched cervelas of Lyon		H+	+	+	+	+	+
92	*Listeria*	*monocytogenes*	Ad276	Strasbourg sausage		H+	+	+	+	+	+
93	*Listeria*	*monocytogenes*	Ad277	Sweet chorizo		H+	+	+	+	+	+
94	*Listeria*	*monocytogenes*	Ad278	Smoked chest		H+	+	+	+	+	+
95	*Listeria*	*monocytogenes*	Ad279	Pan-fried Parisian cooked		H+	+	+	+	+	+
96	*Listeria*	*monocytogenes*	Ad280	Nature bacon		H+	+	+	+	+	+
97	*Listeria*	*monocytogenes*	Ad281	Pasta with Roquefort		H+	+	+	+	+	+
98	*Listeria*	*monocytogenes*	Ad285	Green peppers	La	H+	+	+	+	+	+

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Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
99	*Listeria*	*monocytogenes*	Ad291	Smoked bacon		H+	+	+	+	+	+
100	*Listeria*	*monocytogenes*	Ad292	Knacky		H+	+	+	+	+	+
101	*Listeria*	*monocytogenes*	Ad293	Sliced coppa		H+	+	+	+	+	+
102	*Listeria*	*monocytogenes*	Ad294	Clinical		H+	+	+	+	+	+
103	*Listeria*	*monocytogenes*	Ad295	Clinical		H+	+	+	+	+	+
104	*Listeria*	*monocytogenes*	Ad299	Cockles		H+	+	+	+	+	+
105	*Listeria*	*monocytogenes*	Ad470	Cheese		H+ (weak halo)	+	+	+	+	+
106	*Listeria*	*monocytogenes*	Ad474	Smoked salmon		H+	+	+	+	+	+
107	*Listeria*	*monocytogenes*	Ad494	Piedmont	II a	H+	+	+	+	+	+
108	*Listeria*	*monocytogenes*	Ad523	Raclette cheese		H+	+	+	+	+	+
109	*Listeria*	*monocytogenes*	Ad532	Fruits		H+	+	+	+	+	+
110	*Listeria*	*monocytogenes*	Ad534	Fruits	II b	H+	+	+	+	+	+
111	*Listeria*	*monocytogenes*	Ad543	Lamella pepper		H+	+	+	+	+	+
112	*Listeria*	*monocytogenes*	Ad544	Pre-fried onion	II a	H+	+	+	+	+	+
113	*Listeria*	*monocytogenes*	Ad545	Carrot cabbage salad		H+	+	+	+	+	+
114	*Listeria*	*monocytogenes*	Ad546	Black wheat flour	II a	H+	+	+	+	+	+
115	*Listeria*	*monocytogenes*	Ad548	De-stop room	II a	H+	+	+	+	+	+

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Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
116	*Listeria*	*monocytogenes*	Ad549	Fish delicatessen workshop		H+	+	+	+	+	+
117	*Listeria*	*monocytogenes*	Ad550	Outdoor sewer		H+	+	+	+	+	+
118	*Listeria*	*monocytogenes*	Ad551	Lava soles	II a	H+	+	+	+	+	+
119	*Listeria*	*monocytogenes*	Ad610	Milk		H+	+	+	+	+	+
120	*Listeria*	*monocytogenes*	Ad611	Milk		H+	+	+	+	+	+
121	*Listeria*	*monocytogenes*	Ad613	Munster		H+	+	+	+	+	+
122	*Listeria*	*monocytogenes*	Ad614	Dairy environment		H+	+	+	+	+	+
123	*Listeria*	*monocytogenes*	Ad617	Dairy environment		H+	+	+	+	+	+
124	*Listeria*	*monocytogenes*	Ad618	Munster	IV b	H+	+	+	+	+	+
125	*Listeria*	*monocytogenes*	Ad619	Cheese		H+	+	+	+	+	+
126	*Listeria*	*monocytogenes*	Ad620	Dairy environment		H+	+	+	+	+	+
127	*Listeria*	*monocytogenes*	Ad621	Dairy environment (soil)		H+	+	+	+	+	+
128	*Listeria*	*monocytogenes*	Ad622	Cheese		H+	+	+	+	+	+
129	*Listeria*	*monocytogenes*	Ad623	Breadcrumbs (dairy)	II b	H+	+	+	+	+	+
130	*Listeria*	*monocytogenes*	Ad624	Dairy environment		H+	+	+	+	+	+
131	*Listeria*	*monocytogenes*	Ad625	Dairy environment	IV b	H+	+	+	+	+	+
132	*Listeria*	*monocytogenes*	Ad626	Gorgonzola	II a	H+ (microscopic and pale colonies)	+/-	+	+	+	+

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+: CONFIRM'Lmono broth : yellow broth +/- : CONFIRM'Lmono broth : doubtfull result (brown coloring)

Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
133	*Listeria*	*monocytogenes*	Ad627	Dairy product packaging		H+	+	+	+	+	+
134	*Listeria*	*monocytogenes*	Ad629	Cantal		H+	+	+	+	+	+
135	*Listeria*	*monocytogenes*	Ad630	Cantal	II a	H+	+	+	+	+	+
136	*Listeria*	*monocytogenes*	Ad631	Dairy environment		H+	+	+	+	+	+
137	*Listeria*	*monocytogenes*	Ad632	Milk		H+	+	+	+	+	+
138	*Listeria*	*monocytogenes*	Ad634	Dairy environment (soil)		H+	+	+	+	+	+
139	*Listeria*	*monocytogenes*	Ad665	Milk	II a	H+	+	+	+	+	+
140	*Listeria*	*monocytogenes*	A00M047	Smoked salmon		H+	+	+	+	+	+
141	*Listeria*	*monocytogenes*	AER100	Chicken		H+	+	+	+	+	+
142	*Listeria*	*monocytogenes*	AER101	Milk		H+	+	+	+	+	+
143	*Listeria*	*monocytogenes*	AER102	Brine		H+	+	+	+	+	+
144	*Listeria*	*monocytogenes*	AER103	Poultry		H+	+	+	+	+	+
145	*Listeria*	*monocytogenes*	BR32	Trout		H+	+	+	+	+	+
146	*Listeria*	*monocytogenes*	CL3:29	Meat product environment		H+	+	+	+	+	+
147	*Listeria*	*monocytogenes*	LMH180	Fresh salad		H+	+	+	+	+	+
148	*Listeria*	*monocytogenes*	V2/124	Pig		H+	+	+	+	+	+
149	*Listeria*	*monocytogenes*	V5/126	Beef		H+	+	+	+	+	+

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Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

INCLUSIVITY											
No	Strain	Species	Reference	Origin	Molecular serotypes	Alternative method/ COMPASS *Listeria* Agar					
						COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA (22 h at 37°C)		
						Aspect of colonies	CONFIRM'L.mono broth		Growth	CONFIRM'L.mono broth	
							6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
150	*Listeria*	*monocytogenes*	V8/127	Beef		H+	+	+	+	+	+

st : sterile
+/-: weak growth
H- : typical blue colonies without halo
H+ : typical colonies with opacification halo

Strains tested for the renewal study of the COMPASS® Listeria Agar Enumeration method

EXCLUSIVITY										
N°	Strain	Species	Reference	Origin	Alternative method: COMPASS *Listeria* Agar					
					COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA		
					Aspect of colonies	CONFIRM'L.mono		Growth	CONFIRM'L.mono	
						6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
1	*Bacillus*	*cereus*	1	Liquid egg	st	/	/	+	-	-
2	*Bacillus*	*cereus*	8	Spanish pasta	st	/	/	+	-	-
3	*Bacillus*	*cereus*	11	Rice-puree filling	st	/	/	+	-	-
4	*Bacillus*	*cereus*	14.2	Ile flottante	st	/	/	+	-	-
5	*Bacillus*	*cereus*	16	Spaghetti with seafood	st	/	/	+	-	-
6	*Bacillus*	*cereus*	17	Rice pudding	st	/	/	+	-	-
7	*Bacillus*	*cereus*	20	Chicken-carrot sauce	st	/	/	+	-	-
8	*Bacillus*	*cereus*	21	Curry rice	st	/	/	+	-	-
9	*Bacillus*	*cereus*	22	Wheat flour	st	/	/	+	-	-
10	*Bacillus*	*cereus*	26	Raw cow's milk	st	/	/	+	-	-
11	*Bacillus*	*cereus*	30	Shelled raw shrimp	st	/	/	+	-	-
12	*Bacillus*	*cereus*	31	Butter powder	st	/	/	+	-	-
13	*Bacillus*	*cereus*	Ad1681	Dairy product	st	/	/	+	/	/
14	*Bacillus*	*cereus*	Ad420	Caseinate powder	st	/	/	+	-	-
15	*Bacillus*	*cereus*	Ad465	Salmon terrine	st	/	/	+	-	-
16	*Bacillus*	*cereus*	Ad483	Punch	st	/	/	+	-	-
17	*Bacillus*	*cereus*	Ad495	Rice flour	st	/	/	+	-	-
18	*Bacillus*	*cereus*	Ad758	Environment	st	/	/	+	-	-
19	*Bacillus*	*cereus*	Ad608	Baguette dough	st	/	/	+	-	-
20	*Bacillus*	*cereus*	Ad609	Sewer wipe, workshop, dairy product	st	/	/	+	/	/
21	*Bacillus*	*circulans*	Ad734	Dairy product	st	/	/	+	-	-
22	*Bacillus*	*coagulans*	Ad732	Dairy product	st	/	/	st	/	/
23	*Bacillus*	*licheniformis*	Ad741	Dairy product	st	/	/	+	/	/

EXCLUSIVITY										
N°	Strain	Species	Reference	Origin	Alternative method: COMPASS *Listeria* Agar					
					COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA		
					Aspect of colonies	CONFIRM'L.mono		Growth	CONFIRM'L.mono	
						6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
24	*Bacillus*	*licheniformis*	Ad798	Egg product	st	/	/	+	-	-
25	*Bacillus*	*mycoïdes*	Ad762	Milk	st	/	/	st	/	/
26	*Bacillus*	*pseudomycoides*	Ad767	/	st	/	/	+	/	/
27	*Bacillus*	*pumilus*	Ad733	Dairy product	st	/	/	+	-	-
28	*Bacillus*	*pumilus*	Ad768	Vegetables	st	/	/	+	-	-
29	*Bacillus*	*sphaericus*	Ad872	Dairy product	st	/	/	+	-	-
30	*Bacillus*	*subtilis*	Ad736	Dairy product	st	/	/	+	-	-
31	*Bacillus*	*subtilis*	Ad786	Egg product	st	/	/	+	-	-
32	*Bacillus*	*thuringiensis*	Ad773	Plants	st	/	/	+	/	/
33	*Bacillus*	*weihenstephanensis*	Ad726	Egg product	st	/	/	+	/	/
34	*Bacillus*	*weihenstephanensis*	Ad727	Egg product	st	/	/	+	-	-
35	*Bacillus*	*weihenstephanensis*	Ad778	Puree kept cold	st	/	/	+	-	-
36	*Bacillus*	*weihenstephanensis*	Ad780	Cooked dish	st	/	/	+	-	-
37	*Bacillus*	*weihenstephanensis*	Ad781	Pasteurized vegetable	st	/	/	+	-	-
38	*Bacillus*	*weihenstephanensis*	Ad782	Dairy product	st	/	/	+	-	-
39	*Enterococcus*	*avium*	Ad 183	Raw liquid egg	green zone at the point of inoculation	/	/	+	/	/
40	*Enterococcus*	*durans*	Ad 149	White ham	st	/	/	+/-	-	-
41	*Enterococcus*	*durans*	Ad 181	Pasteurized liquid egg	st	/	/	+	/	/
42	*Enterococcus*	*faecalis*	Ad 602	Raw milk	st	/	/	+	/	/
43	*Enterococcus*	*faecalis*	25	Chicken leg	st	/	/	+	-	-
44	*Enterococcus*	*faecalis*	Ad 289	Cooked dish	st	/	/	+	-	-
45	*Enterococcus*	*faecium*	Ad 180	Pasteurized liquid egg	Green colonies	/	/	+	/	/
46	*Enterococcus*	*hirae*	CNRZ1380	Cheese	green zone at the point of inoculation	/	/	+	-	-
47	*Lactococcus*	*lactis*	Ad 425	Ferment	st	/	/	+		
48	*Lactococcus*	*lactis cremoris*	91G030	Gros lait	st	/	/	st	/	/
49	*Listeria*	*grayi*	Ad 1295	Spinach	st	/	/	+	/	/
50	*Listeria*	*grayi*	Ad 1504	Salmon terrine	green zone at the point of inoculation	/	/	+	/	/

EXCLUSIVITY										
N°	Strain	Species	Reference	Origin	Alternative method: COMPASS *Listeria* Agar					
					COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA		
					Aspect of colonies	CONFIRM'L.mono		Growth	CONFIRM'L.mono	
						6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
51	*Listeria*	*innocua*	Ad 643	Calf paupiette	H-	/	/	+	+	+
52	*Listeria*	*innocua*	Ad 644	Raw baguette	H-	/	/	+	-	-
53	*Listeria*	*innocua*	Ad 653	Environment	H-	/	/	+	+	+
54	*Listeria*	*innocua*	Ad 654	Dairy product	H-	/	/	+	+	+
55	*Listeria*	*innocua*	Ad 655	Brine	H-	/	/	+	+	+
56	*Listeria*	*innocua*	Ad 656	Raw milk cheese	H-	/	/	+	+	+
57	*Listeria*	*innocua*	Ad 657	Cantal	H-	/	/	+	-	-
58	*Listeria*	*innocua*	Ad 660	Breadcrumbs	H-	/	/	+	+	+
59	*Listeria*	*innocua*	Ad 661	Pont L'Eveque (cheese)	H-	/	/	+	/	/
60	*Listeria*	*innocua*	Ad 663	Environmental sample	H-	/	/	+	+	+
61	*Listeria*	*innocua*	Ad 671	Smoked bacon	H-	/	/	+	+	+
62	*Listeria*	*innocua*	Ad 1176	Spinach	H-	/	/	+	+	+
63	*Listeria*	*innocua*	Ad 1177	Mushrooms	H-	/	/	+	+	+
64	*Listeria*	*innocua*	Ad 1233	Breaded cod fillet	H-	/	/	+	+	+
65	*Listeria*	*innocua*	Ad 1230	Saint James and prawns	H-	/	/	+	/	/
66	*Listeria*	*ivanovii*	Ad 466	Veal kidneys	H+	-	-	+	/	/
67	*Listeria*	*ivanovii*	Ad 616	Dairy environment (floor)	H+	-	-	+	/	/
68	*Listeria*	*ivanovii*	Ad 648	Collection	H+	-	-	+	-	-
69	*Listeria*	*ivanovii*	Ad 662	Packaging	H+	-	-	+	-	-
70	*Listeria*	*ivanovii*	Ad 675	Marbled cheese	H+	-	-	+	-	-
71	*Listeria*	*ivanovii*	Ad 676	Pork cheek	H+	-	-	+	/	/
72	*Listeria*	*ivanovii*	Ad 677	Shrimps	H+	-	-	+	/	/
73	*Listeria*	*ivanovii*	Ad 991	Roquefort	H+	-	-	+	-	-
74	*Listeria*	*ivanovii*	Ad 1288	Sheep's milk	H+	-	-	+	/	/
75	*Listeria*	*ivanovii*	Ad 1289	Raw milk cheese	H+	-	-	+	-	-
76	*Listeria*	*ivanovii*	Ad 1290	Milk powder	H+	-	-	+	/	/
77	*Listeria*	*ivanovii*	Ad 1291	Poultry	H+	-	-	+	-	-
78	*Listeria*	*ivanovii*	Ad 1292	Merguez	H+	-	-	+	/	/

EXCLUSIVITY										
N°	Strain	Species	Reference	Origin	Alternative method: COMPASS *Listeria* Agar					
					COMPASS *Listeria* Agar (22 h at 37°C)			TSYEA		
					Aspect of colonies	CONFIRM'L.mono		Growth	CONFIRM'L.mono	
						6 h at 37°C	22 h at 37°C		6 h at 37°C	22 h at 37°C
79	*Listeria*	*ivanovii*	Ad 1308	Sheep meat	H+	-	-	+	/	/
80	*Listeria*	*ivanovii*	Ad 1748	Goat's milk	H+	-	-	+	-	-
81	*Listeria*	*ivanovii*	Ad 1752	Merguez	H+	-	-	+	-	-
82	*Listeria*	*ivanovii*	Ad 1768	Sheep's milk	H+	-	-	+	-	-
83	*Listeria*	*ivanovii*	BR15	Fish farming environment, pond wall	H+	-	-	+	-	-
84	*Listeria*	*ivanovii*	L41	Raw milk	H+	-	-	+	-	-
85	*Listeria*	*ivanovii sps londoniensis*	CIP103505	/	H+	-	-	+	-	-
86	*Listeria*	*seeligeri*	Ad 649	Cheese	H-	/	/	+	/	/
87	*Listeria*	*seeligeri*	Ad 651	Environment	H-	/	/	+	-	-
88	*Listeria*	*seeligeri*	Ad 652	Foot bath	H-	/	/	+	-	-
89	*Listeria*	*seeligeri*	Ad 674	Munster	H-	/	/	+	-	-
90	*Listeria*	*seeligeri*	Ad 1237	Raw cow's milk	H-	/	/	+	-	-
91	*Listeria*	*seeligeri*	Ad 1293	Parsley	H-	/	/	+	/	/
92	*Listeria*	*seeligeri*	BR1	Trout	H-	/	/	+	-	-
93	*Listeria*	*seeligeri*	BR18	Fish farming environment, pond wall	H-	/	/	+	-	-
94	*Listeria*	*seeligeri*	BR4	Fish	H-	/	/	+	-	-
95	*Listeria*	*welshimeri*	Ad 1221	Sausages with herbs	H-	/	/	+	/	/
96	*Listeria*	*welshimeri*	Ad 1175	Cantonese rice	H-	/	/	+	+	+
97	*Listeria*	*welshimeri*	Ad 1194	Herb sausage	H-	/	/	+	+	+
98	*Listeria*	*welshimeri*	Ad 1669	Saithe steak	H-	/	/	+	/	/
99	*Streptococcus*	*bovis*	92L613	Cheese	st	/	/	st	/	/
100	*Streptococcus*	*salivarius*	Ad 441	Milk	st	/	/	st	/	/

Appendix 16 - Artificial contamination of samples - *Listeria monocytogenes* - Half Fraser Protocol- 37°C

Half Fraser Protocol- 37°C (*Listeria monocytogenes*)												
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2019	724	Sandwich thon œuf	Tuna and egg sandwich	*L.monocytogenes* Ad1186	Breaded codfish fillet	Seeding 48 h 3±2°C	/	2,0	+	+	1	a
2019	725	Sandwich jambon Emmental	Ham and Emmental Sandwich	*L.monocytogenes* Ad270	Rosette de Lyon	Seeding 48 h 3±2°C	/	1,8	+	+	1	a
2019	726	Sandwich jambon Emmental	Ham and Emmental Sandwich	*L.monocytogenes* Ad271	Bacon	Seeding 48 h 3±2°C	/	2,8	+	+	1	a
2019	728	Sandwich saumon cuit et fumé	Cooked and smoked salmon sandwich	*L.monocytogenes* Ad1185	Filet de Panga	Seeding 48 h 3±2°C	/	2,2	+	+	1	a
2018	8610	Cassolette de crabes aux épices	Crab casserole with spices	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	3,4	+	+	1	b
2018	8613	Paëlla	Paella	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	3,4	+	+	1	b
2018	8614	Paëlla	Paella	*L.innocua* Ad1675	Fish	Seeding 48 h 3±2°C	/	3,0	-	-	1	b
2018	8615	Pizza jambon fromage	Ham and cheese pizza	*L.monocytogenes* Ad2154	Pâté	Seeding 48 h 3±2°C	/	1,6	+	+	1	b
2018	8616	Pizza jambon fromage	Ham and cheese pizza	*L.monocytogenes* Ad1494	Sausage	Seeding 48 h 3±2°C	/	2,4	+	+	1	b
2018	8617	Quiche Lorraine	Quiche Lorraine	*L.monocytogenes* Ad2154	Pâté	Seeding 48 h 3±2°C	/	1,6	+	+	1	b
2018	8618	Quiche Lorraine	Quiche Lorraine	*L.welshimeri* Ad1671	Pork	Seeding 48 h 3±2°C	/	4,0	-	-	1	b
2018	8619	Quiche saumon brocolis	Salmon and broccoli quiche	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	3,4	+	+	1	b
2018	8620	Quiche saumon brocolis	Salmon and broccoli quiche	*L.monocytogenes* Ad1279	Smoked fish	Seeding 48 h 3±2°C	/	3,0	+	+	1	b
2019	79	Quiche Lorraine	Quiche Lorraine	*L.monocytogenes* Ad2154+*L.welshimeri* Ad1670	Green pepper pâté +Rosette	Seeding 48 h 3±2°C	/	0,4+1,2	+	+	1	b
2019	80	Pizza jambon fromage	Pizza ham and cheese	*L.monocytogenes* Ad2154+*L.welshimeri* Ad1670	Green pepper pâté +Rosette	Seeding 48 h 3±2°C	/	0,4+1,2	+	+	1	b
2019	529	Couscous 3 viandes	Couscous 3 meats	*L.monocytogenes* Ad1494	Strasbourg Sausage	Seeding 48 h 3±2°C	/	1,0	+	+	1	b
2019	530	Croissant au jambon	Ham Croissant	*L.monocytogenes* Ad1494	Strasbourg Sausage	Seeding 48 h 3±2°C	/	1,0	-	-	1	b
2019	531	Quiche Lorraine	Quiche Lorraine	*L.monocytogenes* Ad669	Rillettes	Seeding 48 h 3±2°C	/	0,6	+	+	1	b
2018	8621	Eclair vanille	Pastry (Vanilla éclair)	*L.monocytogenes* Ad1195	Egg products	Seeding 48 h 3±2°C	/	5,2	+	+	1	c
2018	8622	Eclair vanille	Pastry (Vanilla éclair)	*L.monocytogenes* Ad1757	Egg products	Seeding 48 h 3±2°C	/	1,8	+	+	1	c
2018	8623	Eclair chocolat	Pastry (Chocolate éclair)	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,6	-	-	1	c
2018	8624	Eclair chocolat	Pastry (Chocolate éclair)	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,8	-	-	1	c
2018	8625	Flan	Flan	*L.monocytogenes* JL2862+*L.innocua* Ad644	Egg white+ Pastry	Seeding 48 h 3±2°C	/	1,0+1,4	+	+	1	c
2018	8626	Tortilla espagnole aux oignons	Spanish tortilla with onions	*L.monocytogenes* Ad1195	Egg products	Seeding 48 h 3±2°C	/	5,2	+	+	1	c
2018	8627	Tortilla espagnole	Spanish Tortilla	*L.monocytogenes* JL2862	Egg white	Seeding 48 h 3±2°C	/	3,2	+	+	1	c
2018	8628	Tortilla aux oignons	Tortilla with onions	*L.innocua* Ad1277	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,8	+	+	1	c
2018	8629	Tortilla aux oignons	Tortilla with onions	*L.monocytogenes* Ad1757+*L.welshimeri* Ad1270	Egg products + Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,0+1,6	+	+	1	c
2018	8630	Tortilla espagnole aux oignons	Spanish tortilla with onions	*L.monocytogenes* Ad1195+*L.innocua* Ad644	Egg products + Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,0+1,4	+	+	1	c
2018	8631	Clafoutis aux cerises griottes	Morello cherry clafoutis	*L.monocytogenes* Ad1757	Egg products	Seeding 48 h 3±2°C	/	1,8	+	+	1	c
2018	8632	Clafoutis aux cerises griottes	Morello cherry clafoutis	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,6	-	-	1	c
2018	8633	Crème aux œufs vanille	Vanilla egg cream	*L.welshimeri* Ad1270	Poultry slaughterhouse	Seeding 48 h 3±2°C	/	1,6	-	-	1	c
2018	8634	Crème aux œufs vanille	Vanilla egg cream	*L.monocytogenes* Ad1195+*L.innocua* Ad1277	Egg products + Poultry slaughterhouse	Seeding 48 h 3±2°C	/	2,0+2,0	+	+	1	c
2018	8635	Ile flottante	Ile flottante	*L.monocytogenes* JL2862 +*L.innocua* Ad644	Egg white + Pastry	Seeding 48 h 3±2°C	/	1,0+1,4	+	+	1	c
2019	74	Bœuf charolais au vin du Médoc	Charolais beef with Médoc wine	*L.monocytogenes* Ad1218+*L.innocua* Ad643	Raw beef + veal olives	Seeding 48 h 3±2°C	/	6,2+1,0	+	+	2	b
2019	75	Bœuf charolais au vin du Médoc	Charolais beef with Médoc wine	*L.monocytogenes* Ad1208+*L.welshimeri* Ad1202	Frozen minced steak + minced veal	Seeding 48 h 3±2°C	/	4,8+1,8	-	-	2	b
2019	76	Blanquette de veau à l'ancienne	Blanquette of veal in the old style	*L.monocytogenes* Ad1206+*L.innocua* Ad643	Frozen minced steak + veal olives	Seeding 48 h 3±2°C	/	1,4+1,0	+	+	2	b

Half Fraser Protocol- 37°C (*Listeria monocytogenes*)												
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2019	77	Blanquette de veau à l'ancienne	Blanquette of veal in old fashioned style	*L.monocytogenes* Ad1218+*L.welshimeri* Ad1202	Minced steak + minced veal	Seeding 48 h 3±2°C	/	6,2+1,8	+	+	2	b
2019	78	Paupiette de veau sauce tomate	Paupiette of veal with tomato sauce	*L.monocytogenes* Ad1208+*L.innocua* Ad643	Frozen minced steak + veal olives	Seeding 48 h 3±2°C	/	4,8+1,0	-	-	2	b
2019	971	Bœuf bourguignon et ses tagliatelles	Boeuf bourguignon with tagliatelle	*L.monocytogenes* Ad1206	Minced steak	Seeding 48 h 3±2°C	/	4,2	+	+	2	b
2019	972	Bœuf bourguignon et ses tagliatelles	Boeuf bourguignon with tagliatelle	*L.monocytogenes* Ad265	Ox tongue	Seeding 48 h 3±2°C	/	1,2	+	+	2	b
2019	973	Escalope de dinde milanaise	Turkey escalope Milanese	*L.monocytogenes* Ad2453	Poultry	Seeding 48 h 3±2°C	/	2,4	+	+	2	b
2019	974	Blanquette de veau et son riz blanc	Blanquette of veal and its white rice	*L.monocytogenes* Ad1206	Minced steak	Seeding 48 h 3±2°C	/	4,2	+	+	2	b
2019	975	Blanquette de veau et son riz blanc	Blanquette of veal and its white rice	*L.monocytogenes* Ad265	Ox tongue	Seeding 48 h 3±2°C	/	1,2	+	+	2	b
2019	82	Camembert au lait cru	Raw milk cheese (Camembert)	*L.monocytogenes* Ad2757	Dairy product	Seeding 48 h 3±2°C	/	4,6	-	-	3	a
2019	83	Camembert au lait cru	Raw milk cheese (Camembert)	*L.monocytogenes* Ad2858	Milk	Seeding 48 h 3±2°C	/	2,2	+	+	3	a
2019	84	Emmental français au lait cru	Raw milk cheese (French Emmental)	*L.monocytogenes* Ad1785	Ewe's milk	Seeding 48 h 3±2°C	/	1,4	+	+	3	a
2019	85	Emmental français au lait cru	Raw milk cheese (French Emmental)	*L.monocytogenes* Ad2757	Dairy product	Seeding 48 h 3±2°C	/	4,6	+	+	3	a
2019	532	Brie de Meaux au lait cru	Raw milk cheese (Brie de Meaux)	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48 h 3±2°C	/	0,6	+	+	3	a
2019	533	Brie de Meaux au lait cru	Raw milk cheese (Brie de Meaux)	*L.monocytogenes* Ad2603	Dairy product	Seeding 48 h 3±2°C	/	0,6	-	-	3	a
2019	534	Roquefort au lait cru	Raw milk cheese (Roquefort)	*L.monocytogenes* Ad2642	Emmental	Seeding 48 h 3±2°C	/	0,4	-	-	3	a
2019	730	Emmental français au lait cru	Raw milk cheese (French Emmental)	*L.monocytogenes* Ad665	Raw milk	Seeding 48 h 3±2°C	/	2,4	-	-	3	a
2019	731	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	*L.monocytogenes* Ad977	Dairy product	Seeding 48 h 3±2°C	/	1,8	+	+	3	a
2019	1180	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	L.monocytogenes Ad1201	Cheese (Brie de Meaux)	Seeding 48 h 3±2°C	/	3,0	+	+	3	a
2019	1181	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	L.monocytogenes Ad1236	Raw milk cheese (Gouda)	Seeding 48 h 3±2°C	/	4,4	+	+	3	a
2019	1183	Brie de meaux au lait cru	Raw milk cheese (Brie de Meaux)	L.monocytogenes Ad1205	Cheese (Morbier)	Seeding 48 h 3±2°C	/	5,2	-	-	3	a
2019	535	Lait cru fermier	Farmhouse raw milk	*L.monocytogenes* Ad2642	Emmental râpé	Seeding 48 h 3±2°C	/	0,4	-	-	3	b
2019	536	Lait cru fermier pasteurisé	Raw milk pasteurized	*L.monocytogenes* Ad1236	Raw milk cheese (Gouda)	Seeding 48 h 3±2°C	/	0,6	+	+	3	b
2019	733	Beurre doux au lait cru	Sweet butter with raw milk	*L.monocytogenes* Ad665	Raw milk	Seeding 48 h 3±2°C	/	2,4	+	+	3	b
2019	734	Beurre cru demi-sel	Raw semi-salted butter	*L.monocytogenes* Ad977	Dairy product	Seeding 48 h 3±2°C	/	1,8	-	+	3	b
2019	735	Beurre cru demi-sel	Raw semi-salted butter	*L.monocytogenes* Ad1205	Cheese (Morbier)	Seeding 48 h 3±2°C	/	0,8	+	+	3	b
2019	86	Lait frais entier pasteurisé	Fresh pasteurized whole milk	*L.monocytogenes* Ad2858	Milk	Seeding 48 h 3±2°C	/	2,2	+	+	3	c
2019	87	Lait frais demi-écrémé pasteurisé	Fresh pasteurized semi-skimmed milk	*L.monocytogenes* Ad1785	Ewe's milk	Seeding 48 h 3±2°C	/	1,4	+	+	3	c
2019	88	Lait frais de montagne pasteurisé	Fresh pasteurized mountain milk	*L.monocytogenes* Ad2757	Dairy product	Seeding 48 h 3±2°C	/	4,6	+	+	3	c
2019	537	Lait frais entier pasteurisé	Fresh pasteurized whole milk	*L.monocytogenes* Ad2603	Dairy product	Seeding 48 h 3±2°C	/	0,6	+	+	3	c
2019	538	Lait frais entier pasteurisé	Fresh pasteurized whole milk	*L.monocytogenes* Ad2642	Emmental	Seeding 48 h 3±2°C	/	0,4	+	+	3	c
2019	736	Coulommiers au lait pasteurisé	Coulommiers (pasteurized milk cheese)	*L.monocytogenes* Ad665	Raw milk	Seeding 48 h 3±2°C	/	2,4	+	+	3	c
2019	737	Cousteron au lait pasteurisé	Cousteron (pasteurized milk cheese)	*L.monocytogenes* Ad977	Dairy product	Seeding 48 h 3±2°C	/	1,8	+	+	3	c
2019	3341	Filet de lieu noir	Fillet of saithe	*L.monocytogenes* Ad1187	Squid	Seeding 48 h 3±2°C	/	0,8	-	-	4	a
2019	4170	Pavé de saumon	Salmon steak	*L.monocytogenes* Ad1279+*L.innocua* Ad1233	Smoked fish + breaded codfish fillet	Seeding 72 h 3±2°C	/	0,6	+	+	4	a
2019	4171	Filet de julienne	Fillet of julienne	*L.monocytogenes* Ad1412+*L.innocua* Ad1674	Smoked salmon + smoked salmon	Seeding 72 h 3±2°C	/	1,4	+	+	4	a
2019	4172	Dos de cabillaud	Back of cod	*L.innocua* Ad1233	Breaded codfish fillet	Seeding 72 h 3±2°C	/	1,8	-	-	4	a
2019	4173	Filet d'églefin	Haddock fillet	*L.innocua* Ad1674	Smoked salmon	Seeding 72 h 3±2°C	/	1,8	-	-	4	a
2019	4174	Filet d'églefin	Haddock fillet	*L.welshimeri* Ad1669	Saithe steak	Seeding 72 h 3±2°C	/	2,4	-	-	4	a
2019	519	Saumon fumé de Norvège	Smoked salmon from Norway	*L.innocua* Ad1674	Smoked salmon	Seeding 48 h 3±2°C	/	0,4	-	-	4	b
2019	520	Truite fumée au bois de hêtre	Smoked trout with beech wood	*L.welshimeri* Ad1669	Saithe steak	Seeding 48 h 3±2°C	/	2,0	-	-	4	b
2019	546	Truite fumée	Smoked trout	*L.innocua* Ad1674	Smoked salmon	Seeding 48 h 3±2°C	/	0,4	-	-	4	b
2019	3061	Harengs fumés	Smoked herring	*L.monocytogenes* Ad993	Trout	Seeding 48 h 3±2°C	/	2,2	-	-	4	b
2019	3343	Filets de maquereaux fumés au bois de hêtre	Smoked mackerel fillets with beech wood	*L.monocytogenes* Ad1187	Squid	Seeding 48 h 3±2°C	/	0,8	-	-	4	b
2019	4175	Emincés de thon fumé aux zestes de citron et au thym	Sliced smoked tuna with lemon zest and thyme	*L.monocytogenes* Ad2599+*L.innocua* Ad1233	Salmon + breaded codfish fillet	Seeding 72 h 3±2°C	/	1,4	+	+	4	b
2019	4176	Emincés de saumon fumé aux 5 baies fumés au bois de hêtre	Smoked salmon slices with 5 berries smoked in beech wood	*L.monocytogenes* Ad1412+*L.welshimeri* Ad1669	Smoked salmon + Saithe steak	Seeding 72 h 3±2°C	/	2,0	-	-	4	b

Half Fraser Protocol- 37°C (*Listeria monocytogenes*)												
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2019	**4179**	**Filets de maquereaux fumés au bois de hêtre au poivre**	**Smoked mackerel fillets with beech wood and pepper**	*L.innocua* Ad1233	Breaded codfish fillet	Seeding 72 h 3±2°C	/	1,8	-	-	4	b
2019	**4180**	**Filets de maquereaux fumés au bois de hêtre au poivre**	**Smoked mackerel fillets with beech wood and pepper**	*L.innocua* Ad1674	Smoked salmon	Seeding 72 h 3±2°C	/	1,8	-	-	4	b
2019	**3346**	**Accras aux crevettes à la créole**	**Shrimp accras à la créole**	*L.monocytogenes* Ad1187	Squid	Seeding 48 h 3±2°C	/	0,8	-	-	4	c
2019	**4181**	**Tielles Sétois**	**Tielles Sétois**	*L.monocytogenes* Ad1279+*L.innocua* Ad1674	Smoked fish + smoked salmon	Seeding 72 h 3±2°C	/	0,8	+	+	4	c
2019	**4182**	**Plat préparé de pavé de saumon**	**Prepared dish of salmon steak**	*L.monocytogenes* Ad1412+*L.welshimeri* Ad1669	Smoked salmon + Saithe steak	Seeding 72 h 3±2°C	/	2,0	+	+	4	c
2019	**93**	**Epinards**	**Spinach**	*L.monocytogenes* Ad2598	Salad	Seeding 48 h 3±2°C	/	4,2	+	+	5	a
2019	**94**	**Mélange de jeunes pousses**	**Mixed baby greens**	*L.monocytogenes* Ad2598	Salad	Seeding 48 h 3±2°C	/	4,2	+	+	5	a
2019	**95**	**Mélange de jeunes pousses**	**Mixed baby greens**	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,4	+	+	5	a
2019	**3068**	**Avocat**	**Avocado**	*L.monocytogenes* Ad1238	Vegetables	Seeding 48 h 3±2°C	/	1,2	+	+	5	a
2019	**3069**	**Tomate**	**Tomato**	*L.monocytogenes* Ad1212	Mushrooms	Seeding 48 h 3±2°C	/	2,4	+	+	5	a
2019	**3351**	**Carottes râpées**	**Grated carrots**	*L.monocytogenes* Ad1672	Zucchini	Seeding 48 h 3±2°C	/	2,8	-	-	5	b
2019	**3352**	**Carottes râpées**	**Grated carrots**	*L.monocytogenes* Ad1680	Frozen celery	Seeding 48 h 3±2°C	/	5,2	-	-	5	b
2019	**3064**	**Poêlée de trois légumes**	**Pan-fried three vegetables**	*L.monocytogenes* Ad1212	Mushrooms	Seeding 48 h 3±2°C	/	2,4	+	+	5	c
2019	**3065**	**Poêlée de trois légumes**	**Fried three vegetables**	*L.monocytogenes* Ad1238	Vegetables	Seeding 48 h 3±2°C	/	1,2	-	+	5	c
2019	**3066**	**Poêlée de légumes**	**Fried vegetables**	*L.monocytogenes* Ad1303	Pepper	Seeding 48 h 3±2°C	/	2,0	+	+	5	c
2019	**3067**	**Poêlée de légumes**	**Pan-fried vegetables**	*L.monocytogenes* Ad1212	Mushrooms	Seeding 48 h 3±2°C	/	2,4	+	+	5	c
2019	**3353**	**Tartare de légumes**	**Vegetable Tartar**	*L.monocytogenes* Ad1672+*L.seeligeri* Ad1293	Zucchini + chopped parsley	Seeding 48 h 3±2°C	/	4,4	+	+	5	c
2019	**3354**	**Tartare de légumes**	**Vegetable Tartar**	*L.monocytogenes* Ad1680+*L.welshimeri* Ad1668	Frozen celery + stuffed vegetables	Seeding 48 h 3±2°C	/	5,4	+	+	5	c
2019	**3355**	**Gratin de quinoa et boulgour de légumes**	**Quinoa and vegetable bulgur gratin**	*L.monocytogenes* Ad1672+*L.welshimeri* Ad1668	Zucchini+ stuffed vegetables	Seeding 48 h 3±2°C	/	3,4	+	+	5	c
2019	**3356**	**Houmous extra au basilic**	**Extra hummus with basil**	*L.monocytogenes* Ad1680+*L.seeligeri* Ad1293	Frozen celery+ chopped parsley	Seeding 48 h 3±2°C	/	6,4	+	+	5	c
2019	**3357**	**Tomates semi-séchées**	**Semi-dried tomatoes**	*L.monocytogenes* Ad1672+*L.seeligeri* Ad1293	Zucchini + chopped parsley	Seeding 48 h 3±2°C	/	4,4	+	+	5	c
2019	**540**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	1,2	+	+	6	a
2019	**542**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	*L.monocytogenes* Ad1191	Fish dry food	Seeding 48 h 3±2°C	/	0,6	-	-	6	a
2019	**543**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	*L.monocytogenes* Ad1191	Fish dry food	Seeding 48 h 3±2°C	/	0,6	-	-	6	a
2019	**544**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,0	+	+	6	a
2019	**545**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,0	+	+	6	a
2019	**1188**	**Eau rinçage (préparation chantilly)**	**Rinsing water (whipped cream)**	L.monocytogenes Ad1201	Cheese (Brie de Meaux)	Seeding 48 h 3±2°C	/	3,0	+	+	6	a
2019	**1189**	**Eau rinçage (fromage)**	**Rinsing water (cheese)**	L.monocytogenes Ad1205	Cheese (Morbier)	Seeding 48 h 3±2°C	/	5,2	+	+	6	a
2019	**1190**	**Eau de rinçage marmite cuisson compote pomme rhubarbe**	**Rinsing water for cooking apple rhubarb compote**	L.monocytogenes Ad1493	Cube red peppers	Seeding 48 h 3±2°C	/	3,0	+	+	6	a
2019	**1191**	**Eau de rinçage marmite cuisson soupe haricots verts**	**Rinse water for cooking green bean soup**	L.monocytogenes Ad1493	Cube red peppers	Seeding 48 h 3±2°C	/	3,0	-	-	6	a
2019	**3361**	**Eau de rinçage bol (barres de céréales)**	**Rinsing water bowl (cereal bars)**	*L.monocytogenes* Ad546	Buckwheat flour	Seeding 48 h 3±2°C	/	4,2	+	+	6	a
2019	**3362**	**Eau de rinçage Stéphan (barre de céréales)**	**Rinsing water Stephan (cereal bar)**	*L.monocytogenes* Ad1672	Zucchini	Seeding 48 h 3±2°C	/	2,8	+	+	6	a
2019	**3363**	**Eau de rinçage (saucisses cocktail)**	**Rinsing water (cocktail sausages)**	*L.monocytogenes* Ad268	Vendée ham	Seeding 48 h 3±2°C	/	3,2	+	+	6	a
2019	**4580**	**Eau de rinçage poussoir après prod. Saucisson**	**Rinsing water (pusher after production) Sausage**	*L.monocytogenes* Ad1259	Pork environment pork	Seeding 48 h 3±2°C	/	1,8	+	+	6	a
2019	**4581**	**Eau de rinçage ustensiles knacks porc**	**Rinsing water for pork knack utensils**	*L.monocytogenes* Ad1261	Environnement porcs	Seeding 48 h 3±2°C	/	1,0	+	+	6	a
2019	**4582**	**Eau de rinçage ustensiles knacks porc**	**Rinsing water for pork knack utensils**	*L.monocytogenes* Ad1263	Pork environment pork	Seeding 48 h 3±2°C	/	3,0	+	+	6	a
2019	**521**	**Déchets découpe saumon**	**Salmon cutting waste**	*L.innocua* Ad1674	Salmon fumé	Seeding 48 h 3±2°C	/	0,4	-	-	6	b
2019	**522**	**Déchets poisson avec épices**	**Fish waste with spices**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48 h 3±2°C	/	2,0	-	-	6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	*L.welshimeri* Ad1669	Saithe steak	Seeding 48 h 3±2°C	/	2,0	-	-	6	b

Half Fraser Protocol- 37°C (*Listeria monocytogenes*)												
Year	No	Product (French)	Product (English name)	Artificial contamination					Global result		Category	Type
				Strain	Origin	Injury applied	Injury evaluation	Inoculation level (CFU/sample)	22 h	48 h		
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	1,2	+	+	6	b
2019	**525**	**Déchets poisson**	**Fish waste**	*L.monocytogenes* Ad2599	Salmon	Seeding 48 h 3±2°C	/	1,2	+	+	6	b
2019	**526**	**Déchets mêlée de jambon végétal**	**Vegetable ham waste**	*L.seeligeri* Ad1754	Cubes zucchini	Seeding 48 h 3±2°C	/	0,4	-	-	6	b
2019	**527**	**Déchets veggie**	**Veggie waste**	*L.seeligeri* Ad1754	Cubes zucchini	Seeding 48 h 3±2°C	/	0,4	-	-	6	b
2019	**528**	**Déchets veggie**	**Veggie waste**	*L.monocytogenes* Ad2643	Salad	Seeding 48 h 3±2°C	/	1,0	+	+	6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (fish cut with spices)**	L.monocytogenes Ad994	Trout	Seeding 48 h 3±2°C	/	1,6	+	+	6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	L.monocytogenes Ad994	Trout	Seeding 48 h 3±2°C	/	1,6	+	+	6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	L.monocytogenes Ad995	Smoked trout	Seeding 48 h 3±2°C	/	3,0	+	+	6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	L.monocytogenes Ad995	Smoked trout	Seeding 48 h 3±2°C	/	3,0	+	+	6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	L.monocytogenes Ad994	Trout	Seeding 48 h 3±2°C	/	1,6	+	+	6	b
2019	**3364**	**Chiffonnette Stéphan avant nettoyage (barre de céréales)**	**Stéphan's rag before cleaning (cereal bar)**	*L.monocytogenes* Ad1680	Frozen celery	Seeding 48 h 3±2°C	/	5,2	+	+	6	c
2019	**3365**	**Chiffonnette bol avant nettoyage (barres de céréales)**	**Bowl wipe before cleaning (cereal bar)**	*L.monocytogenes* Ad546	Buckwheat flour	Seeding 48 h 3±2°C	/	4,2	+	+	6	c
2019	**3366**	**Chiffonnette Stéphan avant nettoyage (barre de céréales)**	**Stéphan wipe before cleaning (cereal bar)**	*L.monocytogenes* Ad546	Buckwheat flour	Seeding 48 h 3±2°C	/	4,2	+	+	6	c
2019	**3367**	**Chiffonnette bol avant nettoyage (barres de céréales)**	**Rags before cleaning (cereal bars)**	*L.monocytogenes* Ad546	Buckwheat flour	Seeding 48 h 3±2°C	/	4,2	+	+	6	c
2019	**3368**	**Chiffonnette avant nettoyage (saucisses cocktail)**	**Cleaning cloth before cleaning (cocktail sausages)**	*L.monocytogenes* Ad268	Vendée ham	Seeding 48 h 3±2°C	/	3,2	+	+	6	c
2019	**3369**	**Chiffonnette avant nettoyage (saucisses cocktail)**	**Cleaning cloth before cleaning (cocktail sausages)**	*L.monocytogenes* Ad268	Vendée ham	Seeding 48 h 3±2°C	/	3,2	+	+	6	c

Appendix 17 - Sensitivity study: raw data - *Listeria monocytogenes* - Half Fraser Protocol- 37°C

H-: colonies without halo
H+: colonies with halo
d: doubtful colonies
st: sterile plates

COMPOSITE FOOD - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
Year	No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C										Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples			
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**				
2019	180	Salade pamplemousse	Grapefruit salad	-	+d(2col)	H+	+	*L.monocytogenes*	+	st	-			-	-	**ND**	**ND**	**-**		1	a
2019	181	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	-	-		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**			1	a
2019	182	Sandwich jambon crudités œuf	Ham and egg sandwich	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**		1	a
2019	183	Sandwich poulet crudités	Chicken and vegetables sandwich	st	st	st	st		-	H-d	H-d	-	Gram -	-	-	**NA**	**NA**	**-**		1	a
2019	184	Salade de riz	Rice salad	st	st	st	st		-	-	-			-	-	**NA**	**NA**	**-**		1	a
2019	353	Sandwich jambon cheddar	Ham and cheddar sandwich	-	-	st	-		-	-	-			-	-	**NA**	**NA**	**-**		1	a
2019	354	Sandwich jambon Emmental	Ham and Emmental sandwich	st	st	st	st		-	st	-			-	-	**NA**	**NA**	**-**		1	a
2019	355	Sandwich jambon crudités œuf	Ham and egg sandwich	st	st	H+	+	*L.monocytogenes*	+	H+	H+ni	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	a
2019	**724**	**Sandwich thon œuf**	**Tuna and egg sandwich**	st	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**			1	a
2019	**725**	**Sandwich jambon Emmental**	**Emmental ham sandwich**	st	st	H+	+	*L.monocytogenes*	+	-	-			-	-	**ND**	**ND**	**-**		1	a
2019	**726**	**Sandwich jambon Emmental**	**Ham and Emmental sandwich**	st	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**			1	a
2019	**728**	**Sandwich saumon cuit et fumé**	**Cooked and smoked salmon sandwich**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+dni	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	a
2019	1396	Piémontaise au jambon	Deli salad (Piémontaise)	st	-	st	st		-	st	-			-	-	**NA**	**NA**	-		1	a
2019	1397	Taboulé au poulet rôti	Tabbouleh with roasted chicken	st	-	st	-		-	st	-			-	-	**NA**	**NA**	-		1	a
2019	2206	Nigiri saumon	Salmon Nigiri	-	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**			1	a
2019	2207	Piémontaise	Deli salad (Piémontaise)	-	-	st	st		-	st	-			-	-	**NA**	**NA**	-		1	a
2019	2208	Coquille au crabe légumes	Crab and vegetable shell	-	st	st	st		-	-	H-d	-	Catalase -	-	-	**NA**	**NA**	-		1	a
2019	3514	Sandwich Suédois (saumon)	Swedish sandwich (salmon)	-	-	-	-		-	H-d	H-d			-	-	**NA**	**NA**	-		1	a
2019	3515	Salade thon riz	Tuna and rice salad	-	-	st	st		-	st	st			-	-	**NA**	**NA**	-		1	a
2023	**4756**	**Salade de pâtes et surimi**	**Pasta and surimi salad**	-	-	-	-		-	-	-			-	-	**NA**	**NA**	**-**		1	a
2018	**8610**	**Cassolette de crabes aux épices**	**Crab casserole with spices**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	b
2018	**8613**	**Paëlla**	**Paella**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	b
2018	**8614**	**Paëlla**	**Paella**	H-	+	H-	+	*L.innocua*	-	H-	H-	+	*L.innocua*	-	-	**NA**	**NA**	**-**		1	b
2018	**8615**	**Pizza jambon fromage**	**Ham and cheese pizza**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	b
2018	**8616**	**Pizza jambon fromage**	**Ham and cheese pizza**	st	-	H+d/H-d	-	*Enterococcus faecium*	-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**			1	b
2018	**8617**	**Quiche Lorraine**	**Quiche Lorraine**	H+	+	H+	+	*L.monocytogenes*	+	st	-			-	-	**ND**	**ND**	**-**		1	b
2018	**8618**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	+	*L.welshimeri*	-	-	**NA**	**NA**	**-**		1	b
2018	**8619**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	b
2018	**8620**	**Quiche saumon brocolis**	**Salmon and broccoli quiche**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	b
2019	**79**	**Quiche Lorraine**	**Quiche Lorraine**	H-	+	H-	+	*L.welshimeri*	-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**			1	b
2019	**80**	**Pizza jambon fromage**	**Pizza ham and cheese**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+d/H-	H+/H-	+/+	*L.monocytogenes/ L.welshimeri*	+	+	**PA**	**PA**			1	b
2019	**529**	**Couscous 3 viandes**	**Couscous 3 meats**	H+	+	H+	+	*L.monocytogenes*	+	st	st			-	-	**ND**	**ND**	**-**		1	b
2019	**530**	**Croissant au jambon**	**Ham Croissant**	-	st	st	st		-	st	H-d	-		-	-	**NA**	**NA**	**-**		1	b
2019	**531**	**Quiche Lorraine**	**Quiche Lorraine**	-	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**			1	b
2019	738	Pizza jambon fromage	Ham and cheese pizza	-	st	-	-		-	-	-			-	-	**NA**	**NA**	**-**		1	b
2019	739	Quiche Lorraine	Quiche Lorraine	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**		1	b
2019	740	Tarte aux poireaux	Leek pie	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**		1	b
2019	1393	Pizza jambon champignons	Ham and mushroom pizza	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-		1	b
2019	1394	Tarte aux poireaux	Leek pie	st	-	st	-		-	st	st			-	-	**NA**	**NA**	-		1	b
2019	1395	Couscous poulet merguez	Chicken merguez couscous	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-		1	b
2019	3511	Quiche Lorraine	Quiche Lorraine	st	st	-	-		-	-	-			-	-	**NA**	**NA**	-		1	b
2018	**8621**	**Eclair vanille**	**Pastry (Vanilla eclair)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**			1	c

♦ Analyses performed according to the COFRAC accreditation

COMPOSITE FOOD - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
Year	No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C										Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**			
2018	**8622**	**Eclair vanille**	**Pastry (Vanilla eclair)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		1	c
2018	**8623**	**Eclair chocolat**	**Pastry (Chocolate eclair)**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	+	*L.welshimeri*	-	-	**NA**	**NA**	**-**	1	c
2018	**8624**	**Eclair chocolat**	**Pastry (Chocolate eclair)**	H-	+	H-	+	*L.innocua*	-	H-	H-	+	*L.innocua*	-	-	**NA**	**NA**	**-**	1	c
2018	**8625**	**Flan**	**Flan**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H-	H-	+	*L.innocua*	-	-	**ND**	**ND**	**-**	1	c
2018	**8626**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		1	c
2018	**8627**	**Tortilla espagnole**	**Spanish Tortilla**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		1	c
2018	**8628**	**Tortilla aux oignons**	**Tortilla with onions**	H-	+	H-	+	*L.innocua*	-	H+/H-	H+/H-	+/+	*L.monocytogenes/ L.innocua*	+	+	**PD**	**PD**		1	c
2018	**8629**	**Tortilla aux oignons**	**Tortilla with onions**	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+	+/+	*L.monocytogenes*	+	+	**PA**	**PA**		1	c
2018	**8630**	**Tortilla espagnole aux oignons**	**Spanish tortilla with onions**	H+	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**		1	c
2018	**8631**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		1	c
2018	**8632**	**Clafoutis aux cerises griottes**	**Morello cherry clafoutis**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	+	*L.welshimeri*	-	-	**NA**	**NA**	**-**	1	c
2018	**8633**	**Crème aux œufs vanille**	**Vanilla egg cream**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	+	*L.welshimeri*	-	-	**NA**	**NA**	**-**	1	c
2018	**8634**	**Crème aux œufs vanille**	**Vanilla egg cream**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		1	c
2018	**8635**	**Ile flottante**	**Ile flottante**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**		1	c
2019	351	Profiteroles	Profiteroles	st	st	st	st		-	-	-			-	-	**NA**	**NA**	**-**	1	c
2019	741	Œufs au lait vanille	Vanilla eggs in milk	st	st	st	st		-	st	st			-	-	**NA**	**NA**	**-**	1	c
2019	742	Clafoutis aux cerises	Cherry clafoutis	st	-	st	st		-	st	st			-	-	**NA**	**NA**	**-**	1	c
2019	743	Crème aux œufs	Egg cream	st	-	st	-		-	st	-			-	-	**NA**	**NA**	**-**	1	c
2019	744	Tortilla espagnole	Spanish tortilla	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**	1	c
2019	745	Flan	Custard	st	-	st	-		-	st	-			-	-	**NA**	**NA**	**-**	1	c
2019	746	Mille-feuilles	Mille-feuilles	st	-	st	st		-	st	-			-	-	**NA**	**NA**	**-**	1	c

MEAT PRODUCTS - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																				
Year	No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C										Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	22 h	48 h	22 h	48 h			
2018	8696	Viande rouge surgelée	Frozen red meat	H+/H-	+	H+	+	*L.monocytogenes/ L.innocua*	+	st	-			-	-	ND	ND	-	2	a
2018	8697	Suprême de poulet	Chicken supreme	-	-	st	st		-	-	-			-	-	NA	NA	-	2	a
2018	8698	Viande rouge surgelée	Frozen red meat	st	st	st	st		-	H-	H-	+	*L.welshimeri*	-	-	NA	NA	-	2	a
2018	8699	Viande rouge surgelée	Frozen red meat	st	st	st	st		-	st	-			-	-	NA	NA	-	2	a
2018	8700	Sot l'y laisse de poulet	Sot l y laisse of chicken	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		2	a
2018	8701	Viande rouge surgelée	Frozen red meat	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		2	a
2018	8702	Maigre de tête de porc surgelée	Frozen pork head lean	H-	+	H-	+	*L.welshimeri*	-	H-	H-	-	*L.welshimeri*	-	-	NA	NA	-	2	a
2018	8703	Noix de joue de bœuf	Cheek of beef	st	st	st	st		-	-	-			-	-	NA	NA	*L.monocytogenes*	2	a
2018	8704	Blanquette	Blanquette	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	+	PA	PA		2	a
2018	8705	Filet mignon de porc	Pork tenderloin	-	st	-	st		-	-	-			-	-	NA	NA	-	2	a
2018	8714	Côte de porc thym romarin	Pork chop with thyme and rosemary	H+	+	H+	+	*L.monocytogenes*	+	st	-			-	-	ND	ND	-	2	a
2018	8716	Côte de porc provençale	Pork chop Provencal	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	a
2019	1101	Côte d'agneau	Lamb chop	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	a
2019	1102	Filet de dinde	Turkey fillet	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	a
2019	1103	Escalope de poulet	Chicken cutlet	-	-	-	st		-	-	-			-	-	NA	NA	-	2	a
2019	2209	Morceaux de filet de poule	Pieces of chicken fillet	H-	+	H-	-	*L.welshimeri*	-	H-	H-	-	*L.innocua*	-	-	NA	NA	-	2	a
2019	2210	Morceaux de filet de poule	Chicken fillet pieces	-	-	st	st		-	-	-			-	-	NA	NA	-	2	a
2019	2211	Viande hachée bœuf	Ground beef	H-d	+	H-	+	*L.welshimeri*	-	H-	H-		*L.welshimeri*	-	-	NA	NA	-	2	a
2019	2924	Morceaux de filet de dinde	Pieces of turkey fillet	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H+/H-	H+/H-	+	*L.monocytogenes*	+	+	PA	PA		2	a
2019	3137	Viande de lièvre	Hare meat	H+	+(3)	H+	+	*L.monocytogenes*	+	-	-			-	-	ND	ND	-	2	a
2019	3138	Préparation de viande de poulet	Chicken meat preparation	st	-	-	-		-	H-	H-		*L.innocua*	-	-	NA	NA	-	2	a
2019	3139	Viande rouge avec peau	Red meat with skin	H-	+	-	-	*L.innocua*	-	H-	H-			-	-	NA	NA	-	2	a
2018	8321	Steak haché Tex Mex	Tex Mex minced meat	st	-	st	-		-	-	-			-	-	NA	NA	-	2	b
2018	8322	Paupiette lapin moutarde	Paupiette rabbit mustard	-	st	-	st		-	-	-			-	-	NA	NA	-	2	b
2018	8323	Côte de porc à la provençale	Pork chop Provencal style	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	b
2018	8324	Côte de porc thym romarin	Pork chop with rosemary thyme	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	b
2018	8325	Manchons de poulet rôti	Roasted chicken breast	st	st	st	st		-	st	st			-	-	NA	NA	-	2	b
2018	8328	Terrine chapon miel châtaigne	Capon terrine honey chestnut	st	st	st	st		-	-	-			-	-	NA	NA	-	2	b
2018	8713	Emincés poulet tikka	Sliced chicken tikka	-	st	st	st		-	st	-			-	-	NA	NA	-	2	b
2019	**74**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+/+	*L.monocytogenes/ L.innocua*	+	+	PA	PA		2	b
2019	**75**	**Bœuf charolais au vin du Médoc**	**Charolais beef with Médoc wine**	H-	+	H-	+	*L.welshimeri*	-	H-	H-	-	*L.welshimeri*	-	-	NA	NA	-	2	b
2019	**76**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in the old style**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	b
2019	**77**	**Blanquette de veau à l'ancienne**	**Blanquette of veal in old fashioned sauce**	H+	+	H+	+	*L.monocytogenes/ L.welshimeri*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	b
2019	**78**	**Paupiette de veau sauce tomate**	**Paupiette of veal with tomato sauce**	H-	+	H-	+	*L.innocua*	-	H-	H-	-	*L.innocua*	-	-	NA	NA	-	2	b
2019	747	Paupiette de veau sauce tomate	Paupiette of veal with tomato sauce	st	st	st	-		-	st	st			-	-	NA	NA	-	2	b
2019	748	Nuggets de poulet	Chicken nuggets	st	-	st	-		-	st	-			-	-	NA	NA	-	2	b
2019	749	Poulet basquaise	Chicken basquaise	st	st	st	st		-	st	st			-	-	NA	NA	-	2	b
2019	750	Bœuf bourguignon	Beef bourguignon	st	st	st	st		-	st	st			-	-	NA	NA	-	2	b
2019	751	Blanquette de veau et son riz	Blanquette of veal and its rice	st	st	st	st		-	st	st			-	-	NA	NA	-	2	b
2019	**971**	**Bœuf bourguignon et ses tagliatelles**	**Boeuf bourguignon with tagliatelle**	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	b
2019	**972**	**Bœuf bourguignon et ses tagliatelles**	**Boeuf bourguignon with tagliatelle**	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		2	b

♦ Analyses performed according to the COFRAC accreditation

MEAT PRODUCTS - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																				
Year	No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C									Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**			
2019	**973**	**Escalope de dinde milanaise**	**Turkey escalope Milanese**	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	b
2019	**974**	**Blanquette de veau et son riz blanc**	**Blanquette of veal and its white rice**	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	b
2019	**975**	**Blanquette de veau et son riz blanc**	**Blanquette of veal and its white rice**	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	b
2019	1104	Emincés de poulet rôti	Sliced roasted chicken	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	2	b
2018	8326	Chipolatas	Chipolatas	H-	+	H-	+	*L.innocua/L.welshimeri*	-	H-	H-	-	*L.innocua*	-	-	**NA**	**NA**	-	2	c
2018	8327	Saucisse fumée	Smoked sausage	-	st	st	st		-	H-	H-	-	*L.welshimeri*	-	-	**NA**	**NA**	-	2	c
2018	8718	Farce tomate	Tomato stuffing	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	c
2019	178	Pâté de campagne	Country style pâté	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	c
2019	179	Pâté de lapin	Rabbit pâté	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	2	c
2019	345	Saucisses de Strasbourg	Strasbourg sausages	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	2	c
2019	346	Saucisses cocktail	Cocktail sausages	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	c
2019	347	Merguez	Merguez	H+	+	H+	+	*L.monocytogenes*	+	st	-			-	-	**ND**	**ND**	-	2	c
2019	348	Lardons cuits fumés	Cooked and smoked bacon	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	c
2019	349	Bacon cuits	Cooked bacon	H+	+	H+	+	*L.monocytogenes*	+	st	st			-	-	**ND**	**ND**	-	2	c
2019	1105	Emincés rôti de dinde poulets épicés	Sliced roast turkey spicy chicken	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		2	c
2019	1106	Bloc de jambon sec	Block of dry-cured ham	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	2	c
2019	1107	Lardons cuits fumés	Cooked smoked bacon	-	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		2	c
2019	1108	Farce à légumes	Vegetable stuffing	st	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		2	c
2019	1109	Chair à merguez	Merguez meat	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.grayi*	+	H+/H-	H+/H-d	+	*L.monocytogenes/ L.welshimeri ou L.innocua*	+	+	**PA**	**PA**		2	c
2019	3521	Rillettes de poulet	Chicken rillettes	st	st	st	st		-	st	-			-	-	**NA**	**NA**	-	2	c
2019	3522	Tranches de salami	Slices of salami	st	st	st	st		-	-	-			-	-	**NA**	**NA**	-	2	c
2019	3523	Saucisses cuites fumées	Cooked smoked sausages	-	-	st	st		-	-	-			-	-	**NA**	**NA**	-	2	c
2019	3524	Lardons nature	Plain bacon						+	H+	H+	**+**	*L.monocytogenes*	+	+	**PA**	**PA**		2	c
2019	5506	Bacon	Bacon						-					-	-	**NA**	**NA**	-	2	c

DAIRY PRODUCTS - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
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				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β hémolyse	API Listeria	22 h	48 h	22 h	48 h			
2018	8334	Fromage au lait cru de brebis	Raw sheep's milk cheese	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	a
2018	8335	Fromage de brebis	Ewe's milk cheese	st	-	st	-		-	-	-			-	-	NA	NA	-	3	a
2018	8336	Saint Nectaire au lait cru	Raw milk cheese (Saint Nectaire)	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	a
2019	**82**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	st	-		-	-	-			-	-	NA	NA	-	3	a
2019	**83**	**Camembert au lait cru**	**Raw milk cheese (Camembert)**	-	-	H+	+	*L.monocytogenes*	+	-	-			-	-	ND	ND	-	3	a
2019	**84**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	-	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD		3	a
2019	**85**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	H+	+	H+	+	*L.monocytogenes*	+	H+/H-	H+/H-	+	*L.monocytogenes/ L.grayi*	+	+	PA	PA		3	a
2019	**532**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD		3	a
2019	**533**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	H-d	st	NC on TSYEA	-	st	-			-	-	NA	NA	-	3	a
2019	**534**	**Roquefort au lait cru**	**Raw milk cheese (Roquefort)**	-	-	H-d	-	NC on TSYEA	-	-	H-d		NC on TSYEA	-	-	NA	NA	-	3	a
2019	**730**	**Emmental français au lait cru**	**Raw milk cheese (French Emmental)**	-	st	st	st		-	st	-			-	-	NA	NA	-	3	a
2019	**731**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	H+	+	H+	+	*L.monocytogenes*	+	st	-			-	-	ND	ND	-	3	a
2019	**1180**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	st	st	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	a
2019	**1181**	**Coulommiers au lait cru**	**Raw milk cheese (Coulommiers)**	st	-	st	-		+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	a
2019	**1183**	**Brie de Meaux au lait cru**	**Raw milk cheese (Brie de Meaux)**	-	-	-	-		-	-	-			-	-	NA	NA	-	3	a
2019	1192	Fromage au lait cru de vache	Raw cow's milk cheese	st	-	st	-		-	st	st			-	-	NA	NA	-	3	a
2019	1193	Fromage au lait cru de vache	Raw cow's milk cheese	st	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD		3	a
2019	1194	Morbier au lait cru	Raw milk cheese (Morbier)	-	-	-	-		-	st	-			-	-	NA	NA	-	3	a
2019	1197	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	st	st	st	st		-	st	st			-	-	NA	NA	-	3	a
2019	1198	Coulommiers au lait cru	Raw milk cheese (Coulommiers)	st	-	st	st		-	st	st			-	-	NA	NA	-	3	a
2019	1199	Emmental au lait cru	Raw milk cheese (Emmental)	-	st	st	st		-	-	-			-	-	NA	NA	-	3	a
2019	1200	Brie de Meaux au lait cru	Raw milk cheese (Brie de Meaux)	-	st	-	-		-	-	-			-	-	NA	NA	-	3	a
2018	8329	Lait cru de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8330	Lait cru de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8331	Lait cru de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8332	Lait cru de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2018	8333	Lait cru de brebis	Raw ewe's milk	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2019	352	Lait cru de vache	Raw cow's milk	H-	+	H-	+	*L.innocua*	-	H+	H+ni	+	*L.monocytogenes*	+	+	PD	PD		3	b
2019	**535**	**Lait cru fermier**	**Raw farm milk**	H-	+	H-	+	*L.innocua*	-	H-	H-	-	*L.innocua*	-	-	NA	NA	-	3	b
2019	**536**	**Lait cru fermier pasteurisé**	**Raw farm milk pasteurized**	H+/H-	+	H+/H-	+	*L.monocytogenes*	+	H-	H-	-	*L.innocua*	-	-	ND	ND	-	3	b
2019	**733**	**Beurre doux au lait cru**	**Raw milk sweet butter**	H+	-	H+	-	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	b
2019	**734**	**Beurre cru demi-sel**	**Raw semi-salted butter**	H-d	-	H-d	-	Gram -	-	-	H+d	+	*L.monocytogenes*	-	+	NA	PD	***L.monocytogenes***	3	b
2019	**735**	**Beurre cru demi-sel**	**Raw semi-salted butter**	H-d	-	H-d	-	Gram -	-	H+dni	H+dni	+	*L.monocytogenes*	+	+	PD	PD		3	b
2019	1201	Lait cru fermier	Raw farm milk	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H-	H-	-	*L.innocua*	-	-	ND	ND	-	3	b
2019	1202	Lait cru fermier	Raw farm milk	H-	+	H-	+	*L.innocua*	-	-	-			-	-	NA	NA	-	3	b
2019	1203	Lait cru de vache	Raw cow's milk	-	st	st	st		-	st	st			-	-	NA	NA	-	3	b
2019	1204	Beurre à la crème au lait cru	Raw milk cream butter	st	st	st	st		-	-	-			-	-	NA	NA	-	3	b
2019	1205	Beurre cru fermier	Raw farm butter	H-	+	H-	+	*L.innocua*	-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD		3	b
2019	1206	Beurre cru	Raw butter	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H-	H-	-	*L.innocua*	-	-	ND	ND	-	3	b
2019	3527	Lait cru fermier	Raw farm milk	-	-	st	-		-	H-d	H-d			-	-	NA	NA	-	3	b
2019	3528	Lait cru fermier	Farm raw milk	-	st	st	st		-	H-d	H-d			-	-	NA	NA	-	3	b
2019	3529	Beurre demi-sel au lait cru	Raw milk semi-salted butter						+	H+/H-	H+/H-	+	*L.monocytogenes*	+	+	PA	PA		3	b
2019	3530	Beurre demi-sel au lait cru	Raw milk semi-salted butter						+	H+/H-	H+/H-	+	*L.monocytogenes*	+	+	PA	PA		3	b
2019	3531	Beurre doux au lait cru	Raw milk sweet butter	st	st	st	st		-	-	-			-	-	NA	NA	-	3	b
2019	**86**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	c
2019	**87**	**Lait frais demi-écrémé pasteurisé**	**Fresh pasteurized semi-skimmed milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		3	c

♦ Analyses performed according to the COFRAC accreditation

DAIRY PRODUCTS - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																				
Year	No	Product (French)	Product (English name)	Reference method: ISO 11290-1♦						Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C									Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β hémolyse	API Listeria	22 h	48 h	22 h	48 h			
2019	**88**	**Lait frais de montagne pasteurisé**	**Fresh pasteurized mountain milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		3	c
2019	350	Feta bio	**Organic Feta cheese**	-	-	st	-		-	H-d	H-d		*Bacillus spp*	-	-	**NA**	**NA**	**-**	3	c
2019	**537**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	H+	+	H+	+	*L.monocytogenes*	+	st	st			-	-	**ND**	**ND**	**-**	3	c
2019	**538**	**Lait frais entier pasteurisé**	**Fresh pasteurized whole milk**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		3	c
2019	**736**	**Coulommiers au lait pasteurisé**	**Coulommiers (pasteurized milk cheese)**	st	-	st	-		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		3	c
2019	**737**	**Cousteron au lait pasteurisé**	**Cousteron (pasteurized milk cheese)**	st	st	st	st		-	H+	H+ni	+	*L.monocytogenes*	+	+	**PD**	**PD**		3	c
2019	1398	Glace vanille	Vanilla ice cream	st	-	st	-		-	st	st			-	-	**NA**	**NA**	-	3	c
2019	1399	Lait frais demi-écrémé pasteurisé	Fresh pasteurized semi-skimmed milk	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	3	c
2019	1400	Lait demi-écrémé au chocolat	Semi-skimmed milk with chocolate	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	3	c
2019	1652	Munster au cumin	Munster cheese with cumin	-	-	st	st		-	-	-			-	-	**NA**	**NA**	-	3	c
2019	3534	Petit camembert pasteurisé	Camembert (pasteurized milk cheese)	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	3	c
2019	3535	Brie pasteurisé	Pasteurized Brie cheese	st	-	st	st		-	-	-			-	-	**NA**	**NA**	-	3	c
2019	4584	Lait frais demi-écrémé	Fresh semi-skimmed milk	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	3	c
2019	4585	Lait frais demi-écrémé	Fresh semi-skimmed milk	st	ss	st	st		-	st	st			-	-	**NA**	**NA**	-	3	c
2019	4586	Camembert pasteurisé	Camembert (pasteurized milk cheese)	st	s	st	st		-	st	st			-	-	**NA**	**NA**	-	3	c
2019	4587	Bleu d'Auvergne pasteurisé	Bleu d'Auvergne (pasteurized milk cheese)	-	-	st	st		-	-	-			-	-	**NA**	**NA**	-	3	c
2019	4588	Fromage pasteurisé	Pasteurized cheese	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-	3	c
2023	4755	Tomme blanche au lait pasteurisée de vache	Pasteurized cow milk cheese	st	st	st	st		-	-	-			-	-	**NA**	**NA**	-	3	c

FISHERY PRODUCTS - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
Year	No	Product /French)	Product (English name)	**Reference method: ISO 11290-1♦**						**Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C**										Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples			
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**				
2018	8709	Pavé de poisson	Fish steak	st	st	st	st		-	st	st			-	-	**NA**	**NA**	**-**	4	a
2018	8710	Pavé de colin	Hake steak	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**	4	a
2018	8711	Seiche	Cuttlefish	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**	4	a
2019	358	Bloc de saumon	Salmon block	st	st	st	st		-	st	st			-	-	**NA**	**NA**	**-**	4	a
2019	360	Saumon	Salmon	H-	+	H-	+	*L.innocua*	-	st	st			-	-	**NA**	**NA**	**-**	4	a
2019	361	Saumon	Salmon	st	st	st	st		-	st	st			-	-	**NA**	**NA**	**-**	4	a
2019	1646	Pavé de colin	Hake steak	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-	4	a
2019	1650	Barquette de pavé de saumon	Tray of salmon steak	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	4	a
2019	2394	Œufs de truite	Trout eggs	st	st	-	-		-	st	st			-	-	**NA**	**NA**	-	4	a
2019	3141	Pavé de colin herbes de Provence	Hake steak with Provence herbs	H-	+	H-	+	*L.innocua*	-	-	-			-	-	**NA**	**NA**	-	4	a
2019	**3341**	**Filet de lieu noir**	**Fillet of saithe**	st	st	st	st		-	st	-			-	-	**NA**	**NA**	-	4	a
2019	4071	Surimi	Surimi	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	a
2019	4072	Saumon	Salmon	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	4	a
2019	4073	Saumon	Salmon	-	st	st	st		-	-	-			-	-	**NA**	**NA**	-	4	a
2019	4074	Filet de saumon	Salmon fillet	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	4	a
2019	4075	Crevettes roses	Pink shrimps	-	-	st	-		-	st	-			-	-	**NA**	**NA**	-	4	a
2019	4076	Surimi	Surimi	-	st	H-(1d)	-	*Gram-*	-	-	-			-	-	**NA**	**NA**	-	4	a
2019	4077	Barquette de pavé de saumon	Tray of salmon steak	st	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		4	a
2019	4078	Barquette de pavé de saumon	Tray of salmon steak	H+	+	H+	+	*L.monocytogenes*	+	st	-			-	-	**ND**	**ND**	-	4	a
2019	4079	Tartare de saumon	Salmon tartar	H+	+	H+	+	*L.monocytogenes*	+	H+/H-	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	+	**PA**	**PA**		4	a
2019	4080	Pavé de saumon	Salmon steak	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	4	a
2019	4081	Bloc de chair de saumon	Salmon meat block	st	st	st	st		-	st	-			-	-	**NA**	**NA**	-	4	a
2019	**4170**	**Pavé de saumon**	**Salmon steak**	-	st	-	-		-	H+/H-	H+/H-	+	*L.monocytogenes/ L.innocua*	+	+	**PD**	**PD**		4	a
2019	**4171**	**Filet de julienne**	**Julienne fillet**	H-	+	H-	+	*L.innocua*	-	H+/H-	H+/H-	+	*L.monocytogenes/ L.innocua*	+	+	**PD**	**PD**		4	a
2019	**4172**	**Dos de cabillaud**	**Back of cod**	H-	+	H-	+	*L.innocua*	-	H-	H-		*L.innocua*	-	-	**NA**	**NA**	-	4	a
2019	**4173**	**Filet d'églefin**	**Haddock fillet**	H-	+	H-	+	*L.innocua*	-	H-	H-		*L.welshimeri*	-	-	**NA**	**NA**	-	4	a
2019	**4174**	**Filet d'églefin**	**Haddock fillet**	H-	+	H-	+	*L.welshimeri*	-	H-	H-		*L.welshimeri*	-	-	**NA**	**NA**	-	4	a
2019	4553	Saumon	Salmon	st	st	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	a
2019	5178	Filet de truite	Trout fillet	st	-	-	st		-	-	-			-	-	**NA**	**NA**	-	4	a
2019	5179	Filet d'Eglefin	Haddock fillet	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	a
2019	5180	Steak d'espadon	Swordfish steak	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	a
2018	8342	Saumon	Salmon	st	st	st	st		-	st	st			-	-	**NA**	**NA**	**-**	4	b
2019	343	Filet de saumon fumé	Smoked Salmon Fillet	st	st	st	st		-	H-	H-/H+d	+	*L.welshimeri*	-	-	**NA**	**NA**	**-**	4	b
2019	**519**	**Saumon fumé de Norvège**	**Smoked salmon from Norway**	H-	+	H-	+	*L.innocua*	-	st	st			-	-	**NA**	**NA**	**-**	4	b
2019	**520**	**Truite fumée au bois de hêtre**	**Beechwood smoked trout**	st	st	st	st		-	H-	H-	-	*L.welshimeri*	-	-	**NA**	**NA**	**-**	4	b
2019	**546**	**Truite fumée**	**Smoked trout**	H-	+	H-	+	*L.innocua*	-	st	st			-	-	**NA**	**NA**	**-**	4	b
2019	1115	Bouchées aux poulpes marinés	Marinated octopus bites	-	-	st	st		-	-	-			-	-	**NA**	**NA**	**-**	4	b
2019	1116	Bouchées aux poulpes marinés	Marinated octopus bites	st	st	st	st		-	-	-			-	-	**NA**	**NA**	**-**	4	b
2019	1640	Paupiettes de saumon	Salmon Paupiettes	H-	+	H-	+	*L.innocua*	-	H-	H-	+	*L.innocua*	-	-	**NA**	**NA**	**-**	4	b
2019	1649	Saumon gravlax	Salmon gravlax	st	st	st	st		-	st	-			-	-	**NA**	**NA**	-	4	b
2019	2405	Truite fumée bio	Organic smoked trout	st	st	st	-		-	st	st			-	-	**NA**	**NA**	-	4	b
2019	2406	Filets de maquereaux fumés	Smoked mackerel fillets	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	4	b
2019	2407	Filet de haddock fumé	Smoked haddock fillet	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	4	b
2019	**3061**	**Harengs fumés**	**Smoked herring**	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	4	b
2019	**3343**	**Filets de maquereaux fumés au bois de hêtre**	**Smoked mackerel fillets with beech wood**	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	4	b
2019	4082	Saumon fumé à l'aneth	Smoked salmon with dill	st	+d(2)	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	4083	Petites pieuvres marinées	Small marinated octopus	-	-	st	st		-	st	-			-	-	**NA**	**NA**	-	4	b
2019	4084	Bouchées au poulpe marinées	Marinated octopus bites	-	-	st	st		-	-	-			-	-	**NA**	**NA**	-	4	b

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Year	No	Product /French)	Product (English name)	**Reference method: ISO 11290-1♦**						**Alternative method: COMPASS *Listeria* Agar Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C**										Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		**Agreement**		**Subculture in Fraser 1 on negative samples**		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**			
2019	4085	Bouchées au poulpe marinées	Marinated octopus bites	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	4	b
2019	**4175**	**Emincés de thon fumé aux zestes de citron et au thym**	**Sliced smoked tuna with lemon zest and thyme**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	**4176**	**Emincés de saumon fumé aux 5 baies fumés au bois de hêtre**	**Smoked salmon slices with 5 berries and beech wood**	H-	+	H-	+	*L.welshimeri*	-	st	-			-	-	**NA**	**NA**	-	4	b
2019	**4179**	**Filets de maquereaux fumés au bois de hêtre au poivre**	**Smoked mackerel fillets with beech wood and pepper**	H-	+	H-	+	*L.innocua*	-	H-	H-	+	*L.innocua*	-	-	**NA**	**NA**	-	4	b
2019	**4180**	**Filets de maquereaux fumés au bois de hêtre au poivre**	**Smoked mackerel fillets with beech wood and pepper**	H-	+	H-	+	*L.innocua*	-	st	st			-	-	**NA**	**NA**	-	4	b
2019	5038	Anchois marinés	Marinated anchovies	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	4	b
2019	5181	Saumon fumé élevé en Norvège	Smoked salmon farmed in Norway	H+/H-	+	H+	+	*L.monocytogenes/ L.seeligeri*	+	H+	H+/H-	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5182	Saumon fumé élevé en Norvège	Smoked salmon farmed in Norway	st	st	st	st		-	H+(2)	H+	+	*No identification by API colony confirmed on RLM and by PCR*	+	+	**PD**	**PD**		4	b
2019	5183	Filets de harengs fumés	Smoked herring fillets	st	-	st	-		-	st	-			-	-	**NA**	**NA**	-	4	b
2019	5184	Filets de harengs fumés	Smoked herring fillets	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-	4	b
2019	5185	Filets de maquereaux fumés	Smoked mackerel fillets	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-	4	b
2019	5186	Filets de maquereaux fumés	Smoked mackerel fillets	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5187	Carpaccio de saumon marinés	Marinated salmon carpaccio	st	-	st	st		-	st	st			-	-	**NA**	**NA**	-	4	b
2019	5188	Tartare de saumon fumé	Smoked salmon tartar	H-d	-	st	-	*cocci*	-	-	-			-	-	**NA**	**NA**	-	4	b
2019	5321	Emincés de thon fumé aux zestes de citron et thym	Sliced smoked tuna with lemon zest and thyme	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5322	Emincés de thon fumé aux zestes de citron et thym	Sliced smoked tuna with lemon zest and thyme	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5323	Truite fumée	Smoked trout	H+	+	H+/H-d	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5324	Truite fumée	Smoked trout	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5325	Filets de harengs fumés	Smoked herring fillets	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5326	Filets de maquereaux fumés au bois de hêtre	Smoked mackerel fillets with beech wood	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2019	5327	Carpaccio de saumon aux zestes de citron et à l'aneth	Salmon carpaccio with lemon zest and dill	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	b
2018	8338	Pané de poisson blanc provençale	Breaded white fish from Provence	H-	+d	H-	+	*L.innocua*	-	-	-			-	-	**NA**	**NA**	-	4	c
2018	8340	Bouchées au poulpe	Bites of octopus	-	-	st	st		-	-	-			-	-	**NA**	**NA**	-	4	c
2018	8341	Poisson blanc gratiné au fromage	White fish with cheese au gratin	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	185	California roll saumon	California roll salmon	st	-	st	st		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	187	Surimi base colin	Surimi with hake	st	-	st	st		-	st	st			-	-	**NA**	**NA**	-	4	c
2019	188	Poisson sauce Chablis	Fish with Chablis sauce	st	-	st	st		-	st	st			-	-	**NA**	**NA**	-	4	c
2019	189	Colin Alaska sauce citron	Alaska hake with lemon sauce	st	-	-	-		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	190	Pavé colin napolitain pré cuit	Pre-cooked Neapolitan hake steak	-	-	st	-		-	st	-			-	-	**NA**	**NA**	-	4	c
2019	191	Colin sauce brésilienne	Hake with Brazilian sauce	-	-	st	-		-	H-	H-	+	*L.innocua*	-	-	**NA**	**NA**	-	4	c
2019	192	Poisson blanc crumble	White fish crumble	st	-	st	-		-	st	-			-	-	**NA**	**NA**	-	4	c
2019	193	Colin sauce brésilienne	Hake with Brazilian sauce	st	-	st	-		-	st	st			-	-	**NA**	**NA**	-	4	c
2019	1112	Pavé de poisson blanc thym citron	White fish steak lemon thyme	H-	+	H-	+	*L.innocua*	-	st	st			-	-	**NA**	**NA**	-	4	c
2019	1113	Pavé de poisson blanc provençale	White fish steak Provençale	st	-	st	-		-	st	-			-	-	**NA**	**NA**	-	4	c
2019	1641	Filet de merlu pané	Breaded hake fillet	-	-	-	-		-	st	st			-	-	**NA**	**NA**	-	4	c
2019	1643	Poisson blanc gratiné au fromage	White fish with cheese au gratin	st	-	st	-		-	st	-			-	-	**NA**	**NA**	-	4	c
2019	1644	Cabillaud pané	Breaded cod	-	-	-	-		-	st	-			-	-	**NA**	**NA**	-	4	c
2019	3142	Poisson mayonnaise	Fish mayonnaise	st	-	-	-		-	st	-			-	-	**NA**	**NA**	-	4	c
2019	3143	Cocktail de fruits de mer	Seafood cocktail	st	-	st	-		-	st	st			-	-	**NA**	**NA**	-	4	c
2019	**3346**	**Accras aux crevettes à la créole**	**Shrimp accras à la créole**	st	-	-	-		-	st	st			-	-	**NA**	**NA**	-	4	c
2019	4086	Pavé de colin napolitain pré-cuit	Pre-cooked Neapolitan hake steak	H+	-	H+	+	*L.monocytogenes*	+	st	-			-	-	**ND**	**ND**	-	4	c
2019	4087	Poisson blanc gratiné au fromage	White fish with cheese au gratin	-	-	-	-		-	H+	H+/H-d	+	*L.monocytogenes*	+	+	**PD**	**PD**		4	c
2019	4088	Pavé poisson blanc thym citron	White fish steak with lemon thyme	-	-	st	-		-	H-	H-		*L.innocua*	-	-	**NA**	**NA**	-	4	c

FISHERY PRODUCTS - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																				
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				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		**Agreement**		**Subculture in Fraser 1 on negative samples**		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**			
2019	4089	Portion de colin sauce brésilienne	Portion of hake with Brazilian sauce	H-	+	H-	+	*L.innocua*	-	st	st			-	-	**NA**	**NA**	-	4	c
2019	4090	Pavé de poisson sauce bordelaise	Fish steak with bordelaise sauce	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	4091	Nigiri de thon saumon crevettes	Nigiri of tuna salmon shrimps	st	st	st	st		-	st	-			-	-	**NA**	**NA**	-	4	c
2019	4092	Filet de merlu blanc	Fillet of white hake	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	c
2019	**4181**	**Tielles Sétois**	**Tielles Sétois**	H+	+	H+	+	*L.monocytogenes*	+	H-	H-	+	*L.innocua*	-	-	**ND**	**ND**	-	4	c
2019	**4182**	**Plat préparé de pavé de saumon**	**Prepared dish of salmon steak**	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.welshimeri*	+	H-	H-	+	*L.welshimeri*	-	-	**ND**	**ND**	-	4	c
2019	5035	Calamars chorizo à poêler	Pan-fried chorizo squid	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	c
2019	5036	Calamars à la romaine	Calamari à la romaine	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	5037	Riz au thon	Rice with tuna	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	5039	Verrine de saumon	Verrine of salmon	H-	-	H-	+	*L.innocua*	-	-	H-d	-		-	-	**NA**	**NA**	-	4	c
2019	5189	Encornets farcis	Stuffed squid	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	c
2019	5190	Encornets farcis	Stuffed squid	-	-	st	-		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	5191	Filet de lieu à la Dieppoise	Fillet of pollock Dieppoise style	st	st	st	-		-	st	st			-	-	**NA**	**NA**	-	4	c
2019	5192	Filet de lieu à la Dieppoise	Fillet of pollock Dieppoise style	st	-	st	st		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	5193	Terrine aux noix de Saint Jacques	Terrine with scallops	st	-	st	-		-	-	-			-	-	**NA**	**NA**	-	4	c
2019	5194	Terrine de saumon	Salmon terrine	H+	+d	H+	+	*L.monocytogenes*	+	-	-			-	-	**ND**	**ND**	-	4	c
2019	5328	Terrine aux Saint-Jacques	Scallop Terrine	H+	+	H+	+	*L.monocytogenes*	+	-	-			-	-	**ND**	**ND**	-	4	c
2019	5329	Terrine aux Saint-Jacques	Scallop Terrine	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	c
2019	5330	Cabillaud sauce citron	Cod with lemon sauce	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		4	c
2019	5331	Cabillaud sauce citron	Cod with lemon sauce	-	st	st	-	/	-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		4	c
2019	5332	Sandwich saumon cuit et fumé	Cooked and smoked salmon sandwich	H+	+	H+	+	*L.monocytogenes*	+	H+	H+/H-	**+/-(x5)**	*L.monocytogenes / cocci*	+	+	**PA**	**PA**		4	c

VEGETABLES - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
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				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples			
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**				
2018	8343	Roquette	Arugula	st	-	st	-		-	-	-			-	-	**NA**	**NA**	**-**	5	a
2018	8344	Epinards	Spinach	H-	+	H-	+	*L.innocua*	-	H-	H-	-	*L.innocua*	-	-	**NA**	**NA**	**-**	5	a
2018	8345	Mais grains	But grains	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	a
2018	8346	Epinards en branches	Spinach in branches	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	a
2019	**93**	**Epinards**	**Spinach**	H+	+	H+	+	*L.monocytogenes*	+	H+/H-	H+/H-	+/-	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**		5	a
2019	**94**	**Mélange de jeunes pousses**	**Mixed baby greens**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	a
2019	**95**	**Mélange de jeunes pousses**	**Mixed baby greens**	H+	+	H+	+	*L.monocytogenes*	+	-	H+d	-	NC on TSYE	-	-	**ND**	**ND**	**-**	5	a
2019	368	Ciboulette	Chives	-	-	st	-		-	st	-			-	-	**NA**	**NA**	**-**	5	a
2019	369	Roquette	Arugula	st	-	st	st		-	st	st			-	-	**NA**	**NA**	**-**	5	a
2019	370	Persil	Parsley	st	st	st	st		-	st	-			-	-	**NA**	**NA**	**-**	5	a
2019	371	Persil	Parsley	-	st	st	st		-	st	-			-	-	**NA**	**NA**	**-**	5	a
2019	2182	Maïs doux en grains	Sweet corn kernels	-	-	-	-		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		5	a
2019	2183	Maïs doux en grains	Sweet corn in kernels	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	5	a
2019	2184	Maïs doux en grains	Sweet corn in kernels	H+	-	H+	+	*L.monocytogenes*	+	-	-			-	-	**ND**	**ND**	-	5	a
2019	2185	Maïs doux en grains	Sweet corn in kernels	H-	-	H-	+	*L.innocua*	-	-	-			-	-	**NA**	**NA**	-	5	a
2019	2396	Pousses d'épinards	Spinach shoots	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	5	a
2019	2397	Epinards frais	Fresh spinach	-	-	-	-		-	-	-			-	-	**NA**	**NA**	-	5	a
2019	2398	Persil plat	Flat leaf parsley	-	-	st	-		-	H-d	-			-	-	**NA**	**NA**	-	5	a
2019	2399	Basilic	Basil	-	-	-	-		-	H-d	-			-	-	**NA**	**NA**	-	5	a
2019	2400	Fines pousses alfalfa (lentilles poireaux)	Shoots of alfalfa (lentils, leeks)	-	-	-	st		-	H-d	-			-	-	**NA**	**NA**	-	5	a
2019	2401	Fines pousses alfalfa (radis fenouil)	Shoots of alfalfa (radishes, fennel)	-	-	-	-		-	H-d	-			-	-	**NA**	**NA**	-	5	a
2019	2402	Melon	Melon	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	5	a
2019	**3068**	**Avocat**	**Avocado**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	a
2019	**3069**	**Tomate**	**Tomato**	st	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		5	a
2019	3144	Pommes de terre grenaille	Small potatoes	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	a
2019	3145	Pommes de terre grenaille	Small potatoes	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	a
2018	8348	Mélange de légumes	Mixed vegetables	H+	+	H+	+	*L.monocytogenes*	+	-	-			-	-	**ND**	**ND**	**-**	5	b
2019	194	Poêlée campagnarde	Country-style pan-fried potatoes	st	-	st	-		-	st	-			-	-	**NA**	**NA**	**-**	5	b
2019	195	Légumes vapeurs (haricots, courgettes, poivrons)	Steamed vegetables (beans, zucchini, peppers)	-	-	-	-		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		5	b
2019	196	Poivrons en cubes bicolore	Peppers in two-colour cubes	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**	5	b
2019	197	Concombre	Cucumber	-	-	-	-		-	st	-			-	-	**NA**	**NA**	**-**	5	b
2019	362	Brunoise méridionale	Southern brunoise	st	-	st	-		-	st	-			-	-	**NA**	**NA**	**-**	5	b
2019	363	Brunoise méridionale	Southern brunoise	-	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**	5	b
2019	364	Poivrons bicolores	Bicolored peppers	st	-	st	st		-	st	st			-	-	**NA**	**NA**	**-**	5	b
2019	1119	Concombre	Cucumber	-	-	st	st		-	st	st			-	-	**NA**	**NA**	**-**	5	b
2019	1121	Pommes de terre grenaille	Grilled potatoes	st	-	st	-		-	st	st			-	-	**NA**	**NA**	**-**	5	b
2019	1651	Betterave rouge râpée	Grated red beet	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	5	b
2019	2186	Choux brocolis coupés	Broccoli, cut up	-	-	st	-		-	st	-			-	-	**NA**	**NA**	-	5	b
2019	2187	Choux brocolis coupés	Broccoli cabbage, cut	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	b
2019	2188	Pommes de tarre coupées carré	Tartar apples, cut in squares	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	b
2019	2189	Frites crues	French fries, raw	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	b
2019	2190	Pommes de terre frites	Fried potatoes	H+/H-	+	H+d/H-	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		5	b
2019	2403	Crudités mélange chou blanc carottes céleri	Raw vegetables white cabbage carrot celery mix	st	-	st	st		-	st	-			-	-	**NA**	**NA**	-	5	b
2019	2404	Carottes Nantaises	Nantaise carrots	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	5	b
2019	2928	Crudités mélange chou rouge, carottes, choux blancs	Red cabbage, carrots and white cabbage mix	-	st	-	st		-	H+/H-	H+/H-	+	*L.monocytogenes*	+	+	**PD**	**PD**		5	b

♦ Analyses performed according to the COFRAC accreditation

VEGETABLES - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																				
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				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		Agreement		Subculture in Fraser 1 on negative samples		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	22 h	48 h	22 h	48 h			
2019	2935	Crudités mélange chou blanc carottes céleri	Raw vegetables mix of white cabbage, carrots and celery	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+d/H-	H-	-	*L.welshimeri*	-	-	PPND	ND	-	5	b
2019	**3351**	**Carottes râpées**	**Grated carrots**	st	st	st	st		-	st	st			-	-	NA	NA	-	5	b
2019	**3352**	**Carottes râpées**	**Grated carrots**	st	st	st	st		-	st	st			-	-	NA	NA	-	5	b
2018	8347	Pommes de terre au beurre	Buttered potatoes	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2018	8349	Salade de fruits	Fruit salad	st	-	-	-		-	-	-			-	-	NA	NA	-	5	c
2019	365	Pommes de terre sarladaises	Sarlatan potatoes	st	-	st	-		-	st	st			-	-	NA	NA	-	5	c
2019	367	Pommes de terre grenaille	Grilled potatoes	st	st	st	st		-	st	-			-	-	NA	NA	-	5	c
2019	1117	Poêlée à la bretonne	Pan-fried Breton style	st	-	st	-		-	st	-			-	-	NA	NA	-	5	c
2019	1118	Poêlée campagnarde	Country-style pan-fried potatoes	st	-	st	-		-	st	-			-	-	NA	NA	-	5	c
2019	1122	Chou à la crème mousseline	Cabbage with cream sauce	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	2191	Mélange 3 poivrons	3 peppers mix	H+	+	H+	+	*L.monocytogenes*	+	st	-			-	-	ND	ND	-	5	c
2019	2192	Julienne de légumes	Julienne of vegetables	H-	+	H-	+	*L.innocua*	-	-	-			-	-	NA	NA	-	5	c
2019	2193	Légumes pour couscous	Vegetables for couscous	-	-	st	-		-	st	-			-	-	NA	NA	-	5	c
2019	2194	Légumes pour couscous	Vegetables for couscous	-	-	-	-		-	-	-			-	-	NA	NA	-	5	c
2019	2195	Mélange végétal	Vegetable mix	-	-	st	-		-	st	-			-	-	NA	NA	-	5	c
2019	**3064**	**Poêlée de trois légumes**	**Fried three vegetables**	H+/H-	+	H+	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3065**	**Poêlée de trois légumes**	**Fried three vegetables**	-	-	st	-		-	-	H+	+	*L.monocytogenes*	-	+	NA	PD	***L.monocytogenes***	5	c
2019	**3066**	**Poêlée de légumes**	**Mixed vegetables**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3067**	**Poêlée de légumes**	**Pan-fried vegetables**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	3146	Poêlée à la bretonne	Pan-fried Breton style	H-(1d)	-	-	-	Catalase -	-	st	st			-	-	NA	NA	-	5	c
2019	3147	Paillasson de légumes	Vegetable paillasson	-	-	st	-		-	-	-			-	-	NA	NA	-	5	c
2019	**3353**	**Tartare de légumes**	**Vegetable Tartar**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3354**	**Tartare de légumes**	**Vegetable Tartar**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3355**	**Gratin de quinoa et boulgour de légumes**	**Quinoa and vegetable bulgur gratin**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	PA	PA		5	c
2019	**3356**	**Houmous extra au basilic**	**Extra hummus with basil**	H+ni	+	H+	+	*L.monocytogenes*	+	H+	H+/H-	+	*L.monocytogenes/ L.seeligeri*	+	+	PA	PA		5	c
2019	**3357**	**Tomates semi-séchées**	**Semi-dried tomatoes**	H-	+	H-	+		-	H+	H+	+	*L.monocytogenes*	+	+	PD	PD		5	c

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
Year	No	Product (French)	Product (English name)	**Reference method: ISO 11290-1♦**						**Méthode COMPASS *Listeria* Agar**										Category	Type
										Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C											
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		**Agreement**		**Subculture in Fraser 1 on negative samples**		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**			
2019	**540**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cutting)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**542**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cutting)**	st	st	st	st		-	st	st			-	-	**NA**	**NA**	**-**	6	a
2019	**543**	**Eau de rinçage (découpe saumon)**	**Rinsing water (salmon cut)**	st	st	st	st		-	st	st			-	-	**NA**	**NA**	**-**	6	a
2019	**544**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**545**	**Eau de rinçage (Veggie)**	**Rinsing water (Veggie)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**1188**	**Eau rinçage (préparation chantilly)**	**Rinsing water (whipped cream)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**1189**	**Eau rinçage (fromage)**	**Rinsing water (cheese)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**1190**	**Eau de rinçage marmite cuisson compote pomme rhubarbe**	**Rinsing water for cooking apple rhubarb compote**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**1191**	**Eau de rinçage marmite cuisson soupe haricots verts**	**Rinsing water for cooking green bean soup**	st	st	st	-		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	1765	Eaux de lavage bacs (usine poisson)	Washing water from tanks (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	1766	Eau de lavage chariot (usine poisson)	Washing water from cart (fish plant)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	1768	Eau de process sortie désarêteuse (usine poisson)	Process water from de-ripper (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	1769	Eau de rinçage filet après parage (usine poisson)	Rinsing water after trimming (fish plant)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	2032	Eau de rinçage (porc)	Rinsing water (pig)	-	st	-	-		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	2033	Eau de rinçage (porcs)	Rinsing water (pigs)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	2202	Eau de lavage (Balancelle Porc Abattoir)	Washing water (Pork slaughterhouse swing)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	2203	Eau bac échaudage (Abattoir porcs)	Scalding tank water (Slaughterhouse pigs)	st	-	-	-		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	2204	Eau d'égout (Abattoir porcs)	Sewage water (Slaughterhouse pigs)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	a
2019	**3361**	**Eau de rinçage bol (barres de céréales)**	**Rinsing water bowl (Cereal bars)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**3362**	**Eau de rinçage Stéphan (barre de céréales)**	**Rinsing water Stephan (Cereal bar)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**3363**	**Eau de rinçage (saucisses cocktail)**	**Rinsing water (cocktail sausages)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	**4580**	**Eau de rinçage poussoirr après prod. Saucisson**	**Rinsing water after production Sausage**	st	st	st	st		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		6	a
2019	**4581**	**Eau de rinçage ustensiles knacks porc**	**Rinsing water for pork knack utensils**	st	st	st	-		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		6	a
2019	**4582**	**Eau de rinçage ustensiles knacks porc**	**Rinsing water for pork knack utensils**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	a
2019	356	Déchets farine de blé noir	Buckwheat flour waste	dni/-	+(1col)	H-d	+	NC on TSYEA	-	H-	H-ni			-	-	**NA**	**NA**	***L.monocytogenes***	6	b
2019	**521**	**Déchets découpe saumon**	**Salmon cutting waste**	st	st	st	st		-	st	-			-	-	**NA**	**NA**	**-**	6	b
2019	**522**	**Déchets poisson avec épices**	**Fish waste with spices**	st	-	st	-		-	H-	H-	-	*L.welshimeri*	-	-	**NA**	**NA**	**-**	6	b
2019	**523**	**Déchets découpe poisson**	**Fish cutting waste**	H-	+	H-	+	*L.seeligeri*	-	H-	H-	-	*L.welshimeri*	-	-	**NA**	**NA**	**-**	6	b
2019	**524**	**Déchets découpe poisson**	**Fish cutting waste**	H+	+	H+	+	*L.monocytogenes*	+	st	-			-	-	**ND**	**ND**	**-**	6	b
2019	**525**	**Déchets poisson**	**Waste fish**	st	st	st			-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		6	b
2019	**526**	**Déchets mélée de jambon végétal**	**Mixed vegetable ham waste**	H-	+	H-	+	*L.seeligeri*	-	-	H-d	-	*L.seeligeri*	-	-	**NA**	**NA**	**-**	6	b
2019	**527**	**Déchets veggie**	**Veggie waste**	-	-	st	-		-	-	H-d	-	*L.seeligeri*	-	-	**NA**	**NA**	**-**	6	b
2019	**528**	**Déchets veggie**	**Veggie waste**	-	-	st	-		-	H+	H+	+	*L.monocytogenes*	+	+	**PD**	**PD**		6	b
2019	**1175**	**Déchets (découpe poisson avec épices)**	**Waste (fish cut with spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	b
2019	**1176**	**Déchets (découpe poisson sans épices)**	**Waste (fish cut without spices)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	b
2019	**1177**	**Déchets (peau de poisson)**	**Waste (fish skin)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	b
2019	**1178**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	b
2019	**1179**	**Déchets (saumon)**	**Waste (salmon)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	b

♦ Analyses performed according to the COFRAC accreditation

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
Year	No	Product (French)	Product (English name)	**Reference method: ISO 11290-1♦**						**Méthode COMPASS *Listeria* Agar** **Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C**										Category	Type
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		**Agreement**		**Subculture in Fraser 1 on negative samples**		
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**			
2019	1763	Déchets Sol Scan 3 (usine poisson)	Waste Sol Scan 3 (fish factory)	st	st	-	st		-	st	st			-	-	**NA**	**NA**	-	6	b
2019	1764	Déchets nature bac maggy (usine poisson)	Waste (fish plant)	st	st	-	st		-	st	-			-	-	**NA**	**NA**	-	6	b
2019	1767	Eau d'égout (usine poisson)	Sewage (fish plant)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	b
2019	1770	Chiffonnette égout (usine poisson)	Sewer rag (fish plant)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	b
2019	2030	Déchets découpe porc (abattoir porc)	Pork cutting waste (pork slaughterhouse)	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H+	+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**		6	b
2019	2031	Déchets découpe bœuf (abattoir bœuf)	Beef cutting waste (beef slaughterhouse)	H-	+d	H-	+	*L.innocua*	-	H-	H-		*L.innocua*	-	-	**NA**	**NA**	-	6	b
2019	2205	Résidus zone sang (Abattoir porcs)	Blood zone waste (pig slaughterhouse)	H-	+	H-	+	*L.innocua*	-	H-	H-		*L.innocua*	-	-	**NA**	**NA**	-	6	b
2019	1771	Chiffonnette tapis maille sortie trancheuse avant nettoyage (usine poisson)	Slicer outlet mesh cloth before cleaning (fish plant)	st	st	-	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1772	Chiffonnette trancheuse avant nettoyage (usine poisson)	Slicer cloth before cleaning (fish plant)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1773	Chiffonnette toasts sol sous-trancheuseavant nettoyage (usine poisson)	Slicer floor toast cloth before cleaning (fish plant)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1774	Chiffonnette toasts lame trancheur avant nettoyage (usine poisson)	Slicer blade toast cloth before cleaning (fish factory)	st	st	st	st		-	st	-			-	-	**NA**	**NA**	-	6	c
2019	1775	Chiffonnette tartare baratteavant nettoyage (usine poisson)	Tartar slicer before cleaning (fish factory)	st	-	-	-		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1776	Chiffonnette lardons couteaux de parage avant nettoyage (usine poisson)	Rags with larder knives before cleaning (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1777	Chiffonnette lardons table de parage avant nettoyage (usine poisson)	Larder cloth for trimming table before cleaning (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1778	Chiffonnette tapis maille sortie trancheuse après nettoyage (usine poisson)	Slicer output mesh belt after cleaning (fish factory)	st	st	-	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1779	Chiffonnette tartare baratte après nettoyage (usine poisson)	Tartar churn cloth after cleaning (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1780	Chiffonnette égout après nettoyage (usine poisson)	Drain cloth after cleaning (fish factory)	-	-	-	-		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1781	Chiffonnette lame trancheur ligne toast après nettoyage (usine poisson)	Slicer blade toast line after cleaning (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1782	Chiffonnette PN trancheur après nettoyage (usine poisson)	Slicer blade PN after cleaning (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	1783	Chiffonnette lardons table de parage après nettoyage (usine poisson)	Cleaning cloth for larder table after cleaning (fish factory)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	2196	Chiffonnette avant nettoyage (Tapis inox Abattoir Carnés)	Cleaning cloth before cleaning (Stainless steel slaughterhouse belt)	H+/H-	+	H+	+	*L.monocytogenes/ L.innocua*	+	H+	H+	+	*L.monocytogenes*	+	+	**PA**	**PA**		6	c
2019	2197	Chiffonnette avant nettoyage (Tapis lattes Abattoir Carnés)	Cleaning cloth before cleaning (Slatted mat Slaughterhouse Meat)	H-	+	H-	+	*L.innocua*	-	st	-			-	-	**NA**	**NA**	-	6	c
2019	2198	Chiffonnette avant nettoyage (Tapis ATTEC sortie Abattoir Carnés)	Wipe before cleaning (ATTEC belt, exit from the slaughterhouse)	H-	+	H-	+	*L.innocua*	-	H-	H-		*L.innocua*	-	-	**NA**	**NA**	-	6	c
2019	2199	Chiffonnette après nettoyage (Tapis dec poitrine Abattoir carnés)	Wipe after cleaning (Carpet breast slaughterhouse)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	2200	Chiffonnette après nettoyage (Tapis milieu de ligne Abattoir carnés)	Wipe after cleaning (Mid-line slaughterhouse meat conveyor)	H-	+	H-	+	*L.welshimeri*	-	H-	H-		*L.innocua*	-	-	**NA**	**NA**	-	6	c
2019	2201	Chiffonnette après nettoyage (Dec L1 Abattoir carnés)	Wipe after cleaning (Dec L1 Slaughterhouse meat)	st	st	st	st		-	st	st			-	-	**NA**	**NA**	-	6	c
2019	2945	Chiffonnette avant nettoyage (abattoir porcs)	Rags before cleaning (Pigs slaughterhouse)	H+/H-	+	H+/H-	+	*L.monocytogenes/ L.innocua*	+	H+/H-	H+/H-	+	*L.monocytogenes/ L.innocua*	+	+	**PA**	**PA**		6	c

PRODUCTION ENVIRONMENTAL SAMPLES - Half Fraser Protocol- 37°C (*Listeria monocytogenes*)																					
Year	No	Product (French)	Product (English name)	**Reference method: ISO 11290-1♦**						**Méthode COMPASS *Listeria* Agar**										Category	Type
										Half Fraser pre-warmed at 37°C then incubated for 18 h at 37°C											
				Half Fraser		Fraser		Confirmation	Final result	COMPASS *Listeria* Agar		Confirmations		Final result L.mono		**Agreement**		**Subculture in Fraser 1 on negative samples**			
				O&A	Palcam	O&A	Palcam			22 h	48 h	β haemolyse	API Listeria	**22 h**	**48 h**	**22 h**	**48 h**				
2019	**3364**	**Chiffonnette Stéphan avant nettoyage (barre de céréales)**	**Rags Stephan before cleaning (cereal bar)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	**+**	*L.monocytogenes*	+	+	**PA**	**PA**		6	c
2019	**3365**	**Chiffonnette bol avant nettoyage (barres de céréales)**	**Bowl wipe before cleaning (cereal bars)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	**+**	*L.monocytogenes*	+	+	**PA**	**PA**		6	c
2019	**3366**	**Chiffonnette Stéphan avant nettoyage (barre de céréales)**	**Stéphan wipe before cleaning (cereal bar)**	st	st	-	st		-	H+	H+	**+**	*L.monocytogenes*	+	+	**PD**	**PD**		6	c
2019	**3367**	**Chiffonnette bol avant nettoyage (barres de céréales)**	**Bowl wipe before cleaning (cereal bars)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	**+**	*L.monocytogenes*	+	+	**PA**	**PA**		6	c
2019	**3368**	**Chiffonnette avant nettoyage (saucisses cocktail)**	**Cleaning cloth before cleaning (cocktail sausages)**	H+	+	H+	+	*L.monocytogenes*	+	H+	H+	**+**	*L.monocytogenes*	+	+	**PA**	**PA**		6	c
2019	**3369**	**Chiffonnette avant nettoyage (saucisses cocktail)**	**Cloth before cleaning (cocktail sausages)**	-	-	-	-		-	H+	H+	**+**	*L.monocytogenes*	+	+	**PD**	**PD**		6	c
2019	5195	Lingette découpe végétaux avant nettoyage	Vegetable cutting wipe before cleaning	st	st	H+	+	*L.monocytogenes*	+	H+	H+	**+**	*L.monocytogenes*	+	+	**PA**	**PA**		6	c

Appendix 18 - Relative level of detection determination: raw data - *Listeria monocytogenes* - Half Fraser Protocol- 37°C

Composite: Deli salad (Piémontaise)
Strain: *Listeria monocytogenes* Ad494 **48 h at 5°C ± 3°C**
Aerobic mesophilic flora: 1,4 10^3 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			O&A	Palcam	O&A	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
824	0	0	st	st	st	-	-	0/5	-	-	/	-	-	0/5	0/5
825			st	st	st	st	-		-	-	/	-	-		
826			st	st	st	-	-		-	-	/	-	-		
827			st	-	st	st	-		-	-	/	-	-		
828			st	st	st	st	-		-	-	/	-	-		
888	1	0,8	+	+	+	+	+	9/20	+	+	+	+	+	7/20	7/20
889			+	+	+	+	+		+	+	+	+	+		
890			+	+	+	+	+		+	+	+	+	+		
891			st	st	-	-	-		st	st	/	-	-		
892			st	st	-	st	-		-	-	/	-	-		
893			-	+ (L.welshimeri)	-	+ (L.welshimeri)	-		-	-	/	-	-		
894			st	st	-	-	-		st	st	/	-	-		
895			st	st	st	st	-		st	st	/	-	-		
896			+	+	+	+	+		-	-	/	-	-		
897			+	+	+	+	+		-	-	/	-	-		
898			+	+	+	+	+		-	-	/	-	-		
899			-	+	-	+	-		st	st	/	-	-		
900			+	+	+	+	+		+	+	+	+	+		
901			+	+	+	+	+		-	-	/	-	-		
902			st	-	-	-	-		-	-	/	-	-		
903			-	+	-	+	-		-	-	/	-	-		
904			st	st	-	-	-		+	+	+	+	+		
905			-	+	-	+	-		+	+	+	+	+		
906			+	+	+	+	+		st	st	/	-	-		
907			-	+ (L.welshimeri)	-	+ (L.welshimeri)	-		+	+	+	+	+		
908	2	2,2	+	+	+	+	+	5/5	-	+	+	-	+	4/5	5/5
909			+	+	+	+	+		+	+	+	+	+		
910			+	+	+	+	+		+	+	+	+	+		
911			+	+	+	+	+		+	+	+	+	+		
912			+	+	+	+	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Meat products: Rillettes
Strain: *L.monocytogenes* Ad669 **48 h at 5°C ± 3°C**
Aerobic mesophilic flora: 10 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			O&A	Palcam	O&A	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
1795	0	0	st	st	st	st	-	0/5	st	st	/	-	-	0/5	0/5
1796			-	st	-	st	-		st	st	/	-	-		
1797			st	st	st	st	-		st	st	/	-	-		
1798			st	st	st	st	-		st	-	/	-	-		
1799			st	st	st	st	-		-	-	/	-	-		
1800	1	0,5	st	st	st	st	-	5/20	+	+	+	+	+	10/20	10/20
1801			+	+	+	+	+		+	+	+	+	+		
1802			+	+	+	+	+		+	+	+	+	+		
1803			st	st	st	st	-		st	-	/	-	-		
1804			st	st	st	st	-		+	+	+	+	+		
1805			st	st	st	st	-		st	-	/	-	-		
1806			st	st	st	st	-		st	st	/	-	-		
1807			st	st	st	st	-		st	st	/	-	-		
1808			+	+	+	+	+		-	-	/	-	-		
1809			-	st	st	st	-		+	+	+	+	+		
1810			+	+	+	+	+		st	st	/	-	-		
1811			st	st	st	st	-		+	+	+	+	+		
1812			-	st	st	st	-		st	st	/	-	-		
1813			st	st	st	st	-		+	+	+	+	+		
1814			st	st	st	st	-		st	st	/	-	-		
1815			-	st	-	st	-		+	+	+	+	+		
1816			-	st	st	st	-		st	st	/	-	-		
1817			-	st	st	st	-		st	st	/	-	-		
1818			+	+	+	+	+		+	+	+	+	+		
1819			-	st	st	st	-		+	+	+	+	+		
1820	2	1,4	+	+	+	+	+	4/5	st	st	/	-	-	2/5	2/5
1821			+	+	+	+	+		st	st	/	-	-		
1822			+	+	+	+	+		+	+	+	+	+		
1823			+	+	+	+	+		-	-	/	-	-		
1824			st	st	-	st	-		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Dairy products: raw milk
Strain: *L.monocytogenes* 153 **48 h at 5°C ± 3°C**
Aerobic mesophilic flora: 2,6 10^5 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			O&A	Palcam	O&A	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
2048	0	0	st	-	st	st	-	0/5	st	-		-	-	0/5	0/5
2049			st	st	st	st	-		st	-		-	-		
2050			st	st	st	st	-		st	-		-	-		
2051			st	st	st	st	-		st	-		-	-		
2052			st	st	st	st	-		st	-		-	-		
2078	1	0,3	st	st	-	st	-	3/20	-	-		-	-	8/20	8/20
2079			st	st	st	st	-		+	+	+	+	+		
2080			st	st	st	st	-		st	-		-	-		
2081			st	st	st	st	-		st	-		-	-		
2082			st	st	-	st	-		st	-		-	-		
2083			st	st	st	st	-		st	-		-	-		
2084			st	st	st	st	-		st	-		-	-		
2085			st	st	st	st	-		st	-		-	-		
2086			st	st	st	st	-		+	+	+	+	+		
2087			st	st	st	st	-		st	-		-	-		
2088			st	st	-	st	-		+	+	+	+	+		
2089			st	st	st	st	-		st	-		-	-		
2090			st	st	-	st	-		+	+	+	+	+		
2091			+	+	/	/	+		+	+	+	+	+		
2092			st	st	st	st	-		+	+	+	+	+		
2093			st	st	st	-	-		+	+	+	+	+		
2094			+	+	/	/	+		-	-		-	-		
2095			+	+	+	+	+		-	-		-	-		
2096			st	st	st	st	-		+	+	+	+	+		
2097			st	st	st	st	-		st	-		-	-		
2098	2	0,8	+	+	/	/	+	3/5	st	-		-	-	4/5	4/5
2099			+	+	/	/	+		+	+	+	+	+		
2100			st	st	-	st	-		+	+	+	+	+		
2101			st	st	st	st	-		+	+	+	+	+		
2102			+	+	/	/	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Fishery products: smoked salmon
Strain: *Listeria monocytogenes* Ad670 **48 h à**
Aerobic mesophilic flora: 1,0 10^2CFU/g **5°C ± 3°C**

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			O&A	Palcam	O&A	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
4755	0	0	st	st	st	st	-	0/5	st	-		-	-	0/5	0/5
4756			st	st	st	st	-		st	-		-	-		
4757			-	-	-	-	-		st	-		-	-		
4758			st	st	st	st	-		st	-		-	-		
4759			st	st	-	st	-		st	st		-	-		
4895	1	0,6	st	st	st	st	-	8/20	-	-		-	-	9/20	9/20
4896			st	st	st	st	-		+	+	+	+	+		
4897			st	st	st	st	-		st	st		-	-		
4898			+	+	+	+	+		st	st		-	-		
4899			st	-	st	st	-		st	st		-	-		
4900			st	st	st	st	-		st	st		-	-		
4901			+	+	+	+	+		st	st		-	-		
4902			st	st	st	st	-		+	+	+	+	+		
4903			+	+	+	+	+		st	st		-	-		
4904			+	+	+	+	+		-	-		-	-		
4905			st	st	st	st	-		+	+	+	+	+		
4906			+	+	+	+	+		+	+	+	+	+		
4907			+	+	+	+	+		st	st		-	-		
4908			st	st	st	st	-		+	+	+	+	+		
4909			st	st	st	st	-		st	st		-	-		
4910			st	-	st	st	-		+	+	+	+	+		
4911			+	+	+	+	+		st	st		-	-		
4912			st	-	st	st	-		+	+	+	+	+		
4913			st	st	st	st	-		+	+	+	+	+		
4914			+	+	+	+	+		+	+	+	+	+		
4915	2	3,9	+	+	+	+	+	5/5	+	+	+	+	+	5/5	5/5
4916			+	+	+	+	+		+	+	+	+	+		
4917			+	+	+	+	+		+	+	+	+	+		
4918			+	+	+	+	+		+	+	+	+	+		
4919			+	+	+	+	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Vegetables: frozen sliced zucchini
Strain: *Listeria monocytogenes* Ad1672 **2 weeks at -20°C**
Aerobic mesophilic flora:1,3.10^3 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/ Total	Reading			Final result		Number of positive samples/Total	
			O&A	Palcam	O&A	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
3638	0	0	H- d(NC sur TSYEA)	+d(NC sur TSYEA)	-	st	-	0/5	-	+d	- (NC sur TSYEA)	-	-	0/5	0/5
3639			-	st	-	-	-		-	+d	- (NC sur TSYEA)	-	-		
3640			H- d(NC sur TSYEA)	-	H- d(NC sur TSYEA)	-	-		-	-	/	-	-		
3641			H- d(NC sur TSYEA)	-	H- d(NC sur TSYEA)	-	-		-	+d	- (NC sur TSYEA)	-	-		
3642			H- d(NC sur TSYEA)	-	H- d(NC sur TSYEA)	-	-		-	+d	- (NC sur TSYEA)	-	-		
3807	1	0,4	+	+	+	+	+	9/20	+	+	+	+	+	8/20	8/20
3808			+	+	+	+	+		-	-		-	-		
3809			-	+	-	+	-		-	-		-	-		
3810			-	-	-	-	-		-	-		-	-		
3811			+	+	+	+	+		-	-		-	-		
3812			-	+	-	+	-		+	+	+	+	+		
3813			-	-	-	-	-		+	+	+	+	+		
3814			-	-	-	-	-		-	-		-	-		
3815			-	-	-	-	-		+	+	+	+	+		
3816			-	+	-	+	-		+	+	+	+	+		
3817			-	-	-	-	-		-	-		-	-		
3818			-	-	-	-	-		-	-		-	-		
3819			+	+	+	+	+		-	-		-	-		
3820			-	-	-	-	-		+	+	+	+	+		
3821			+	+	+	+	+		-	-		-	-		
3822			+	+	+	+	+		+	+	+	+	+		
3823			+	+	+	+	+		-	-		-	-		
3824			+	+	+	+	+		-	-		-	-		
3825			+	+	+	+	+		-	-		-	-		
3826			-	-	-	-	-		+	+	+	+	+		
3827	2	3,0	-	+	-	+	-	4/5	+	+	+	+	+	5/5	5/5
3828			+	+	+	+	+		+	+	+	+	+		
3829			+	+	+	+	+		+	+	+	+	+		
3830			+	+	+	+	+		+	+	+	+	+		
3831			+	+	+	+	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Environment: rinse water
Strain: *L.monocytogenes* Ad551 **48 h à 5°C ± 3°C**
Aerobic mesophilic flora: 5,6 10^2 CFU/g

Sample No	Level	Inoculation level (CFU/sample)	ISO 11290-1♦						COMPASS Listeria agar						
			Half Fraser		Fraser 1		Final result	Number of positive samples/Total	Reading			Final result		Number of positive samples/Total	
			O&A	Palcam	O&A	Palcam			22 h	48 h	Confirmation	22 h	48 h	22 h	48 h
2484	0	/	-	st	-	-	-	0/5	st	st		-	-	0/5	0/5
2485			st	st	-	st	-		st	st		-	-		
2486			st	st	st	-	-		st	st		-	-		
2487			st	st	st	st	-		st	-		-	-		
2488			st	st	-	-	-		st	st		-	-		
2564	1	0,7	+	+	+	+	+	8/20	+	+	+	+	+	8/20	8/20
2565			+	+	+	+	+		st	st		-	-		
2566			+	+	+	+	+		st	st		-	-		
2567			st	st	st	st	-		st	st		-	-		
2568			st	st	st	st	-		st	st		-	-		
2569			st	st	st	st	-		st	st		-	-		
2570			+	+	+	+	+		st	st		-	-		
2571			st	st	st	st	-		st	st		-	-		
2572			st	st	st	st	-		st	st		-	-		
2573			st	st	st	st	-		+	+	+	+	+		
2574			+	+	+	+	+		st	st		-	-		
2575			st	st	st	st	-		st	st		-	-		
2576			+	+	+	+	+		+	+	+	+	+		
2577			st	st	st	st	-		+	+	+	+	+		
2578			st	st	st	st	-		+	+	+	+	+		
2579			st	st	st	st	-		st	st		-	-		
2580			-	-	-	st	-		+	+	+	+	+		
2581			+	+	+	+	+		+	+	+	+	+		
2582			st	st	st	st	-		+	+	+	+	+		
2583			+	+	+	+	+		st	st		-	-		
2584	2	4,5	+	+	+	+	+	5/5	+	+	+	+	+	5/5	5/5
2585			+	+	+	+	+		+	+	+	+	+		
2586			+	+	+	+	+		+	+	+	+	+		
2587			+	+	+	+	+		+	+	+	+	+		
2588			+	+	+	+	+		+	+	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Appendix 19 - Inter-laboratory study: results obtained by the collaborators and the expert laboratory (initial validation study)

Collaborator A

Aerobic mesophilic flora:420 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
A2	-	-	-	-	**-**	-	-	/	**/**
A3	-	-	-	-	**-**	-	-	/	**/**
A7	-	-	-	-	**-**	-	-	/	**/**
A12	-	-	-	-	**-**	-	-	/	**/**
A17	-	-	-	-	**-**	-	-	/	**/**
A18	-	-	-	-	**-**	-	-	/	**/**
A21	-	-	-	-	**-**	-	-	/	**/**
A23	-	-	-	-	**-**	-	-	/	**/**
A4	+	+	+	+	**+**	+	/	+	**+**
A8	+	+	+	+	**+**	+	/	+	**+**
A9	+	+	+	+	**+**	+	/	+	**+**
A13	+	+	+	+	**+**	+	/	+	**+**
A16	+	+	+	+	**+**	+	/	+	**+**
A20	+	+	+	+	**+**	+	/	+	**+**
A22	+	+	+	+	**+**	+	/	+	**+**
A24	+	+	+	+	**+**	+	/	+	**+**
A1	+	+	+	+	**+**	+	/	+	**+**
A5	+	+	+	+	**+**	+	/	+	**+**
A6	+	+	+	+	**+**	+	/	+	**+**
A10	+	+	+	+	**+**	+	/	+	**+**
A11	+	+	+	+	**+**	+	/	+	**+**
A14	+	+	+	+	**+**	+	/	+	**+**
A15	+	+	+	+	**+**	+	/	+	**+**
A19	+	+	+	+	**+**	+	/	+	**+**

Collaborator B

Aerobic mesophilic flora: 9 000 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
B2	-	-	-	-	**-**	-	-	/	**/**
B3	-	-	-	-	**-**	-	-	/	**/**
B7	-	-	-	-	**-**	-	-	/	**/**
B12	-	-	-	-	**-**	-	-	/	**/**
B17	-	-	-	-	**-**	-	-	/	**/**
B18	-	-	-	-	**-**	-	-	/	**/**
B21	-	-	-	-	**-**	-	-	/	**/**
B23	-	-	-	-	**-**	-	-	/	**/**
B4	+	+	+	+	**+**	+	/	+	**+**
B8	+	+	+	+	**+**	+	/	+	**+**
B9	+	+	+	+	**+**	+	/	+	**+**
B13	+	+	+	+	**+**	+	/	+	**+**
B16	+	+	+	+	**+**	+	/	+	**+**
B20	+	+	+	+	**+**	+	/	+	**+**
B22	+	+	+	+	**+**	+	/	+	**+**
B24	+	+	+	+	**+**	+	/	+	**+**
B1	+	+	+	+	**+**	+	/	+	**+**
B5	+	+	+	+	**+**	+	/	+	**+**
B6	+	+	+	+	**+**	+	/	+	**+**
B10	+	+	+	+	**+**	+	/	+	**+**
B11	+	+	+	+	**+**	+	/	+	**+**
B14	+	+	+	+	**+**	+	/	+	**+**
B15	+	+	+	+	**+**	+	/	+	**+**
B19	+	+	+	+	**+**	+	/	+	**+**

Collaborator C

Aerobic mesophilic flora:460 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
C2	-	-	-	-	**-**	-	-	/	**/**
C3	-	-	-	-	**-**	-	-	/	**/**
C7	-	-	-	-	**-**	-	-	/	**/**
C12	-	-	-	-	**-**	-	-	/	**/**
C17	-	-	-	-	**-**	-	-	/	**/**
C18	-	-	-	-	**-**	-	-	/	**/**
C21	-	-	-	-	**-**	-	-	/	**/**
C23	-	-	-	-	**-**	-	-	/	**/**
C4	+	+	+	+	**+**	+	/	+	**+**
C8	+	+	+	+	**+**	+	/	+	**+**
C9	+	+	+	+	**+**	+	/	+	**+**
C13	+	+	+	+	**+**	+	/	+	**+**
C16	+	+	+	+	**+**	+	/	+	**+**
C20	+	+	+	+	**+**	+	/	+	**+**
C22	+	+	+	+	**+**	+	/	+	**+**
C24	+	+	+	+	**+**	+	/	+	**+**
C1	+	+	+	+	**+**	+	/	+	**+**
C5	+	+	+	+	**+**	+	/	+	**+**
C6	+	+	+	+	**+**	+	/	+	**+**
C10	+	+	+	+	**+**	+	/	+	**+**
C11	+	+	+	+	**+**	+	/	+	**+**
C14	+	+	+	+	**+**	+	/	+	**+**
C15	+	+	+	+	**+**	+	/	+	**+**
C19	+	+	+	+	**+**	+	/	+	**+**

Collaborator D

Aerobic mesophilic flora: 3 000 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
D2	-	-	-	-	**-**	-	-	/	**/**
D3	-	-	-	-	**-**	-	-	/	**/**
D7	-	-	-	-	**-**	-	-	/	**/**
D12	-	-	-	-	**-**	-	-	/	**/**
D17	-	-	-	-	**-**	-	-	/	**/**
D18	-	-	-	-	**-**	-	-	/	**/**
D21	-	-	-	-	**-**	-	-	/	**/**
D23	-	-	-	-	**-**	-	-	/	**/**
D4	+	+	+	+	**+**	+	+	+	**+**
D8	+	+	+	+	**+**	+	+	+	**+**
D9	+	+	+	+	**+**	+	+	+	**+**
D13	+	+	+	+	**+**	+	+	+	**+**
D16	+	+	+	+	**+**	+	+	+	**+**
D20	+	+	+	+	**+**	+	+	+	**+**
D22	+	+	+	+	**+**	+	+	+	**+**
D24	+	+	+	+	**+**	+	+	+	**+**
D1	+	+	+	+	**+**	+	+	+	**+**
D5	+	+	+	+	**+**	+	+	+	**+**
D6	+	+	+	+	**+**	+	+	+	**+**
D10	+	+	+	+	**+**	+	+	+	**+**
D11	+	+	+	+	**+**	+	+	+	**+**
D14	+	+	+	+	**+**	+	+	+	**+**
D15	+	+	+	+	**+**	+	+	+	**+**
D19	+	+	+	+	**+**	+	+	+	**+**

Collaborator F

Aerobic mesophilic flora: 360 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
F2	-	-	-	-	**-**	-	-	/	**/**
F3	-	-	-	-	**-**	-	-	/	**/**
F7	-	-	-	-	**-**	-	-	/	**/**
F12	-	-	-	-	**-**	-	-	/	**/**
F17	-	-	-	-	**-**	-	-	/	**/**
F18	-	-	-	-	**-**	-	-	/	**/**
F21	-	-	-	-	**-**	-	-	/	**/**
F23	-	-	-	-	**-**	-	-	/	**/**
F4	+	+	+	+	**+**	+	/	+	**+**
F8	+	+	+	+	**+**	+	/	+	**+**
F9	+	+	+	+	**+**	+	/	+	**+**
F13	+	+	+	+	**+**	+	/	+	**+**
F16	-	-	-	-	**-**	-	-	/	**-**
F20	+	+	+	+	**+**	+	/	+	**+**
F22	+	+	+	+	**+**	+	/	+	**+**
F24	+	+	+	+	**+**	+	/	+	**+**
F1	+	+	+	+	**+**	+	/	+	**+**
F5	+	+	+	+	**+**	+	/	+	**+**
F6	+	+	+	+	**+**	+	/	+	**+**
F10	+	+	+	+	**+**	+	/	+	**+**
F11	+	+	+	+	**+**	+	/	+	**+**
F14	+	+	+	+	**+**	+	/	+	**+**
F15	+	+	+	+	**+**	+	/	+	**+**
F19	+	+	+	+	**+**	+	/	+	**+**

Collaborator G

Aerobic mesophilic flora:500 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
G2	-	-	-	-	**-**	-	-	/	**/**
G3	-	-	-	-	**-**	-	-	/	**/**
G7	-	-	-	-	**-**	-	-	/	**/**
G12	-	-	-	-	**-**	-	-	/	**/**
G17	-	-	-	-	**-**	-	-	/	**/**
G18	-	-	-	-	**-**	-	-	/	**/**
G21	-	-	-	-	**-**	-	-	/	**/**
G23	-	-	-	-	**-**	-	-	/	**/**
G4	+	+	+	+	**+**	+	/	+	**+**
G8	+	+	+	+	**+**	+	/	+	**+**
G9	+	+	+	+	**+**	+	/	+	**+**
G13	-	-	-	-	**-**	-	-	-	**-**
G16	+	+	+	+	**+**	+	/	+	**+**
G20	+	+	+	+	**+**	+	/	+	**+**
G22	+	+	+	+	**+**	+	/	+	**+**
G24	+	+	+	+	**+**	+	/	+	**+**
G1	+	+	+	+	**+**	+	/	+	**+**
G5	+	+	+	+	**+**	+	/	+	**+**
G6	+	+	+	+	**+**	+	/	+	**+**
G10	+	+	+	+	**+**	+	/	+	**+**
G11	+	+	+	+	**+**	+	/	+	**+**
G14	+	+	+	+	**+**	+	/	+	**+**
G15	+	+	+	+	**+**	+	/	+	**+**
G19	+	+	+	+	**+**	+	/	+	**+**

Collaborator H

Aerobic mesophilic flora:690 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
H2	-	-	-	-	**-**	-	-	/	**/**
H3	-	-	-	-	**-**	-	-	/	**/**
H7	-	-	-	-	**-**	-	-	/	**/**
H12	-	-	-	-	**-**	-	-	/	**/**
H17	-	-	-	-	**-**	-	-	/	**/**
H18	-	-	-	-	**-**	-	-	/	**/**
H21	-	-	-	-	**-**	-	-	/	**/**
H23	-	-	-	-	**-**	-	-	/	**/**
H4	+	+	+	+	**+**	+	/	+	**+**
H8	+	+	+	+	**+**	+	/	+	**+**
H9	+	+	+	+	**+**	+	/	+	**+**
H13	+	+	+	+	**+**	+	/	+	**+**
H16	+	+	+	+	**+**	+	/	+	**+**
H20	+	+	+	+	**+**	+	/	+	**+**
H22	+	+	+	+	**+**	+	/	+	**+**
H24	+	+	+	+	**+**	+	/	+	**+**
H1	+	+	+	+	**+**	+	/	+	**+**
H5	+	+	+	+	**+**	+	/	+	**+**
H6	+	+	+	+	**+**	+	/	+	**+**
H10	+	+	+	+	**+**	+	/	+	**+**
H11	+	+	+	+	**+**	+	/	+	**+**
H14	+	+	+	+	**+**	+	/	+	**+**
H15	+	+	+	+	**+**	+	/	+	**+**
H19	+	+	+	+	**+**	+	/	+	**+**

Collaborator I

Aerobic mesophilic flora: 630 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
I2	-	-	-	-	**-**	-	-	/	**/**
I3	-	-	-	-	**-**	-	-	/	**/**
I7	-	-	-	-	**-**	-	-	/	**/**
I12	-	-	-	-	**-**	-	-	/	**/**
I17	-	-	-	-	**-**	-	-	/	**/**
I18	-	-	-	-	**-**	-	-	/	**/**
I21	-	-	-	-	**-**	-	-	/	**/**
I23	-	-	-	-	**-**	-	-	/	**/**
I4	+	+	+	+	**+**	+	/	+	**+**
I8	+	+	+	+	**+**	+	/	+	**+**
I9	+	+	+	+	**+**	+	/	+	**+**
I13	+	+	+	+	**+**	+	/	+	**+**
I16	+	+	+	+	**+**	+	/	+	**+**
I20	+	+	+	+	**+**	+	/	+	**+**
I22	+	+	+	+	**+**	+	/	+	**+**
I24	+	+	+	+	**+**	+	/	+	**+**
I1	+	+	+	+	**+**	+	/	+	**+**
I5	+	+	+	+	**+**	+	/	+	**+**
I6	+	+	+	+	**+**	+	/	+	**+**
I10	+	+	+	+	**+**	+	/	+	**+**
I11	+	+	+	+	**+**	+	/	+	**+**
I14	+	+	+	+	**+**	+	/	+	**+**
I15	+	+	+	+	**+**	+	/	+	**+**
I19	+	+	+	+	**+**	+	/	+	**+**

Collaborator J

Aerobic mesophilic flora:17000 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
J2	-	-	-	-	**-**	-	-	/	**/**
J3	-	-	-	-	**-**	-	-	/	**/**
J7	-	-	-	-	**-**	-	-	/	**/**
J12	-	-	-	-	**-**	-	-	/	**/**
J17	-	-	-	-	**-**	-	-	/	**/**
J18	-	-	-	-	**-**	-	-	/	**/**
J21	-	-	-	-	**-**	-	-	/	**/**
J23	-	-	-	-	**-**	-	-	/	**/**
J4	+	+	+	+	**+**	+	/	+	**+**
J8	+	+	+	+	**+**	+	/	+	**+**
J9	+	+	+	+	**+**	+	/	+	**+**
J13	+	+	+	+	**+**	+	/	+	**+**
J16	+	+	+	+	**+**	+	/	+	**+**
J20	-	-	-	-	**-**	-	-	-	**-**
J22	+	+	+	+	**+**	+	/	+	**+**
J24	+	+	+	+	**+**	+	/	+	**+**
J1	+	+	+	+	**+**	+	/	+	**+**
J5	+	+	+	+	**+**	+	/	+	**+**
J6	+	+	+	+	**+**	+	/	+	**+**
J10	+	+	+	+	**+**	+	/	+	**+**
J11	+	+	+	+	**+**	+	/	+	**+**
J14	+	+	+	+	**+**	+	/	+	**+**
J15	+	+	+	+	**+**	+	/	+	**+**
J19	+	+	+	+	**+**	+	/	+	**+**

Collaborator K

Aerobic mesophilic flora:390 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
K2	-	-	-	-	**-**	-	-	/	**/**
K3	-	-	-	-	**-**	-	-	/	**/**
K7	-	-	-	-	**-**	-	-	/	**/**
K12	-	-	-	-	**-**	-	-	/	**/**
K17	-	-	-	-	**-**	-	-	/	**/**
K18	-	-	-	-	**-**	-	-	/	**/**
K21	-	-	-	-	**-**	-	-	/	**/**
K23	-	-	-	-	**-**	-	-	/	**/**
K4	+	+	+	+	**+**	+	+	+	**+**
K8	+	+	+	+	**+**	+	+	+	**+**
K9	+	+	+	+	**+**	+	+	+	**+**
K13	+	+	+	+	**+**	+	+	+	**+**
K16	+	+	+	+	**+**	+	+	+	**+**
K20	+	+	+	+	**+**	+	+	+	**+**
K22	+	+	+	+	**+**	+	+	+	**+**
K24	+	+	+	+	**+**	+	+	+	**+**
K1	+	+	+	+	**+**	+	+	+	**+**
K5	+	+	+	+	**+**	+	+	+	**+**
K6	+	+	+	+	**+**	+	+	+	**+**
K10	+	+	+	+	**+**	+	+	+	**+**
K11	+	+	+	+	**+**	+	+	+	**+**
K14	+	+	+	+	**+**	+	+	+	**+**
K15	+	+	+	+	**+**	+	+	+	**+**
K19	+	+	+	+	**+**	+	+	+	**+**

Collaborator L

Aerobic mesophilic flora:550 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
L2	-	-	-	-	**-**	-	-	/	**/**
L3	-	-	-	-	**-**	-	-	/	**/**
L7	-	-	-	-	**-**	-	-	/	**/**
L12	-	-	-	-	**-**	-	-	/	**/**
L17	-	-	-	-	**-**	-	-	/	**/**
L18	-	-	-	-	**-**	-	-	/	**/**
L21	-	-	-	-	**-**	-	-	/	**/**
L23	-	-	-	-	**-**	-	-	/	**/**
L4	+	+	+	+	**+**	+	+	+	**+**
L8	+	+	+	+	**+**	+	+	+	**+**
L9	+	+	+	+	**+**	+	+	+	**+**
L13	+	+	+	+	**+**	+	+	+	**+**
L16	+	+	+	+	**+**	+	+	+	**+**
L20	+	+	+	+	**+**	+	+	+	**+**
L22	+	+	+	+	**+**	+	+	+	**+**
L24	+	+	+	+	**+**	+	+	+	**+**
L1	+	+	+	+	**+**	+	+	+	**+**
L5	+	+	+	+	**+**	+	+	+	**+**
L6	+	+	+	+	**+**	+	+	+	**+**
L10	+	+	+	+	**+**	+	+	+	**+**
L11	+	+	+	+	**+**	+	+	+	**+**
L14	+	+	+	+	**+**	+	+	+	**+**
L15	+	+	+	+	**+**	+	+	+	**+**
L19	+	+	+	+	**+**	+	+	+	**+**

Collaborator M

Aerobic mesophilic flora:950 cfu/ml

Sample No	Reference method					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
M2	-	-	-	-	**-**	-	-	/	**/**
M3	-	-	-	-	**-**	-	-	/	**/**
M7	-	-	-	-	**-**	-	-	/	**/**
M12	-	-	-	-	**-**	-	-	/	**/**
M17	-	-	-	-	**-**	-	-	/	**/**
M18	-	-	-	-	**-**	-	-	/	**/**
M21	-	-	-	-	**-**	-	-	/	**/**
M23	-	-	-	-	**-**	-	-	/	**/**
M4	+	+	+	+	**+**	+	+	+	**+**
M8	+	+	+	+	**+**	+	+	+	**+**
M9	+	+	+	+	**+**	+	+	+	**+**
M13	+	+	+	+	**+**	+	+	+	**+**
M16	+	+	+	+	**+**	+	+	+	**+**
M20	+	+	+	+	**+**	+	+	+	**+**
M22	+	+	+	+	**+**	+	+	+	**+**
M24	+	+	+	+	**+**	+	+	+	**+**
M1	+	+	+	+	**+**	+	+	+	**+**
M5	+	+	+	+	**+**	+	+	+	**+**
M6	+	+	+	+	**+**	+	+	+	**+**
M10	+	+	+	+	**+**	+	+	+	**+**
M11	+	+	+	+	**+**	+	+	+	**+**
M14	+	+	+	+	**+**	+	+	+	**+**
M15	+	+	+	+	**+**	+	+	+	**+**
M19	+	+	+	+	**+**	+	+	+	**+**

Collaborator O(ADRIA)

Aerobic mesophilic flora:530 cfu/ml

Sample No	Reference method♦					Alternative method			
	Half Fraser		Fraser 1			COMPASS Listeria Agar			
	OAA	Palcam	OAA	Palcam	**Result**	24H	48H	Confirmation	**Result**
O2	-	-	-	-	**-**	-	-	/	**/**
O3	-	-	-	-	**-**	-	-	/	**/**
O7	-	-	-	-	**-**	-	-	/	**/**
O12	-	-	-	-	**-**	-	-	/	**/**
O17	-	-	-	-	**-**	-	-	/	**/**
O18	-	-	-	-	**-**	-	-	/	**/**
O21	-	-	-	-	**-**	-	-	/	**/**
O23	-	-	-	-	**-**	-	-	/	**/**
O4	+	+	+	+	**+**	+	/	+	**+**
O8	+	+	+	+	**+**	+	/	+	**+**
O9	+	+	+	+	**+**	+	/	+	**+**
O13	+	+	+	+	**+**	+	/	+	**+**
O16	+	+	+	+	**+**	+	/	+	**+**
O20	+	+	+	+	**+**	+	/	+	**+**
O22	+	+	+	+	**+**	+	/	+	**+**
O24	+	+	+	+	**+**	+	/	+	**+**
O1	+	+	+	+	**+**	+	/	+	**+**
O5	+	+	+	+	**+**	+	/	+	**+**
O6	+	+	+	+	**+**	+	/	+	**+**
O10	+	+	+	+	**+**	+	/	+	**+**
O11	+	+	+	+	**+**	+	/	+	**+**
O14	+	+	+	+	**+**	+	/	+	**+**
O15	+	+	+	+	**+**	+	/	+	**+**
O19	+	+	+	+	**+**	+	/	+	**+**

♦ Analyses performed according to the COFRAC accreditation