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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

TRANSIA® PLATE Listeria

(Certificate number: TRA 02/06 – 11/95)

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

Qualitative method

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This report consists of 76 pages, including 7 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 0

23 October 2023

Quality Assurance documents related to this study can be consulted upon request from **Millipore SAS**.

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 methods♦	☒ EN ISO 11290-1/A1 (2005): Microbiology of food and animal feeding stuffs - Horizontal method for the detection and enumeration of *Listeria monocytogenes* - Part 1: detection of *Listeria monocytogenes* in foods ☒ ISO 11290-1 (May 2017): Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. - Part 1: detection method
Alternative method	**TRANSIA® PLATE *Listeria***
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 **TRANSIA® PLATE Listeria** was validated on the 21st of November 1995 (certificate number TRA 02/06 – 11/95) for detection of *Listeria* spp. A summary of the different studies is provided below:

Date	Study	ISO method	Validation standard	Expert Laboratory
November 1995	Initial validation for food products.	V08-055 (1993)	/	IPL
February 2000	Renewal	ISO 11290-1 (1997)	ISO 16140 (2003)	IPL
December 2003	Renewal Extension for a new protocol	ISO 11290-1 (1997)	ISO 16140 (2003)	IPL
December 2007	Renewal • Production environmental samples • Storage of Fraser broth 72h at 5°C ± 3°C • New confirmation protocols	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003)	IPL
November 2011	Renewal	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003)	ADRIA
July 2015	Renewal	ISO 11290-1 (1997) ISO 11290-1/A1 (2005)	ISO 16140 (2003)	ADRIA
January 2020	Renewal according to the ISO 16140-2:2016	ISO 11290-1 (2017)	ISO 16140-2 (2016)	ADRIA
October 2023	Renewal	ISO 11290-1 (2017)	ISO 16140-2 (2016)	ADRIA

2 METHOD PROTOCOLS

2.1 Alternative method

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

2.1.1 Principle

TRANSIA® PLATE *Listeria* is an ELISA test (Enzyme Linked Immuno Sorbent Assay) based on a two-steps sandwich-type reaction. The solid support of the reaction is a microtitration plate with dividable microwell strips. Specific antibodies of flagellar antigens are grafted on the microtitration plate wells.

2.1.2 Protocol

The different steps are described below:

- Enrichment in Half Fraser broth for **20 to 26 h at 30 ± 1°C**,
- Inoculation of 0.25 mL of the Half Fraser broth into 10 mL of Fraser broth, incubated for **22 to 26 h at 30 ± 1°C**, followed by a **TRANSIA® PLATE *Listeria* test** after a heat treatment of 1 to 2 mL of the enrichment broth Fraser at 95 - 100°C (boiling water) for 15 to 20 minutes.
- The test is considered positive if O.D.≥ PT (positive threshold) with PT= [(NC1+NC2)/2] + 0.15

Positive results with TRANSIA® PLATE are confirmed by:

- Using traditional tests described in the methods standardized by CEN, ISO (including the purification step). Isolate first from the selective medium used (Fraser) for the enrichment.
- Isolation from the Fraser Broth on Listeria O&A agar (Ottaviani and Agosti, ALOA®). Typical colonies allow to confirm the positive result. If preferred, could be also confirmed with direct characterization on a biochemical identification panel of at least one suspicious colony isolated. If no colonies are isolated, perform a purification step first.
- Isolation from the selective medium used (Fraser) on O&A agar. Typical colonies allow to confirm the positive result. If preferred, could be also confirmed with confirmation of at least one suspicious colony characteristic of L. monocytogenes on ALOA® Confirmation agar (confirmation of the monocytogenes species) or at least one suspicious colony that may or may not be characteristic of L. monocytogenes using Gram and catalase tests (confirmation of Listeria genus). Confirmation of the Listeria genus is mandatory if there is no L. monocytogenes. 4.

- Using any other NF VALIDATION certified method with a principle different from this method. The validated protocol of the second method must be followed in its entirety. This means that all steps prior to the intermediate step from which the confirmation starts should be common to both methods (for example, common enrichment with the same medium). The two validated methods (one used for detection and the other for confirmation) should therefore have a common trunk before branching of

It is possible to store the enrichment broths (Fraser) for 72 h at 5°C ± 3°C.

2.1.3 Restrictions

There is no restriction for use.

2.2 Reference method◆

For the initial validation study, the reference method used was the V08-055 (1993).

In 2007, the renewal studies were run according to the EN ISO 11290-1/A1 (2004): Microbiology of food and animal feeding stuffs - Horizontal method for the detection and enumeration of *Listeria monocytogenes* – Part 1: detection method.

The reference method used for the renewal study in 2020 was the ISO 11290-1 (2017): Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. - Part 1: detection method. The flow diagram is provided in **Appendix 2**.

2.3 Study design

The study is **a paired study design** as the reference and the alternative methods have the same enrichment step: Half Fraser broth incubated for 20 h at 30°C for the alternative method and for 25 h ± 1 h at 30°C for the reference method.

◆ Analysis performed according to the COFRAC accreditation

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/.

3.1.1 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 Number and nature of samples

325 samples were tested by IPL in 2003 and 2007 for extension and renewal studies providing 165 positive and 160 negative results.

For the renewal performed in 2020, 44 samples were removed due to high inoculation level in order to be in agreement with the AFNOR technical rules and 144 samples were tested providing 85 positive samples and 59 negative samples.

Taking into account all the studies, 206 positive samples and 219 samples were tested for a total of 425 samples.
The distribution per tested category and type is given in Table 1.

Table 1 – Distribution per tested category and type

Category		Type		Positive	Negative	Total
1	Composite foods	a	RTE	14	10	24
		b	RTRH	11	11	22
		c	Pastries, egg products	11	11	22
			Total	36	32	68
2	Meat products	a	Raw	11	9	20
		b	RTE, RTRH	16	7	23
		c	Delicatessen	12	19	31
			Total	39	35	74
3	Dairy products	a	Raw milk cheeses	10	17	27
		b	Raw milk	12	8	20
		c	Heat treated dairy products	10	12	22
			Total	32	37	69
4	Fishery products	a	Raw fish	14	12	26
		b	Smoked and seasoned fish	10	15	25
		c	RTE, RTRH	13	7	20
			Total	37	34	71
5	Vegetables	a	Fresh and frozen vegetables	9	11	20
		b	Pre-cooked, under modified atmosphere	11	9	20
		c	RTE, RTRH	10	21	31
			Total	30	41	71
6	Production environmental samples	a	Process water	12	8	20
		b	Sponges, swabs	8	24	32
		c	Dusts, residues	12	8	20
			Total	32	40	72
All categories				**206**	**219**	**425**

The distribution per target analyte is given in Table 2.

Table 2 - Distribution per target analyte

Category	*Listeria* spp (A)		*Listeria* spp + *Listeria monocytogenes* (B)		Total (A+B)		*Listeria monocytogenes* (C)		Total positive samples
	Number of samples	%	Number of samples	%	Number of samples	%	Number of samples	%	
1	27	75,0%	0	0,0%	27	75,0%	9	25,0%	36
2	14	35,9%	10	25,6%	24	61,5%	15	38,5%	39
3	12	37,5%	7	21,9%	19	59,4%	13	40,6%	32
4	12	32,4%	5	13,5%	17	45,9%	20	54,1%	37
5	14	46,7%	4	13,3%	18	60,0%	12	40,0%	30
6	8	25,0%	9	28,1%	17	53,1%	15	46,9%	32
Total	**87**	**42,2%**	**35**	**17,0%**	**122**	**59,2%**	**84**	**40,8%**	**206**

The number of samples contaminated with *Listeria* spp (including *Listeria monocytogenes*) is in agreement with the AFNOR Technical rules (between 15 and 25 per category).

3.1.1.2 *Artificial contamination of samples*

Artificial contaminations were done by seeding or spiking protocol. For the spiking protocol, the injury efficiency was evaluated by comparing enumeration done onto selective media (Palcam) and non-selective media (TSYEA). The artificial contaminations are presented in **Appendix 3**.

139 samples were artificially contaminated; 103 inoculated samples gave a positive result.

The repartition of the positive samples per inoculation protocol and inoculation level is given in Table 3.

Table 3 - Repartition of the positive samples per inoculation protocol and inoculation level

	Naturally contaminated	Cross contamination	Spiking protocol			Seeding protocol			Total
			≤5	5< CFU ≤10	10< CFU≤ 30	≤3	3< CFU ≤10	10< CFU≤ 30	
Number of samples	103	5	2	5	14	54	23	0	206
%	50,0	2,4	1,0	2,4	6,8	26,2	11,2	0	100

Taking into account all the studies, 50 % of the samples were naturally contaminated.

3.1.1.3 *Protocols applied during the validation study*

> ***Incubation times***

The minimum incubation times were applied:

- Half Fraser broth: 20 h at 30°C;
- Fraser broth: 22 h at 30°C.

> **ELISA tests**

During the validation, the washing steps for the ELISA test was performed by hand. An ELISA plate reader was used for O.D. measurement.

> ***Confirmation protocols***

- By streaking 10 µl of Fraser broth onto Palcam and chromogenic agar according to Ottaviani & Agosti (O&A); the typical colonies were confirmed according to classical tests described in the ISO method, including a purification step,
- By streaking 10 µl of Fraser broth onto O&A plate and Palcam plate. Typical colonies from O&A plates were confirmed by biochemical galleries (Oxoid™ Microbact™ 12L Kit) without a purification step,
- By streaking 10 µl onto ALOA® agar and then by using ALOA® Confirmation agar if the suspicious colony was characteristic of *Listeria monocytogenes* (blue colony with halo) (confirmation of species *monocytogenes*) or gram-coloration and catalase tests if the suspicious colony was characteristic of *Listeria* (blue colony without halo) (confirmation of *Listeria* genus).

> ***Fraser broth storage for 72 h at 5°C ± 3°C***

The stored enrichment broths (Fraser) of positive and discordant samples were tested again after storage for 72 h at 5°C ± 3°C (ELISA and confirmatory test).

3.1.1.4 Test results

Raw data per category are given in **Appendix 4**. The results are given in Table 4.

Table 4 - Interpretation of sample results between the reference and alternative method (based on the confirmed alternative)

	Category	PA	NA*	PD	ND**	PPND	PPNA	Total
1	**Composite foods**	33	31	1	2	0	1	**68**
2	**Meat products**	36	35	1	2	0	0	**74**
3	**Dairy products**	29	36	0	3	0	1	**69**
4	**Fishery products**	37	34	0	0	0	0	**71**
5	**Vegetables**	30	37	0	0	0	4	**71**
6	**Production environmental samples**	31	39	0	1	0	1	**72**
	TOTAL	**196**	**212**	**2**	**8**	**0**	**7**	**425**

: PPNA not included* *: PPND not included*

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

The calculations are presented in Table 5.

Table 5 – Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR)

Category		Type		PA	NA**	PD	ND**	PPND	PPNA	SE alt %	SE ref %	RT %	FPR %
1	Composite foods	a	RTE	13	10	1	0	0	0	100,0	92,9	95,8	0,0
		b	RTRH	9	11	0	2	0	0	81,8	100,0	90,9	0,0
		c	Pastries, egg products	11	10	0	0	0	1	100,0	100,0	100,0	9,1
			Total	33	31	1	2	0	1	94,4	97,2	95,6	3,1
2	Meat products	a	Raw	10	9	1	0	0	0	100,0	90,9	95,0	0,0
		b	RTE, RTRH	16	7	0	0	0	0	100,0	100,0	100,0	0,0
		c	Delicatessen	10	19	0	2	0	0	83,3	100,0	93,5	0,0
			Total	36	35	1	2	0	0	94,9	97,4	95,9	0,0
3	Dairy products	a	Raw milk cheeses	9	17	0	1	0	0	90,0	100,0	96,3	0,0
		b	Raw milk	10	7	0	2	0	1	83,3	100,0	90,0	12,5
		c	Heat treated dairy products	10	12	0	0	0	0	100,0	100,0	100,0	0,0
			Total	29	36	0	3	0	1	90,6	100,0	95,7	2,7
4	Fishery products	a	Raw fish	14	12	0	0	0	0	100,0	100,0	100,0	0,0
		b	Smoked and seasoned fish	10	15	0	0	0	0	100,0	100,0	100,0	0,0
		c	RTE, RTRH	13	7	0	0	0	0	100,0	100,0	100,0	0,0
			Total	37	34	0	0	0	0	100,0	100,0	100,0	0,0
5	Vegetables	a	Fresh and frozen vegetables	9	7	0	0	0	4	100,0	100,0	100,0	36,4
		b	Pre-cooked, under modified atmosphere products	11	9	0	0	0	0	100,0	100,0	100,0	0,0
		c	RTE, RTRH	10	21	0	0	0	0	100,0	100,0	100,0	0,0
			Total	30	37	0	0	0	4	100,0	100,0	100,0	9,8
6	Production environmental samples	a	Process water	12	7	0	0	0	1	100,0	100,0	100,0	12,5
		b	Sponges, swabs	8	24	0	0	0	0	100,0	100,0	100,0	0,0
		c	Dusts, residues	11	8	0	1	0	0	91,7	100,0	95,0	0,0
			Total	31	39	0	1	0	1	96,9	100,0	98,6	2,5
All categories				**196**	**212**	**2**	**8**	**0**	**7**	**96,1**	**99,0**	**97,6**	**3,2**

: PPNA not included* *: PPND not included*

A summary of the results is given in Table 6.

Table 6 - Summary of results

Sensitivity for the alternative method	$SE_{alt} = \frac{(PA+PD)}{(PA+ND+PD)} \times 100\,\%$	96.1 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA+ND)}{(PA+ND+PD)}\ x\ 100\ \%$	99.0 %
Relative trueness	$RT = \frac{(PA+NA)}{N} \times 100\,\%$	97.6 %
False positive ratio for the alternative method* **FP = PPNA + PPND**	$FPR = \frac{(FP)}{NA} \times 100\,\%$	3.2 %

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

3.1.1.6 Analysis of discordant results

The negative deviations are given in Table 7 and the positive deviations in Table 8.

Eight negative deviations were observed, 4 with naturally contaminated samples and 4 with artificially contaminated samples. For 2 samples (A26 and D37), the confirmatory tests concluded to the presence of *Listeria* spp in the enrichment broths. The detection level of the alternative method was probably not reached in these cases.

Two positive deviations were observed for naturally contaminated samples.

Table 7 - Negative deviations

Year of analysis	N° sample	Product	Artificial contaminations		Reference method ISO 11290-1/A1		Alternative method - TRANSIA® PLATE *Listeria*							Category	Type
			Strain	CFU/sample	CONFIRMATION	***Result L.spp***	TP Listeria		CONFIRMATION			FINAL RESULT TP Listeria	Agreement		
					IDENTIF.		OD	**Res.**	O&A	PALCAM	*Identification*				
ADRIA (2019)	**5775**	**Quiche-lorraine RTRH food**	*L. grayi* Ad1490	6,4	*L. grayi*	**+**	0,089	**-**	-d	-	NC	**-**	**ND**	1	b
ADRIA (2019)	**5776**	**RTRH food with zucchini and cheese**	*L. grayi* Ad1490	6,4	*L. grayi*	**+**	0,109	**-**	st	st	/	**-**	**ND**	1	b
IPL	A5	Smoked bacon	/	/	*L. innocua*	**+**	0,051	**-**	Ø	Ø	Ø	**-**	**ND**	2	c
IPL	A7	Peppered salami-type sausage	/	/	*L. innocua*	**+**	0,037	**-**	Ø	Ø	Ø	**-**	**ND**	2	c
IPL	A26	"Tome de Cambrai" raw milk cheese	/	/	*L. monocytogenes*	**+**	0,101	**-**	+LA	+LA	*L. monocytogenes*	**-**	**ND**	3	a
ADRIA (2019)	5865	Raw milk	/	/	*L. ivanovii*	**+**	0,102	-	H-d	-	NC (GRAM-)	**-**	**ND**	3	b
ADRIA (2019)	**7369**	**Raw milk**	*L. ivanovii Ad678*	0,6	*L. ivanovii*	**+**	0,210/0,141/0,139	**-/-/-**	-	-	/	**-**	**ND**	3	b
IPL	**D37**	**Scraps from workroom's floor**	*L. monocytogenes L149*	12	*L. monocytogenes*	**+**	0,091	**-**	+LA	+LA	*L. monocytogenes*	**-**	**ND**	6	c

Table 8 - Positive deviations

Year of analysis	N° sample	Product	Artificial contaminations		Reference method ISO 11290-1/A1	Alternative method - TRANSIA® PLATE *Listeria*					Category	Type
			Strain	CFU/sample	***Result L.* spp**	TP Listeria		CONFIRMATION	FINAL RESULT TP Listeria	Agreement		
						OD	Cut-off	*Identification*				
ADRIA (2019)	6003	RTE salad with chicken and cheese	/	/	**-**	1,510	0,169	*L. grayi*	**+**	**PD**	1	a
IPL	A14	Minced beef	/	/	**-**	1505	0,217	*L. grayi*	**+**	**PD**	2	a

The analyses of discordant results according to the EN ISO 16140-2:2016 is the following (See Table 9):

Table 9 - Analyses of discordant results

Category		Type		N+	ND**	PPND	PD	Paired study (ND+PPND)-PD	AL	(ND+PPND)+PD	AL
1	Composite foods	a	RTE	14	0	0	1	-1		1	
		b	RTRH	11	2	0	0	2		2	
		c	Pastries, egg products	11	0	0	0	0		0	
			Total	36	2	0	1	1	3	3	6
2	Meat products	a	Raw	11	0	0	1	-1		1	
		b	RTE, RTRH	16	0	0	0	0		0	
		c	Delicatessen	12	2	0	0	2		2	
			Total	39	2	0	1	1	3	3	6
3	Dairy products	a	Raw milk cheeses	10	1	0	0	1		1	
		b	Raw milk	12	2	0	0	2		2	
		c	Heat treated dairy products	10	0	0	0	0		0	
			Total	32	3	0	0	3	3	3	6
4	Fishery products	a	Raw fish	14	0	0	0	0		0	
		b	Smoked and seasoned fish	10	0	0	0	0		0	
		c	RTE, RTRH	13	0	0	0	0		0	
			Total	37	0	0	0	0	3	0	6
5	Vegetables	a	Fresh and frozen vegetables	9	0	0	0	0		0	
		b	Pre-cooked, under modified atmosphere	11	0	0	0	0		0	
		c	RTE, RTRH	10	0	0	0	0		0	
			Total	30	0	0	0	0	3	0	6
6	Production environmental samples	a	Process water	12	0	0	0	0		0	
		b	Sponges, swabs	8	0	0	0	0		0	
		c	Dusts, residues	12	1	0	0	1		1	
			Total	32	1	0	0	1	3	1	6
TOTAL				206	8	0	2	6	6	10	16

***: PPND not included*

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 (calculated values ≤ AL).

3.1.1.7 Enrichment broth storage at 5 ± 3 °C for 72 h

Only one change was observed after storage for 72 h at 5°C ± 3°C (See Table 10).

Table 10 - Enrichment broth storage

Year of analysis	N° sample	Product	Result before storage	Result after storage	Category	Type
IPL	**D37**	**Scraps from workroom's floor**	**ND**	**PA**	6	c

The analyses of discordant results become (See Table 11).

Table 11 - Analysis of discordant after storage 72 h at 5 ± 3°C

								Paired			
Category		**Type**		**N+**	**ND****	**PPND**	**PD**	**(ND+PPND) -PD**	**AL**	**(ND+PPND) +PD**	**AL**
1	**Composite foods**	a	RTE	14	0	0	1	-1		1	
		b	RTRH	11	2	0	0	2		2	
		c	Pastries, egg products	11	0	0	0	0		0	
			Total	36	2	0	1	1	3	3	6
2	**Meat products**	a	Raw	11	0	0	1	-1		1	
		b	RTE, RTRH	16	0	0	0	0		0	
		c	Delicatessen	12	2	0	0	2		2	
			Total	39	2	0	1	1	3	3	6
3	**Dairy products**	a	Raw milk cheeses	10	1	0	0	1		1	
		b	Raw milk	12	2	0	0	2		2	
		c	Heat treated dairy products	10	0	0	0	0		0	
			Total	32	3	0	0	3	3	3	6
4	**Fishery products**	a	Raw fish	12	0	0	0	0		0	
		b	Smoked and seasoned fish	10	0	0	0	0		0	
		c	RTE, RTRH	13	0	0	0	0		0	
			Total	35	0	0	0	0	3	0	6
5	**Vegetables**	a	Fresh and frozen vegetables	9	0	0	0	0		0	
		b	Pre-cooked, under modified atmosphere	11	0	0	0	0		0	
		c	RTE, RTRH	10	0	0	0	0		0	
			Total	30	0	0	0	0	3	0	6
6	**Production environmental samples**	a	Process water	12	0	0	0	0		0	
		b	Sponges, swabs	8	0	0	0	0		0	
		c	Dusts, residues	12	0	0	0	0		0	
			Total	32	0	0	0	0	3	0	6
TOTAL				**204**	**7**	**0**	**2**	**5**	**6**	**9**	**16**

***: PPND not included*

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 (calculated values ≤ AL).

3.1.1.8 Confirmation

Confirmations were carried out by streaking the Fraser broth onto O&A and Palcam plates.

Characteristic colonies were observed for all samples onto O&A and Palcam plates except for one sample (N° K21). Characteristic colonies were observed only on O&A plates.

Listeria monocytogenes characteristic colonies were confirmed by using ALOA© Confirmation agar (from ALOA© plate).

For seven samples, it was not possible to confirm the positive ELISA result (see Table 12). In each case, the ELISA test was tested three times. For all the samples, the two additional tests gave negative results. The first positive ELISA result could be due to a problem during the washing steps.

Table 12 – PPNA samples

Sample N°	Product	O.D.	PT	Result	Confirmation	Agreement
7196	**Frozen cut leeks**	0,512	0,226	**+/-/-**	**-**	**PPNA**
		0,143	0,254			
		0,145	0,254			
7197	**Frozen Brussels sprout**	0,466	0,226	**+/-/-**	**-**	**PPNA**
		0,141	0,254			
		0,145	0,254			
7198	**Green beans**	0,465	0,226	**+/-/-**	**-**	**PPNA**
		0,139	0,254			
		0,146	0,255			
7199	**Mushroom**	0,288	0,226	**+/-/-**	**-**	**PPNA**
		0,149	0,254			
		0,149	0,256			
7205	**Rinse water utensils (dairy product)**	0,237	0,226	**+/-/-**	**-**	**PPNA**
		0,152	0,254			
		0,136	0,255			
5868	**Raw milk**	0,236	0,172	**+/-/-**	**-**	**PPNA**
		0,065	0,176			
		0,088	0,176			
5789	**Pastry with red fruits**	0,271	0,176	**+/-/-**	**-**	**PPNA**
		0,166	0,172			
		0,061				

3.1.2 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:

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

The relative detection level is the smallest number of culturable micro-organisms that can be detected in the sample in 50% of occasions by the alternative and reference methods.

3.1.2.1 Experimental design

Six (matrix/strain) pairs were analyzed by the reference method and by the alternative method (See Table 13).

Table 13 - Matrix/strain pairs tested

Category		Type	Matrix	Strain	Origin	Storage conditions prior analysis
1	Composite foods	Ready-to-eat	Deli salad	*L. seeligeri* Ad1293	Pastry	48 h at 5°C ± 3°C
2	Meat products	Delicatessen	Rillettes	*L. welshimeri* L90	Ground beef	/
3	Dairy products	Raw milk	Raw milk	*L. ivanovii* L133	Raw milk cheese	/
4	Seafood	Smoked and seasoned	Smoked salmon	*L. monocytogenes* 1/2 a L5	Smoked salmon	/
5	Vegetables	Fresh and frozen vegetables	Vegetable mix	*L. monocytogenes* 4 b L58	Salad	/
6	Production environmental samples	Process water	Process water	*L. innocua* L144	Surface sample	/

For the tests performed in 2007, the following protocol was applied:

- Level 1: 0 UFC/g or /mL,
- Level 2: level necessary to obtain 0 to 50% positives,
- Level 3: level necessary to obtain 50 to 75% positives,
- Level 4: level necessary to obtain 100% positives.

For the renewal study (composite food), 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 to estimate the mesophilic aerobic microflora on the day of analysis.

3.1.2.2 Calculation and interpretation of the RLOD

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

The RLOD calculations were 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 Table 14.

Table 14 – Presentation of RLOD before and after confirmation of the alternative method results

Name	Study design	AL	RLOD	RLODL	RLODU	b=ln (RLOD)	sd(b)	z-Test statistic	p-value
Deli salad / *L. seeligeri* Ad1293	Paired	1,5	1,000	0,478	2,092	0,000	0,369	0,000	1,000
Rillettes / *L. welshimeri* L90			1,000	0,422	2,371	0,000	0,432	0,000	1,000
Raw milk / *L. ivanovii* L133			1,329	0,343	5,148	0,285	0,677	0,420	0,674
Smoked salmon / *L. monocytogenes* L58			1,000	0,364	2,744	0,000	0,505	0,000	1,000
Raw vegetables mix / *L. monocytogenes* L58			1,000	0,446	2,240	0,000	0,403	0,000	1,000
Process water / *L. innocua* L144			1,000	0,382	2,616	0,000	0,481	0,000	1,000
Combined			**1,030**	**0,689**	**1,540**	**0,030**	**0,201**	**0,149**	**0,882**

The $LOD_{50\,\%}$ calculations according to Wilrich & Wilrich POD-LOD calculation program version 11, 2022-10-12 are given in Table 15.

Table 15 - LOD_{50} results

Matrix/strain pair	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich[1]	
	Reference method	Alternative method
Deli salad / *L. seeligeri* Ad1293	0,4 [0,2;0,7]	0,4 [0,2;0,7]
Rillettes / *L. welshimeri* L90	0,6 [0,3;1,2]	0,6 [0,3;1,2]
Raw milk / *L. ivanovii* L133	0,5 [0,3;0,9]	0,6 [0,3;1,1]
Smoked salmon / *L. monocytogenes* L58	0,5 [0,3;0,9]	0,5 [0,3;0,9]
Raw vegetables mix / *L. monocytogenes* L58	0,7 [0,4;1,3]	0,7 [0,4;1,3]
Process water / *L. innocua* L144	0,4 [0,2;0,7]	0,4 [0,2;0,7]
Combined	**0,5 [0,4;0,6]**	**0,5 [0,4;0,7]**

.

3.1.2.3 Conclusion

The RLOD values (using the confirmed alternative method results) meet the acceptability limit of 1.5 for paired studies, for all matrix/strain pairs tested. The LOD_{50} varies from 0.4 to 0.7 CFU/sample size for the reference method and for the alternative method.

3.1.3 Inclusivity / 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.

3.1.3.1 Test protocols

- **Inclusivity**

The *Listeria* strains were grown in nutrient broth for 24 hours at 30°C.

Half Fraser broths were inoculated between 10 to 100 cells/225 mL and incubated at 30°C for 20–26 h, then sub-cultured in Fraser broth before performing the TRANSIA® PLATE *Listeria* test.

[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.

> **Exclusivity**

The non-target strains were cultivated and inoculated in nutrient broth to obtain (10^5 cells/mL). After incubation at 30°C for 20 - 26 h, the TRANSIA® PLATE *Listeria* test was performed.

3.1.3.2 Results

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

> **Inclusivity**

The 50 strains of *Listeria* (25 strains of *Listeria monocytogenes* and 25 strains belonging to other *Listeria* genus) were detected with TRANSIA® PLATE *Listeria* method.

> **Exclusivity**

No cross reaction was observed with the 30 non-*Listeria* strains tested by the TRANSIA® PLATE *Listeria* test.

3.1.4 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 5°C ± 3°C. The shelf life is given on the package. All the reagents must be stored at the temperature mentioned on the package.		
Time to result	**Steps**	**Alternative method**	**Reference method**
	Half Fraser broth	Day 0	Day 0
	Transfer to Fraser broth	Day 1	Day 1
	TRANSIA® PLATE Listeria procedure	Day 2	/
	Streaking of the selective broths on selective media	/	Day 1 and Day 2
	Reading of the plates. Confirmatory tests	/	Day 2 to Day 4
	Negative result (no typical colony on the plates)	**Day 2**	**Day 2 to Day 4**
	Streaking of the selective broths on selective media	Day 2	Day 1 and Day 2
	Reading of the plates. Confirmatory tests	Day 3 to Day 4	Day 2 to Day 4
	Positive result (Confirmation of typical colonies after subculture on TSYAE: catalase, Gram)	**Day 4 to Day 5**	**Day 3 to Day 5**
Common step with the reference method	Pre-enrichment (Half Fraser broth)		

The negative results are available in 2 days and the positive results in 4 to 5 days with the alternative method.

3.2 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.

3.2.1 Study organization

The inter-laboratory study was carried out in September 2007. Pasteurized milk was contaminated with *Listeria innocua* isolated from a dairy product. 14 laboratories were involved in this study.

The collaborators realized the analyses on 24 milk samples (8 samples per contamination level) with the reference method and the alternative method.

3.2.2 Experimental parameters controls

3.2.2.1 Contamination levels

The contamination levels and the sample codification were the following (see Table 16).

Table 16 - Contamination levels

Level	Samples	Theoretical target level (b/25 mL)	True level (b/25 mL sample)	Low limit / 25 mL sample	High limit / 25 mL sample
Level 0 (L0)	1 - 4 - 7 - 10 - 13 - 16 - 19 - 22	0	0	/	/
Low level (L1)	2 - 5 - 8 - 11 - 14 - 17 - 20 - 23	3	1.4	0.1	7.9
High level (L2)	3 - 6 - 9 - 12 - 15 - 18 - 21 - 24	30	14	7.4	23.8

3.2.2.2 Logistic conditions

Temperature conditions are given in Table 17.

Table 17 - Sample temperatures at receipt

Collaborators	Temperature measured by the probe (°C)	Temperature measured at receipt (°C)	Comments
A	5.1	4.5	/
B	4.6	6.4	/
D	4.2	5.4	/
E	9.2	13.0	Delivery at 11:30 am
F	5.2	Not communicated	/
G	Not received	5.2	/
H	3.2	5.3	/
I	12.2	8.0	Damaged samples
J	5.6	Not communicated	/
K	9.3	9.0	Delivery at D+2
L	7.2	7.6	/
M	5.7	12.0	/
N	18.4	19.0	Delivery at D+2
O	3.6	6.8	/

Among the 14 collaborators, 2 of them (K and N) received their samples at day 2 with a temperature above 8°C (measured at receipt and by the probe).

The temperature measured at receipt was above 8°C for 2 other collaborators (E: 9.2°C and I: 12.2°C). Note that Lab I received damaged samples and could not perform the analyses.
Lab M indicated a temperature at receipt at 12.0°C but the temperature by the probe was correct (5.7°C).

Finally, due to logistics conditions, the results from 4 collaborators were not available for interpretation (E, K, I and N).

3.2.3 Results analysis

Raw data are provided in **Appendix 7**.

3.2.3.1 Expert laboratory results

The results obtained by the expert laboratory are given in Table 18.

Table 18 – Results obtained by the expert Lab (IPL).

Level	Reference method	Alternative method
L0	0/8	0/8
L1	7/8	7/8
L2	8/8	8/8

Uncontaminated samples were found negative by both methods (reference and alternative methods).
Among the samples contaminated at low levels, one is negative by the alternative and reference methods.

3.2.3.2 Results observed by the collaborative laboratories

> ***Aerobic mesophilic flora enumeration***

Depending on the Lab results, the enumeration levels varied from 5.8 10^3 to 1.9 10^7 CFU/g.

> ***Listeria detection***

13 collaborators participated to the study. The results obtained are provided in Table 19 (reference method) and Table 20 (alternative method).

Table 19 - Positive results by the reference method (ALL the collaborators)

Collaborators	Contamination level		
	L0	*L1*	*L2*
A	0	8	8
B	0	6	8
D	0	7	8
E	0	8	8
F	0	8	8
G	0	7	8
H	0	5	8
J	0	5	8
K	0	4	8
L	0	7	8
M	0	6	8
N	0	8	8
O	0	6	8
TOTAL	**P_0 = 0**	**P_1 = 85**	**P_2 = 104**

Table 20 - Positive results (before and after confirmation) by the alternative method (ALL the collaborators)

Collaborators	Contamination level								
	L0			*L1*			*L2*		
	ELISA result	*Confirmation result*	*Final result*	*ELISA result*	*Confirmation result*	*Final result*	*ELISA result*	*Confirmation result*	*Final result*
A	0	0	0	8	8	8	8	8	8
B	0	0	0	6	6	6	8	8	8
D	0	0	0	7	7	7	8	8	8
E	0	0	0	8	8	8	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	5	5	5	8	8	8
J	0	0	0	5	5	5	8	8	8
K	1	0	0	4	4	4	8	8	8
L	0	0	0	7	7	7	8	8	8
M	2	0	0	6	6	6	8	8	8
N	1	0	0	8	8	8	8	8	8
O	0	0	0	6	6	6	8	8	8
TOTAL	**P_0=4**	**C_0=0**	**CP_0=0**	**P_1=85**	**C_1=85**	**CP_1=85**	**P_2=104**	**C_2=104**	**CP_2=104**

Three collaborators (K, M and N) obtained positive ELISA results not confirmed on unspiked samples (see Table 21).

Table 21 - ELISA positive results on unspiked samples

Collaborators	Sample No	O.D. TRANSIA PLATE *Listeria*			Confirmation
		O.D.	Cut off	Result	
K	10	0.371	0.243	+	-
M	1	0.666	0.301	+	-
	7	0.932	0.301	+	-
N	22	0.419	0.245	+	-

The collaborator M mentioned washing problems during the test which could explain these results.

Due to samples temperature receipt being out-of-range, the results of the collaborators E, K and N cannot be taken into account.
Despite the fact that Lab M obtained 2 positive presumptive not confirmed results for unspiked samples, the data from this lab were kept for interpretation as it was the case for the initial validation study. This means that finally 10 data sets are available.

3.2.3.3 Results of the collaborators retained for interpretation

The results obtained with the 10 labs kept for interpretation are presented in Table 22 (reference method) and Table 23 (alternative method).

Table 22 - Positive results by the reference method (Without Labs E, K and N)

Collaborators	Contamination level		
	L0	*L1*	*L2*
A	0	8	8
B	0	6	8
D	0	7	8
F	0	8	8
G	0	7	8
H	0	5	8
J	0	5	8
M	0	6	8
L	0	7	8
O	0	6	8
Total	**CP_0=0**	**CP_1=65**	**CP_2=80**

Table 23 - Positive results (before and after confirmation) by the alternative method (Without Labs E, K and N)

Collaborators	Contamination level								
	L0			*L1*			*L2*		
	ELISA result	*Confirmation result*	*Final result*	*ELISA result*	*Confirmation result*	*Final result*	*ELISA result*	*Confirmation result*	*Final result*
A	0	0	0	8	8	8	8	8	8
B	0	0	0	6	6	6	8	8	8
D	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	5	5	5	8	8	8
J	0	0	0	5	5	5	8	8	8
M	2	0	0	6	6	6	8	8	8
L	0	0	0	7	7	7	8	8	8
O	0	0	0	6	6	6	8	8	8
Total	**P_0=2**	**C_0=0**	**CP_0=0**	**P_1=65**	**C_1=65**	**CP_1=65**	**P_2=80**	**C_2=80**	**CP_2=80**

3.2.4 Calculation and interpretation

3.2.4.1 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 24).

Table 24 - 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

3.2.4.2 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 25.

Table 25 - 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 = 66**	Positive deviation (R-/A+) **PD = 0**
	Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 0 (PPND = 0)**	Negative agreement (A-/R-) **NA = 14 (PPNA = 0)**

Based on the data summarized in Table 25, 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 26).

Table 26 - 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 %

3.2.4.3 Interpretation of data

No negative deviation and no positive deviation were observed.

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 and possibly L_2). The observed value found for (ND – PD) and (ND + PD) shall not be higher than the AL.

For 10 Labs, the limits are the following:

	Calculated values	AL	Conclusion
ND - PD	0	3	ND - PD < AL
ND + PD	0	4	ND - PD < AL

The EN ISO 16140-2:2016 requirements are fulfilled as (ND - PD) and (ND + PD) meet the AL.

There is indeed no difference between the sensitivity of the compared methods, and the alternative method complies with the reproducibility conditions.

3.2.4.4 E Evaluation of the LOD $_{50\%}$, LOD $_{95\ \%}$ and RLOD between laboratories

The LOD $_{50\%}$, the LOD $_{95\ \%}$ and 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 27).

Table 27 - LOD $_{50\%}$, LOD $_{95\ \%}$ and RLOD

Method	LOD 50%	LOD 95%	RLOD
Reference	0.6 [0.4;0.8]	2.5 [1.9;3.3]	1 [0.7;1.4]
Alternative	0.6 [0.4;0.8]	2.5 [1.9;3.3]	

3.3 General conclusion

The **method comparison study conclusions** are:

- ☒ The method comparison study scheme corresponds to a PAIRED STUDY design as the alternative and reference methods have a common enrichment procedure.

- ☒ In the sensitivity study, 6 categories were tested: 5 food categories and the production environmental samples. The protocol of the alternative method shows 2 positive deviations (PD) and 8 negative deviations (ND) for the overall categories. The ((ND+PPND) – PD) and ND+PPND+PD meet the acceptability limits (AL) whatever the categories, and as well for the 6 combined categories.

- ☒ The Relative Levels of Detection (RLOD) are all below the AL fixed at 1.5 for the paired data study whatever the matrix/strain pairs.

- ☒ The inclusivity and exclusivity testing gave the expected results for the 50 target strains and the 30 non-target strains.

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

- ☒ The alternative method allows a two-days screening of the negative samples.

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

The **inter-laboratory study conclusions** are:

☒ The data and interpretations comply with the EN ISO 16140-2:2016 requirements. **The TRANSIA® PLATE *Listeria* method is considered equivalent to the ISO standard.**

Quimper, 23 October 2023

Maryse RANNOU
Project 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: TRANSIA® PLATE Listeria

25 g in 225 mL of half Fraser broth[2]
1 swab + 10 mL half Fraser
1 sponge+ 100 mL half Fraser

↓

Incubation at 30°C for 20 - 26 h

Possibility to store for 72h at 5°C ± 3°C → Transfer 0.25 mL in 10 mL Fraser broth

↓

Incubation at 30°C for 22 - 26 h

↓

Heat 2 mL Fraser broth for 20 min at 95 - 100°C

↓

TRANSIA® Plate *Listeria* test (100 µl)
Positive result: O.D.≥ with PT=[(NC1+NC2)/2)]+0.15

↓

Confirmation *Listeria*

Streaking 10µL of the non-heated Fraser broth on:

- Palcam or O&A agar, according to classical tests described in methods standardized including a purification step,
- Palcam or O&A selective agar, the only presence of typical colonies allows to confirm the positive ELISA test. The typical colonies can be confirmed by:
  - a biochemical gallery on a characteristic colony of *Listeria* without purification step or
  - ALOA® Confirmation agar if presence of characteristic colony of *Listeria monocytogenes*
  - Gram coloration and catalase if characteristic colony of *Listeria* genus

[2] For sampling after cleaning process, premoisten:
- 1 swab + 1 mL broth universal neutralizing (+ 9 mL Half Fraser)
- 1 sponge + 10 mL broth universal neutralizing (+ 90 mL Half Fraser)

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

Test portion (25 g or 25 ml)
1 swab + 10 ml Half Fraser broth[3]
1 sponge + 100 ml Half Fraser broth
↓
Primary enrichment medium (Half Fraser broth) (225 g or 225 ml)
↓
Incubation at 30°C ± 24 h to 26 h

0.1 ml of culture
in 10 ml of secondary
enrichment medium (Fraser broth)
↓
Incubation at 37°C ± 1°C
for 24 h ± 2 h

Plating out on Agar *Listeria* according to
Ottaviani and Agosti and second selective medium
↓
Incubation of Agar *Listeria* according to
Ottaviani and Agosti for 24 h ± 2 h and an additional 24 h ± 2 h at 37°C ± 1°C
Incubation of second selective medium according to the chosen medium
as specified by the manufacturer
↓

Confirmation

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

[3] 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)

Appendix 3 – Artificial contamination of samples

♦ **Analyses performed according to the COFRAC accreditation (ADRIA Développement, Expert laboratory°**

ND: not determined

Year of analysis	N° sample	Product	Artificial contaminations					Global result
			Strain	Origin	Injury protocol	Injury measure-ment	Inoculation level CFU/sample Mean	
IPL	**L26**	**"Camembert" raw milk cheese**	*L. monocytogenes 1/2bL37*	"Maroilles" raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C	1.1	0.8	-
IPL	**L27**	**"Reblochon" cheese**	*L. monocytogenes 1/2bL37*	"Maroilles" raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C	1.1	0.5	-
IPL	**M26**	**"Petit Billy affiné" cheese**	*L. monocytogenes 4e L62*	Reblochon raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C with 10% NaCl	0.7	22.4	+
IPL	**L23**	**Pasteurized goat cheese**	*Cross contamination with raw milk cheese (Epoisses)*			/	/	-
IPL	**L24**	**Pasteurized goat cheese**	*Cross contamination with raw milk cheese (Pont l'Evêque)*			/	/	+
IPL	**L28**	**Pasteurized goat cheese**	*L. monocytogenes 1/2bL37*	"Maroilles" raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C	1.1	0.5	-
IPL	**M21**	**"Sainte Maure" ashy goat cheese**	*L. monocytogenes 4e L62*	Reblochon raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C with 10% NaCl	0.7	32.0	-
IPL	**M23**	**Goat cheese**	*L. monocytogenes 4e L62*	Reblochon raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C with 10% NaCl	0.7	25.6	-
IPL	**N11**	**Goat cheese**	*L. monocytogenes 4b L32*	Munster rind	Spiking- 45 min at 55°C + 30 min at -80°C	0.5	25.6	-
IPL	**K8**	**Vanilla ice-cream**	*L. monocytogenes 1/2a L7*	"Munster" rind	Spiking- 45 min at 50°C + 30 min at -80°C	0.2	7.0	+
IPL	**K9**	**"Mystère" ice-cream**	*L. innocua L64*	Epoisses	Spiking- 45 min at 50°C + 30 min at -80°C	0.1	8.1	+
IPL	**K10**	**Choux pastry + Chantilly cream**	*L. monocytogenes 1/2a L7*	"Munster" rind	Spiking- 45 min at 50°C + 30 min at -80°C	0.2	7.0	+
IPL	**K11**	**Strawberries + ice-cream and Chantilly cream**	*L. innocua L64*	Epoisses	Spiking- 45 min at 50°C + 30 min at -80°C	0.1	12.2	+
IPL	**K13**	**Milk powder**	*L. innocua L64*	Epoisses	Spiking- 45 min at 50°C + 30 min at -80°C	0.1	16.2	+
IPL	**L25**	**Raw milk**	*Cross contamination with raw milk cheese (Pont l'Evêque)*			/	/	/
IPL	**L29**	**Raw milk**	*L. monocytogenes 1/2b L37*	"Maroilles" raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C	1.1	0.8	-
IPL	**L31**	**Raw milk**	*L. monocytogenes 1/2b L37*	"Maroilles" raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C		0.8	-
IPL	**M17**	**Choux pastry + Chantilly cream**	*L. monocytogenes 4e L62*	Reblochon raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C with 10% NaCl	0.7	22.4	+
IPL	**M29**	**Raw milk**	*L. monocytogenes 1/2B L37*	Maroilles raw milk cheese	Spiking- 45 min at 50°C + 30 min at -80°C with 10% NaCl	0.5	25.6	+
IPL	**E10**	**Smoked salmon from Scotland**	*L. monocytogenes 1/2a L12*	Smoked salmon	Spiking- 45 min at 50°C + 30 min at -80°C	0.5	22.5	+
IPL	**E9**	**Fish fritter with curry sauce**	*L. monocytogenes 1/2a L12*	Smoked salmon	Spiking- 45 min at 50°C + 30 min at -80°C	0.5	15.0	+
IPL	**E12**	**Flaked crab**	*L. monocytogenes 1/2a L12*	Smoked salmon	Spiking- 45 min at 50°C + 30 min at -80°C	0.5	15.0	+
IPL	**E19**	**Frozen chopped spinach**	*L. monocytogenes 1/2a L147*	Sauté potatoes	Spiking- 45 min at 50°C + 30 min at -80°C	> 0.9	16.0	+
IPL	**L10**	**String beans**	*L. innocua L112*	Fried potatoes	Spiking- 45 min at 50°C + 30 min at -80°C	0.3	4.4	+
IPL	**D26**	**Red cabbage**	*L. monocytogenes 1/2 L129*	Sauté potatoes	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.7	22.4	+
IPL	**K2**	**Steamed turnip**	*L. monocytogenes 1/2a L47*	Sauté potatoes	Spiking- 45 min at 50°C + 30 min at -80°C	> 0.6	ND	-
IPL	**K3**	**Steamed carrots**	*L. innocua L66*	Spinach	Spiking- 45 min at 50°C + 30 min at -80°C	2.4	0.2	+
IPL	**K7**	**Grated red cabbage**	*L. innocua L66*	Spinach	Spiking- 45 min at 50°C + 30 min at -80°C	2.4	0.4	-
IPL	**L1**	**Grated carrots**	*Cross contamination with French fries*			/	/	-
IPL	**L2**	**Mixed salad**	*Cross contamination with French fries*			/	/	+
IPL	**L3**	**String beans**	*Cross contamination with French fries*			/	/	+
IPL	**L4**	**Chickpeas**	*Cross contamination with French fries*			/	/	+
IPL	**L7**	**Mixed salad**	*L. monocytogenes 1/2a L47*	/	Spiking- 45 min at 50°C + 30 min at -80°C	1.3	17.2	-
IPL	**L8**	**Mixed vegetables**	*L. innocua L112*	/	Spiking- 45 min at 50°C + 30 min at -80°C	0.3	6.6	+
IPL	**M4**	**Grated carrots**	*L. monocytogenes 4b L58*	/	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.4	30.0	-

Year of analysis	N° sample	Product	Artificial contaminations					Global result
			Strain	Origin	Injury protocol	Injury measure-ment	Inoculation level CFU/sample Mean	
IPL	**N1**	**Grated carrots**	*L. monocytogenes 1/2a L129*	/	Spiking- 45 min at 55°C + 30 min at -80°C	0.5	23.0	+
IPL	**K1**	**Saffron-flavored rice**	*L. monocytogenes 1/2a L47*	/	Spiking- 45 min at 50°C + 30 min at -80°C	> 0.6	ND	-
IPL	**K4**	**Ratatouille**	*L. innocua L66*	/	Spiking- 45 min at 50°C + 30 min at -80°C	2.4	0.3	-
IPL	**K5**	**Cooked mixed vegetables**	*L. monocytogenes 1/2a L47*	Sauté potatoes	Spiking- 45 min at 50°C + 30 min at -80°C	> 0.6	ND	-
IPL	**K6**	**Mixed salad (curly lettuce/walnuts/corn)**	*L. monocytogenes 1/2a L47*	Sauté potatoes	Spiking- 45 min at 50°C + 30 min at -80°C	> 0.6	ND	-
IPL	**L11**	**Seasoned grated carrots**	*L. monocytogenes 1/2a L47*	Sauté potatoes	Spiking- 45 min at 50°C + 30 min at -80°C	1.3	34.4	-
IPL	**L12**	**Seasoned red cabbage**	*L. innocua L112*	Fried potatoes	Spiking- 45 min at 50°C + 30 min at -80°C	0.3	8.8	+
IPL	**M1**	**Spinach with cream**	*L. monocytogenes 4b L58*	Salad	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.4	30.0	-
IPL	**M5**	**Cauliflower and potato gratin**	*L. monocytogenes 4b L58*	Salad	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.4	20	-
IPL	**D29**	**Process water**	*L. monocytogenes L149*	Environmental sampling	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.4	12.0	+
IPL	**L17**	**Process water**	*L. monocytogenes 1/2c L28*	Wipe	Spiking- 45 min at 50°C + 30 min at -80°C	1.0	43.0	-
IPL	**D39**	**Surface grille haddock**	*L. monocytogenes L149*	Environmental sampling	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.4	18.0	+
IPL	**D36**	**Scraps from vacuum machine**	*L. monocytogenes L141*	Environmental sampling	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.5	15.2	-
IPL	**D37**	**Scraps from workroom's floor**	*L. monocytogenes L149*	Environmental sampling	Spiking- 24 h at 4°C+ 50min at 50°C+ 30min at -80°C	0.4	12.0	+
ADRIA (2019)	**5767**	**Paella RTRH food**	*L. welshimeri* Ad1231	RTRH food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5768**	**RTHR food with ham and cheese**	*L. welshimeri* Ad1231	RTRH food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5769**	**RTHR food with ham and cheese**	*L. welshimeri* Ad1231	RTRH food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5770**	**RTHR food ravioli**	*L. welshimeri* Ad1231	RTRH food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5771**	**Couscous**	*L. welshimeri* Ad1231	RTRH food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5772**	**Couscous**	*L. welshimeri* Ad1231	RTRH food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5773**	**Pizza three cheeses**	*L. grayi* Ad1490	RTRH pie	Seeding 48 h at 3±2°C	/	6.4	-
ADRIA (2019)	**5774**	**Pizza with ham and cheese**	*L. grayi* Ad1490	RTRH pie	Seeding 48 h at 3±2°C	/	6.4	-
ADRIA (2019)	**5775**	**RTRH food Quiche lorraine**	*L. grayi* Ad1490	RTRH pie	Seeding 48 h at 3±2°C	/	6.4	+
ADRIA (2019)	**5776**	**RTRH food Quiche with zucchini and cheese**	*L. grayi* Ad1490	RTRH pie	Seeding 48 h at 3±2°C	/	6.4	+
ADRIA (2019)	**5777**	**Deli salad piemontaise**	*L. innocua* Ad1230	RTE salad	Seeding 48 h at 3±2°C	/	4.4	+
ADRIA (2019)	**5778**	**Deli salad piemontaise**	*L. innocua* Ad1230	RTE salad	Seeding 48 h at 3±2°C	/	4.4	+
ADRIA (2019)	**5779**	**Deli salad piemontaise**	*L. innocua* Ad1230	RTE salad	Seeding 48 h at 3±2°C	/	4.4	+
ADRIA (2019)	**5780**	**Salad with cucumber and salmon**	*L. innocua* Ad1230	RTE salad	Seeding 48 h at 3±2°C	/	4.4	+
ADRIA (2019)	**5781**	**Salad with ham and cheese**	*L. innocua* Ad1230	RTE salad	Seeding 48 h at 3±2°C	/	4.4	+
ADRIA (2019)	**5782**	**Salad with fish and eggs**	*L. welshimeri* Ad1193	RTE food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5783**	**Sandwich smoked ham**	*L. welshimeri* Ad1193	RTE food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5784**	**Sandwich with fish and vegetables**	*L. welshimeri* Ad1193	RTE food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5785**	**Sandwich ham vegetables and eggs**	*L. welshimeri* Ad1193	RTE food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5786**	**Sandwich fish and eggs**	*L. welshimeri* Ad1193	RTE food	Seeding 48 h at 3±2°C	/	3.2	+
ADRIA (2019)	**5787**	**Pastry**	*L. innocua* Ad644	Pastry	Seeding 48 h at 3±2°C	/	3.6	+
ADRIA (2019)	**5788**	**Pie of fruits**	*L. innocua* Ad644	Pastry	Seeding 48 h at 3±2°C	/	3.6	+
ADRIA (2019)	**5789**	**Pastry with red fruits**	*L. innocua* Ad644	Pastry	Seeding 48 h at 3±2°C	/	3.6	-
ADRIA (2019)	**5790**	**Tortilla**	*L. monocytogenes* Ad1195	Egg product	Seeding 48 h at 3±2°C	/	5.0	+
ADRIA (2019)	**5791**	**Tortilla with onions**	*L. monocytogenes* Ad1195	Egg product	Seeding 48 h at 3±2°C	/	5.0	+
ADRIA (2019)	**5858**	**Raw milk cheese**	*L. monocytogenes* Ad249 / *L. innocua* Ad636	Dairy products / Dairy products	Seeding 48 h at 3±2°C	/	2.6	+
ADRIA (2019)	**5859**	**Raw milk cheese**	*L. monocytogenes* Ad249 / *L. innocua* Ad636	Dairy products / Dairy products	Seeding 48 h at 3±2°C	/	2.6	-

Year of analysis	N° sample	Product	Artificial contaminations					Global result
			Strain	Origin	Injury protocol	Injury measure-ment	Inoculation level CFU/sample Mean	
ADRIA (2019)	**5860**	**Raw milk cheese**	*L. monocytogenes* Ad249 / *L. innocua* Ad636	Dairy products / Dairy products	Seeding 48 h at 3±2°C	/	2.6	+
ADRIA (2019)	**5861**	**Raw milk cheese**	*L. monocytogenes* Ad249 / *L. innocua* Ad636	Dairy products / Dairy products	Seeding 48 h at 3±2°C	/	2.6	+
ADRIA (2019)	**5862**	**Raw milk cheese**	*L. welshimeri* Ad1667	Raw milk cheese	Seeding 48 h at 3±2°C	/	1.4	-
ADRIA (2019)	**5863**	**Raw milk**	*L. welshimeri* Ad1667	Raw milk cheese	Seeding 48 h at 3±2°C	/	1.4	+
ADRIA (2019)	**5864**	**Raw milk**	*L. monocytogenes* Ad611 / *L. innocua* Ad1787	Raw milk / Milk	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5866**	**Raw milk**	*L. welshimeri* Ad1667	Raw milk cheese	Seeding 48 h at 3±2°C	/	1.4	+
ADRIA (2019)	**5867**	**Raw milk**	*L. monocytogenes* Ad611 / *L. innocua* Ad1787	Raw milk / Milk	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5869**	**Raw milk**	*L. welshimeri* Ad1667	Raw milk cheese	Seeding 48 h at 3±2°C	/	1.4	+
ADRIA (2019)	**5870**	**Raw milk**	*L. monocytogenes* Ad611 / *L. innocua* Ad1787	Raw milk / Milk	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5872**	**Seafood terrine**	*L. monocytogenes* Ad1187 / *L. innocua* Ad1188	RTRH fish food / RTRH fish food	Seeding 48 h at 3±2°C	/	1.6	+
ADRIA (2019)	**5873**	**Salmon terrine**	*L. monocytogenes* Ad1187 / *L. innocua* Ad1188	RTRH fish food / RTRH fish food	Seeding 48 h at 3±2°C	/	1.6	+
ADRIA (2019)	**5874**	**Salmon and smoked salmon terrine**	*L. monocytogenes* Ad1187 / *L. innocua* Ad1188	RTRH fish food / RTRH fish food	Seeding 48 h at 3±2°C	/	1.6	+
ADRIA (2019)	**5875**	**RTRH fish**	*L. welshimeri* Ad1669	RTRH fish food	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5876**	**Stuffed mussels**	*L. welshimeri* Ad1669	RTRH fish food	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5877**	**Cut watermelon**	*L. innocua* Ad1673	Vegetables	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5878**	**Cut cantaloupe**	*L. innocua* Ad1673	Vegetables	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5879**	**Cut pineapple**	*L. innocua* Ad1673	Vegetables	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5880**	**Cooked edamame**	*L. innocua* Ad1673	Vegetables	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5881**	**Cooked potatoes**	*L. innocua* Ad1673	Vegetables	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5882**	**Surface sponge (vegetables, cooked cut carrots)**	*L. innocua* Ad1673	Vegetables	Seeding 48 h at 3±2°C	/	1.0	+
ADRIA (2019)	**5883**	**Frozen green beans**	*L. monocytogenes* Ad1672 / *L. welshimeri* Ad1668	Vegetables / Vegetables	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5884**	**Frozen leek**	*L. monocytogenes* Ad1672 / *L. welshimeri* Ad1668	Vegetables / Vegetables	Seeding 2 weeks at -20°C	/	2.4	-
ADRIA (2019)	**5885**	**Frozen Brussels sprout**	*L. monocytogenes* Ad1672 / *L. welshimeri* Ad1668	Vegetables / Vegetables	Seeding 2 weeks at -20°C	/	2.4	+
ADRIA (2019)	**5886**	**Frozen green beans**	*L. monocytogenes* Ad1672 / *L. welshimeri* Ad1668	Vegetables / Vegetables	Seeding 2 weeks at -20°C	/	2.4	+
ADRIA (2019)	**5887**	**Rinse water (vegetables, frozen cauliflower)**	*L. monocytogenes* Ad1672 / *L. welshimeri* Ad1668	Vegetables / Vegetables	Seeding 48 h at 3±2°C	/	2.2	+
ADRIA (2019)	**5888**	**RTRH vegetables food**	*L. monocytogenes* Ad1238 / *L. seeligeri* Ad1293	Vegetables / Vegetables	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5889**	**RTRH zucchini gratin**	*L. monocytogenes* Ad1238 / *L. seeligeri* Ad1293	Vegetables / Vegetables	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5890**	**RTRH carrots leaks gratin**	*L. monocytogenes* Ad1238 / *L. seeligeri* Ad1293	Vegetables / Vegetables	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5893**	**Rinse water (dairy products production)**	*L. monocytogenes* Ad635 / *L. seeligeri* Ad652	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding 48 h at 3±2°C	/	2.2	+
ADRIA (2019)	**5894**	**Rinse water (dairy products production)**	*L. monocytogenes* Ad635 / *L. seeligeri* Ad652	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding 48 h at 3±2°C	/	2.2	+
ADRIA (2019)	**5895**	**Rinse water (dairy products production)**	*L. monocytogenes* Ad635 / *L. seeligeri* Ad652	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding 48 h at 3±2°C	/	2.2	+
ADRIA (2019)	**5896**	**Rinse water (vegetables production)**	*L. seeligeri* Ad651	Environmental sample	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5897**	**Rinse water (poultry meat)**	*L. seeligeri* Ad651	Environmental sample	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5898**	**Rinse water (poultry meat)**	*L. seeligeri* Ad651	Environmental sample	Seeding 48 h at 3±2°C	/	2.4	+
ADRIA (2019)	**5899**	**Rinse water (poultry meat)**	*L. innocua* Ad1277	Environmental sample (poultry)	Seeding 48 h at 3±2°C	/	2.0	+
ADRIA (2019)	**5900**	**Rinse water (poultry meat)**	*L. innocua* Ad1277	Environmental sample (poultry)	Seeding 48 h at 3±2°C	/	2.0	+

Year of analysis	N° sample	Product	Artificial contaminations					Global result
			Strain	Origin	Injury protocol	Injury measure-ment	Inoculation level CFU/sample Mean	
ADRIA (2019)	**5901**	**Rinse water (vegetables production)**	*L. innocua* Ad1177	Vegetables	Seeding 48 h at 3±2°C	/	2.8	+
ADRIA (2019)	**5903**	**Waste working plan (poultry)**	*L. innocua* Ad1277	Environmental sample (poultry)	Seeding 48 h at 3±2°C	/	2.0	+
ADRIA (2019)	**5904**	**Waste working plan (poultry)**	*L. monocytogenes* Ad1271 / *L. seeligeri* Ad651	Environmental sample (poultry) / Environmental sample	Seeding 48 h at 3±2°C	/	2.6	+
ADRIA (2019)	**5905**	**Waste (poultry)**	*L. innocua* Ad1277	Environmental sample (poultry)	Seeding 48 h at 3±2°C	/	2.0	+
ADRIA (2019)	**5906**	**Waste (poultry)**	*L. monocytogenes* Ad1271 / *L. seeligeri* Ad651	Environmental sample (poultry) / Environmental sample	Seeding 48 h at 3±2°C	/	2.6	+
ADRIA (2019)	**5907**	**Waste (dairy products)**	*L. ivanovii* Ad616	Environmental sample (dairy industry)	Seeding 48 h at 3±2°C	/	3.4	+
ADRIA (2019)	**5984**	**Couscous**	*L. monocytogenes* Ad279	RTHR food	Seeding 48 h at 3±2°C	/	1.2	+
ADRIA (2019)	**5985**	**Pizza with chicken and vegetables**	*L. monocytogenes* Ad279	RTHR food	Seeding 48 h at 3±2°C	/	1.2	-
ADRIA (2019)	**5986**	**Pizza with ham and mushrooms**	*L. monocytogenes* Ad279	RTHR food	Seeding 48 h at 3±2°C	/	1.2	-
ADRIA (2019)	**5987**	**Quiche lorraine**	*L. innocua* Ad1676	RTHR food	Seeding 48 h at 3±2°C	/	1.4	-
ADRIA (2019)	**5988**	**Quiche lorraine**	*L. innocua* Ad1676	RTHR food	Seeding 48 h at 3±2°C	/	1.4	+
ADRIA (2019)	**5989**	**Pastry**	*L. innocua* Ad644	Pastry	Seeding 48 h at 3±2°C	/	0.8	-
ADRIA (2019)	**5990**	**Pastry**	*L. innocua* Ad644	Pastry	Seeding 48 h at 3±2°C	/	0.8	+
ADRIA (2019)	**5991**	**Pastry**	*L. innocua* Ad644	Pastry	Seeding 48 h at 3±2°C	/	0.8	+
ADRIA (2019)	**7141**	**Raw milk cheese**	*L. innocua 902*	Dairy products	Seeding 48 h at 3±2°C	/	1	+
ADRIA (2019)	**7142**	**Raw milk cheese**	*L. innocua 902*	Dairy products	Seeding 48 h at 3±2°C	/	1	+
ADRIA (2019)	**7143**	**Raw milk cheese**	*L. innocua 902*	Dairy products	Seeding 48 h at 3±2°C	/	1	-
ADRIA (2019)	**7144**	**Raw milk cheese**	*L. innocua 902*	Dairy products	Seeding 48 h at 3±2°C	/	1	-
ADRIA (2019)	**7145**	**Raw milk**	*L. innocua 902*	Dairy products	Seeding 48 h at 3±2°C	/	1	+
ADRIA (2019)	**7146**	**Raw milk**	*L. ivanovi Ad680*	Raw milk	Seeding 48 h at 3±2°C	/	1	+
ADRIA (2019)	**7367**	**Raw milk**	*L.ivanovii Ad678*	Dairy products	Seeding 48 h at 3±2°C	/	0.6	-
ADRIA (2019)	**7369**	**Raw milk**	*L.ivanovii Ad678*	Dairy products	Seeding 48 h at 3±2°C	/	0.6	+
ADRIA (2019)	**7371**	**Raw milk**	*L.seeligeri Ad1782*	Dairy products	Seeding 48 h at 3±2°C	/	1	+
ADRIA (2019)	**7373**	**Fish terrines**	*L.welshimeri Ad642*	Sea food products	Seeding 48 h at 3±2°C	/	1.2	+
ADRIA (2019)	**7374**	**Salmon terrine**	*L.welshimeri Ad642*	Sea food products	Seeding 48 h at 3±2°C	/	1.2	+
ADRIA (2019)	**7375**	**Shrimps**	*L.welshimeri Ad642*	Sea food products	Seeding 48 h at 3±2°C	/	1.2	+
ADRIA (2019)	**7376**	**Tuna cake**	*L.welshimeri Ad642*	Sea food products	Seeding 48 h at 3±2°C	/	1.2	+

Appendix 4 – Sensitivity study: raw data

IPL results

Bacterial presence

Ø :	no growth
L =	light growth
M =	medium growth
H =	high growth

Distribution of the flora

A =	pure culture of suspicious colonies
B =	mixed culture with a majority of suspicious colonies
C =	mixed culture with a minority of suspicious colonies
D =	mixed culture with very few suspicious colonies
E =	no suspicious colonies
(x) :	x characteristic colonies of *Listeria* if x < 5

Bold typing: artificially inoculated samples

ADRIA results (2019)

H-:	characteristic Listeria colonies without halo
H+:	characteristic Listeria colonies with halo
-:	no typical colonies but presence of background microflora
st:	plate without any colony
PA:	positive agreement
NA:	negative agreement
ND:	negative deviation
PD:	positive deviation
PPNA:	positive presumptive negative agreement
PPND :	positive presumptive negative deviation
NC:	non-characteristic colony on TSYEA
d:	doubtful colony
NI:	no identification
ni :	not isolated colony
L. mono:	*Listeria monocytogenes*
TP:	TRANSIA PLATE

♦ **Analyses performed according to the COFRAC accreditation (ADRIA Développement, Expert laboratory)**

COMPOSITE FOODS																											
Year of analysis	N° sample	Product (French name)	Product	Reference Method ISO 11290-1/A1						Alternative method - TRANSIA® PLATE *Listeria*															Category	Type
										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C										
				Fraser 1/2		Fraser		Confir-mation	Result L.spp	TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*		OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
ADRIA (2019)	**5777**	**Piémontaise jambon**	**Deli salad piemontaise**	H-	+	H-	+	*L. innocua*	+	3,354	0,176	+	H-	+	*L. innocua*	+	**PA**	3,628	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5778**	**Piémontaise jambon**	**Deli salad piemontaise**	H-	+	H-	+	*L. innocua*	+	3,366	0,176	+	H-	+	*L. innocua*	+	**PA**	3,43	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5779**	**Piémontaise jambon**	**Deli salad piemontaise**	H-	+	H-	+	*L. innocua*	+	3,355	0,176	+	H-	+	*L. innocua*	+	**PA**	3,473	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5780**	**Tortis concombres et saumon**	**Salad with cucumber and salmon**	H-	+	H-	+	*L. innocua*	+	3,424	0,176	+	H-	+	*L. innocua*	+	**PA**	3,398	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5781**	**Salade jambon emmental**	**Salad with ham and cheese**	H-	+	H-	+	*L. innocua*	+	3,449	0,176	+	H-	+	*L. innocua*	+	**PA**	3,467	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5782**	**Salade océane thon œufs**	**Salad with fish and eggs**	-	st	H-	+	*L. welshimeri*	+	0,931	0,176	+	H-	+	*L. welshimeri*	+	**PA**	3,347	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5783**	**Sandwich jambon fumé**	**Sandwich smoked ham**	H-	+	H-	+	*L. welshimeri*	+	3,481	0,176	+	H-	+	*L. welshimeri*	+	**PA**	3,384	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5784**	**Sandwich thon crudités**	**Sandwich with fish and vegetables**	H-	+	H-	+	*L. welshimeri*	+	3,472	0,176	+	H-	+	*L. welshimeri*	+	**PA**	3,384	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5785**	**Sandwich jambon œufs crudités**	**Sandwich ham vegetables and eggs**	H-	+	H-	+	*L. welshimeri*	+	3,409	0,176	+	H-	+	*L. welshimeri*	+	**PA**	3,381	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	**5786**	**Sandwich viennois thon œufs**	**Sandwich fish and eggs**	H-	+	H-	+	*L. welshimeri*	+	3,425	0,176	+	H-	+	*L. welshimeri*	+	**PA**	3,404	0,160	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	5995	Sandwich poulet rôti crudités	Sandwich with chicken and vegetables	-	+	H-	+	*L. welshimeri*	+	3,368	0,169	+	H-	+	*L. welshimeri*	+	**PA**	3,349	0,166	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	5996	Sandwich jambon tomates œufs	Sandwich with ham and tomatoes	st	st	st	st	/	-	0,067	0,169	-	st	st	/	-	**NA**									1	a
ADRIA (2019)	5997	Sandwich jambon fumé et cuit	Sandwich with ham	-	-	-	-	/	-	0,055	0,169	-	-	-	/	-	**NA**									1	a
ADRIA (2019)	5998	Sandwich mimolette salade	Sandwich with salad and cheese	-	-	-	-	/	-	0,054	0,169	-	st	-	/	-	**NA**									1	a
ADRIA (2019)	5999	Sandwich poulet rôti crudités	Sandwich with chicken and vegetables	st	-	st	-	/	-	0,089	0,169	-	st	-	/	-	**NA**									1	a
ADRIA (2019)	6000	Torsades poulet rôti	Salad with pasta and chicken meat	-	st	st	st	/	-	0,103	0,169	-	st	st	/	-	**NA**									1	a
ADRIA (2019)	6001	Salade jambon emmental	Salad with cheese and ham	H-	+	H-	+	*L. welshimeri*	+	3,431	0,169	+	H-	+	*L. welshimeri*	+	**PA**	3,336	0,166	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	6002	Salade césar poulet parmesan	Salad with cheese and chicken meat	-	-	st	-	/	-	0,085	0,169	-	st	st	/	-	**NA**									1	a
ADRIA (2019)	6003	Salade poulet emmental	Salad with cheese and chicken meat	-	-	H-d (NC)	+d (NC)	/	-	1,510	0,169	+	H-	+	*L. grayi*	+	**PD**	3,320	0,166	+	H-	-	/	+	**PD**	1	a
ADRIA (2019)	6004	Salade crudités thon	salad with fish and vegetables	H-d	+	H-d	+	*L. seeligeri*	+	3,445	0,169	+	H-	+	*L. seeligeri*	+	**PA**	3,373	0,166	+	H-	+	/	+	**PA**	1	a
ADRIA (2019)	7363	salade jambon, emmental, crudité	Salad with ham cheese and vegetables	H-d (gram -)	st	st	st	/	-	0,198	0,307	-	st	st	/	-	**NA**									1	a
ADRIA (2019)	7364	Salade Montmartre pate, crudité, œuf	Salad with pasta vegetables and eggs	st	st	st	st	/	-	0,203	0,307	-	st	st	/	-	**NA**									1	a
ADRIA (2019)	7365	Sandwich poulet crudité	Sandwich with chicken meat and vegetables	-	st	st	st	/	-	0,202	0,307	-	st	st	/	-	**NA**									1	a
ADRIA (2019)	7366	Moelleux pain thon œuf crudité	RTRH food with eggs vegetables and fish	-	-	st	-	/	-	0,195	0,307	-	st	st	/	-	**NA**									1	a
IPL	**L25**		**Raw milk**	+MB	+MA	+HB	+HB	*L. mono*	+	3097	0,273	+	+MA	+MA	*L. mono*	+	**PA**	3055	0,266	+	+MA	+HA	*L. mono*	+	**PA**	1	b
IPL	**L29**		**Raw milk**	-LE	-LE	-LE	Ø	/	-	0,097	0,273	-	/	/	/	-	**NA**									1	b

COMPOSITE FOODS																													
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				Fraser 1/2		Fraser		Confir-mation	Result L.spp	TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*		OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	L30		Raw milk	Ø	Ø	Ø	Ø	/	-	0,103	0,273	-	/	/	/	-	NA									1	b
IPL	L31		Raw milk	-LE	Ø	-LE	Ø	/	-	0,097	0,273	-	/	/	/	-	NA									1	b
IPL	L6		Pasta salad	-LE	-LE	-LE	-ME	/	-	0,087	0,273	-	/	/	/	-	NA									1	b
ADRIA (2019)	5767	Paëlla volaille fruits de mer	Paella RTRH food	H-	+	H-	+	*L. innocua*	+	3,413	0,176	+	H-	+	*L. innocua*	+	PA	4,404	0,160	+	H-	+	/	+	PA	1	b
ADRIA (2019)	5768	Feuilleté jambon emmental	RTHR food with ham and cheese	H-	+	H-	+	*L. innocua*	+	3,392	0,176	+	H-	+	*L. innocua*	+	PA	3,404	0,160	+	H-	+	/	+	PA	1	b
ADRIA (2019)	5769	Feuilleté jambon fromage	RTHR food with ham and cheese	H-	+	H-	+	*L. innocua*	+	3,422	0,176	+	H-	+	*L. innocua*	+	PA	3,493	0,160	+	H-	+	/	+	PA	1	b
ADRIA (2019)	5770	Ravioli bolognaise	RTHR food ravioli	H-	+	H-	+	*L. innocua*	+	3,418	0,176	+	H-	+	*L. innocua*	+	PA	3,493	0,160	+	H-	+	/	+	PA	1	b
ADRIA (2019)	5771	Couscous royal poulet merguez	Couscous	H-	+	H-	+	*L. innocua*	+	3,401	0,176	+	H-	+	*L. innocua*	+	PA	3,452	0,160	+	H-	+	/	+	PA	1	b
ADRIA (2019)	5772	Couscous à la marocaine poulet merguez	Couscous	H-	+	H-	+	*L. innocua*	+	3,327	0,176	+	H-	+	*L. innocua*	+	PA	3,46	0,160	+	H-	+	/	+	PA	1	b
ADRIA (2019)	5773	Pizza trois fromages	Pizza three cheeses	-	-	-	-	/	-	0,099	0,176	-	-	-	/	-	NA									1	b
ADRIA (2019)	5774	Pizza lardons et chèvre	Pizza with ham and cheese	-	-	st	-	/	-	0,068	0,176	-	-	-	/	-	NA									1	b
ADRIA (2019)	5775	Quiche lorraine bio	RTRH food Quiche lorraine	H-	-	st	st	*L. grayi*	+	0,089	0,176	-	-d	-	NC	-	ND	0,113	0,160	-	+d (NC)	st	/	-	ND	1	b
ADRIA (2019)	5776	Quiche courgettes chèvre	RTRH food Quiche with zucchini and cheese	H-	-	st	st	*L. grayi*	+	0,109	0,176	-	st	st	/	-	ND	0,084	0,160	-	st	st	/	-	ND	1	b
ADRIA (2019)	5984	Couscous poulet merguez	Couscous	H+	+	H+	+	*L. mono*	+	3,409	0,166	+	H+	+	*L. mono*	+	PA	3,436	0,174	+	H+	+	/	+	PA	1	b
ADRIA (2019)	5985	Pizza poulet et légumes grillés	Pizza with chicken and vegetables	-	-	-	-	/	-	0,090	0,166	-	-	st	/	-	NA									1	b
ADRIA (2019)	5986	Pizza jambon et champignons	Pizza with ham and mushrooms	-	-	st	st	/	-	0,083	0,166	-	st	st	/	-	NA									1	b
ADRIA (2019)	5987	Quiche lorraine	Quiche lorraine	st	st	st	-	/	-	0,095	0,166	-	st	st	/	-	NA									1	b
ADRIA (2019)	5988	Quiche lorraine	Quiche lorraine	H-	+	H-	+	*L. innocua*	+	3,426	0,166	+	H-	+	*L. innocua*	+	PA	3,450	0,174	+	H-	+	/	+	PA	1	b
ADRIA (2019)	5992	Couscous poulet merguez	Couscous	st	st	st	st	/	-	0,061	0,169	-	st	st	/	-	NA									1	b
ADRIA (2019)	5993	Quiche lorraine	Quiche lorraine	st	-	st	-	/	-	0,053	0,169	-	st	st	/	-	NA									1	b
IPL	A22		Opéra chocolate cake	+LB	+MD	+MB	+MB	*L. mono*	+	2775	0,217	+	+LB	+HB	*L. mono*	+	PA	2939	0,220	+	+LB	+MB	*L. mono*	+	PA	1	c
IPL	K10		Choux pastry + Chantilly cream	+LA	+LA	+MA	+HA	*L. mono*	+	2990	0,263	+	+LA	+MA	*L. mono*	+	PA	2976	0,245	+	+MA	+MA	*L. mono*	+	PA	1	c
IPL	K11		Strawberries + ice-cream and Chantilly cream	-MA	+MA	-MA	+MA	*L.innocua*	+	2997	0,263	+	-MA	+MA	*L.innocua*	+	PA	2993	0,245	+	-MA	+MA	*L.innocua*	+	PA	1	c
IPL	K15		Profiteroles	Ø	Ø	Ø	Ø	/	-	0,073	0,263	-	/	/	/	-	NA									1	c
IPL	K16		Choux pastry + Chantilly cream	Ø	Ø	Ø	Ø	/	-	0,069	0,263	-	/	/	/	-	NA									1	c
IPL	L21		Mix for cookies	-HD	+MD	-HB	+MD	*L.innocua*	+	3054	0,273	+	-MA	+HA	*L.innocua*	+	PA	2935	0,266	+	-MA	+MA	*L.innocua*	+	PA	1	c
IPL	M17		Choux pastry + Chantilly cream	+LA	+LA	+MA	+MA	*L. mono*	+	3116	0,266	+	+MA	+MA	*L. mono*	+	PA	2852	0,228	+	+MA	+MA	*L. mono*	+	PA	1	c
IPL	M34		Raspberry tart	Ø	Ø	Ø	Ø	/	-	0,032	0,266	-	/	/	/	-	NA									1	c
ADRIA (2019)	5787	Eclair chocolat	Pastry	H-	+	H-	+	*L. innocua*	+	3,451	0,176	+	H-	+	*L. innocua*	+	PA	3,389	0,160	+	H-	+	/	+	PA	1	c

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				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
ADRIA (2019)	**5788**	**Tarte aux fruits**	**Pie of fruits**	H-	+	H-	+	*L. innocua*	**+**	3,445	0,176	**+**	H-	+	*L. innocua*	**+**	**PA**	3,399	0,160	**+**	H-	+	/	**+**	**PA**	1	c
ADRIA (2019)	**5789**	**Entremet fruits rouges**	**Pastry with red fruits**	st	st	st	st	/	**-**	0,271/ 0,166/ 0,061	0,176/ 0,172	**+/d/-**	st	st	/	**-**	**PPNA**	0,231/ 0,061/ 0,123	0,160/ 0,172	**+/-/-**	st	st	/	**-**	**PPNA**	1	c
ADRIA (2019)	**5790**	**Tortilla**	**Tortilla**	H+	+	H+	+	*L. mono*	**+**	3,455	0,176	**+**	H+	+	*L. mono*	**+**	**PA**	3,5	0,160	**+**	H+	+	/	**+**	**PA**	1	c
ADRIA (2019)	**5791**	**Tortilla aux oignons**	**Tortilla with onions**	H+	+	H+	+	*L. mono*	**+**	3,416	0,176	**+**	H+	+	*L. mono*	**+**	**PA**	3,511	0,160	**+**	H+	+	/	**+**	**PA**	1	c
ADRIA (2019)	5792	Eclair au chocolat	Pastry	-	-	st	-	/	**-**	0,088	0,176	**-**	st	st	/	**-**	**NA**									1	c
ADRIA (2019)	5793	Tarte aux fruits	Pie of fruits	-	-	st	-	/	**-**	0,103	0,176	**-**	st	st	/	**-**	**NA**									1	c
ADRIA (2019)	5794	Entremet fruits rouges	Pastry with red fruits	st	st	st	st	/	**-**	0,099	0,176	**-**	st	st	/	**-**	**NA**									1	c
ADRIA (2019)	5795	Tortilla	Tortilla	-	-	-	-	/	**-**	0,11	0,176	**-**	-	st	/	**-**	**NA**									1	c
ADRIA (2019)	5796	Tortilla aux oignons	Tortilla with onions	st	st	st	st	/	**-**	0,068	0,176	**-**	st	st	/	**-**	**NA**									1	c
ADRIA (2019)	**5989**	**Eclair vanille**	**Pastry**	st	st	st	-	/	**-**	0,122	0,166	**-**	st	st	/	**-**	**NA**									1	c
ADRIA (2019)	**5990**	**Flan**	**Pastry**	H+	+d	H+	+	*L. mono*	**+**	1,194	0,166	**+**	H+	+	*L. mono*	**+**	**PA**	3,431	0,174	**+**	H+	+	/	**+**	**PA**	1	c
ADRIA (2019)	**5991**	**Mille-feuilles**	**Pastry**	H+	+	H+	+d	*L. mono*	**+**	3,378	0,166	**+**	H+	+	*L. mono*	**+**	**PA**	3,534	0,174	**+**	H+	+	/	**+**	**PA**	1	c
ADRIA (2019)	5994	Mille-feuilles	Pastry	st	-	st	st	/	**-**	0,051	0,169	**-**	st	-	/	**-**	**NA**									1	c

MEAT PRODUCTS																											
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				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	A11		Pope's eye	+LA	+LA	+MA	+HA	*L. mono*	+	3031	0,217	+	+MA	+MA	*L. mono*	+	PA	2961	0,220	+	+MA	+MA	*L. mono*	+	PA	2	a
IPL	A12		Minced beef	+LA	+LB	+LB	+HB	*L. mono L.welshimeri*	+	2844	0,217	+	+LA	+LB	L. mono L.welshimeri	+	PA	2940	0,220	+	+MB	+MB	*L. mono L.welshimeri*	+	PA	2	a
IPL	A13		Beef meat	+LA	+LA	+MA	+MA	*L. mono*	+	2977	0,217	+	+MA	+MB	*L. mono*	+	PA	2865	0,220	+	+MA	+MA	*L. mono*	+	PA	2	a
IPL	A14		Minced beef	Ø	Ø	Ø	Ø	/	-	1505	0,217	+	-LA	+MA	*L.grayi*	+	PD	2952	0,220	+	-LA	+MA	*L.grayi*	+	PD	2	a
IPL	A15		Minced horse meat	+LA(4)	+LA(1)	+MA	+MA	*L. mono*	+	0,913	0,217	+	+LA	+LB	*L. mono*	+	PA	3010	0,220	+	+MA	+LA	*L. mono*	+	PA	2	a
IPL	A16		Minced beef	-LE	Ø	-LE	-LE	/	-	0,034	0,217	-	Ø	Ø	Ø	-	NA	0,044	0,220	-	Ø	Ø	Ø	-	NA	2	a
IPL	A17		Poultry leg	+LA	+LA	+MB	+MB	*L. mono*	+	1666	0,217	+	+LA	+MB	*L. mono*	+	PA	2929	0,220	+	+LA	+LA	*L. mono*	+	PA	2	a
IPL	B1		Duck breast	Ø	Ø	Ø	Ø	/	-	0,039	0,215	-	/	/	/	-	NA									2	a
IPL	B2		Chicken breast	Ø	Ø	Ø	Ø	/	-	0,038	0,215	-	/	/	/	-	NA									2	a
IPL	B3		Pork fillet	Ø	Ø	Ø	Ø	/	-	0,037	0,215	-	/	/	/	-	NA									2	a
IPL	J7		Minced beef	Ø	Ø	Ø	-LE	/	-	0,161	0,284	-	/	/	/	-	NA									2	a
IPL	J9		Minced beef	-ME	Ø	-LE	Ø	/	-	0,109	0,284	-	/	/	/	-	NA									2	a
IPL	K30		Pork chop	-LA	+LA(2)	-MB	+MB	*L.welshimeri*	+	2983	0,263	+	-LB	+MB	*L.welshimeri*	+	PA	3007	0,245	+	-LB	+MB	*L.welshimeri*	+	PA	2	a
IPL	N20		Minced beef	-LE	Ø	+MA	+MA	*L. mono*	+	1272	0,229	+	+LB	+MB	L. mono L.innocua	+	PA	2938	0,220	+	+LB	+LB	*L. mono L.innocua*	+	PA	2	a
IPL	N24		Pork liver	Ø	Ø	Ø	-LE	/	-	0,052	0,229	-	/	/	/	-	NA									2	a
ADRIA (2019)	6005	Pavé rumsteak	Beef meat	-	-	st	st	/	-	0,067	0,169	-	st	st	/	-	NA									2	a
ADRIA (2019)	6006	Pavé viande bovine	Beef meat	-	-	H-	+	*L. welshimeri*	+	3,389	0,169	+	H-	+	*L. welshimeri*	+	PA	3,330	0,166	+	H-	+	/	+	PA	2	a
ADRIA (2019)	6007	Filet sans os de porc	Pork meat	H+	+	H+	+	*L. mono*	+	3,440	0,169	+	H+	+	*L. mono*	+	PA	3,382	0,166	+	H+	+	/	+	PA	2	a
ADRIA (2019)	6008	Côte de porc échine	Pork meat	st	-	st	st	/	-	0,085	0,169	-	st	st	/	-	NA									2	a
ADRIA (2019)	6009	Poulet blanc filet	Chicken meat	H-	+(12)	H-	+	*L. welshimeri*	+	3,357	0,169	+	H-	+	*L. welshimeri*	+	PA	3,338	0,166	+	H-	-	/	+	PA	2	a
IPL	A1		Chipolata sausages	+LB	+LB	+LB	+HB	*L. mono L.welshimeri*	+	2998	0,217	+	+MB	+HB	L. mono L.welshimeri	+	PA	2968	0,220	+	+MB	+HB	*L. mono L.welshimeri*	+	PA	2	b
IPL	A2		Sausage meat	-LA	+LB	-MA	+HA	*L.innocua*	+	2975	0,217	+	-MA	+HA	*L.innocua*	+	PA	2960	0,220	+	-LA	+MA	*L.innocua*	+	PA	2	b
IPL	A3		Sausage	+LB	+LB	+MB	+MB	*L. mono L.welshimeri*	+	2964	0,217	+	+MB	+HB	L. mono L.welshimeri	+	PA	2945	0,220	+	+LB	+LB	*L. mono L.welshimeri*	+	PA	2	b
IPL	A4		Sausage meat	-LA	+LA	-MB	+HB	*L.welshimeri*	+	3000	0,217	+	-MA	+MA	*L.welshimeri*	+	PA	2989	0,220	+	-LA	+MA	*L.welshimeri*	+	PA	2	b
IPL	B4		Beef carpaccio	Ø	Ø	Ø	Ø	/	-	0,036	0,215	-	/	/	/	-	NA									2	b
IPL	J3		Sausages	-LE	Ø	Ø	Ø	/	-	0,109	0,284	-	/	/	/	-	NA									2	b
IPL	J4		Chipolata sausages	-LB	+LB(3)	-LB	+MB	*L.innocua*	+	0,325	0,284	+	-LB	+LA	*L.innocua*	+	PA	0,351	0,252	+	-LB	+LA	*L.innocua*	+	PA	2	b
IPL	J5		Steak tartare	-LA(3)	+LA(2)	-LA	+HA	*L.innocua*	+	0,454	0,284	+	-LA	+LA	*L.innocua*	+	PA	0,563	0,252	+	-LA	+LA	*L.innocua*	+	PA	2	b
IPL	J8		Merguez	+LB	+LB	+MB	+MB	*L. mono L.welshimeri*	+	3135	0,284	+	+MB	+MB	L. mono L.welshimeri	+	PA	3014	0,252	+	+MB	+MB	*L. mono L.welshimeri*	+	PA	2	b
IPL	K24		Chipolata sausages	+LB	+LB	+MB	+MB	*L. mono L.welshimeri*	+	3014	0,263	+	+LB	+LB	L. mono L.welshimeri	+	PA	2844	0,245	+	+MB	+MB	*L. mono L.welshimeri*	+	PA	2	b
IPL	K25		Merguez	Ø	Ø	Ø	Ø	/	-	0,153	0,263	-	/	/	/	-	NA									2	b
IPL	K26		Chipolata sausages	-LA(2)	+LA	-MA	+HA	*L.welshimeri*	+	2767	0,263	+	-MA	+MB	*L.welshimeri*	+	PA	2980	0,245	+	-MA	+MB	*L.welshimeri*	+	PA	2	b
IPL	K27		Sausage	+LA	+LA	+MA	+HA	*L. mono*	+	2986	0,263	+	+MA	+MB	*L. mono*	+	PA	2967	0,245	+	+MA	+MB	*L. mono*	+	PA	2	b
IPL	K28		Organic pork sausage	-LA(2)	Ø	-MA	+HA	*L.welshimeri*	+	2993	0,263	+	-LB	+MB	*L.welshimeri*	+	PA	3011	0,245	+	-LB	+MB	*L.welshimeri*	+	PA	2	b
IPL	K29		Pork sausage	+MB	+LB	+MB	+HB	*L. mono L.innocua*	+	2987	0,263	+	+MB	+HA	L. mono L.innocua	+	PA	3005	0,245	+	+MB	+HA	*L. mono L.innocua*	+	PA	2	b
IPL	K31		Beef meatballs	+MB	+MB	+MB	+MB	*L. mono*	+	3011	0,263	+	+MB	+HA	*L. mono*	+	PA	3029	0,245	+	+MB	+HA	*L. mono*	+	PA	2	b
IPL	N19		Sausages	Ø	Ø	Ø	Ø	/	-	0,050	0,229	-	Ø	Ø	Ø	-	NA	0,047	0,220	-	Ø	Ø	Ø	-	NA	2	b
IPL	N21		Merguez	+LA	+MB	+MB	+MB	*L. mono L.innocua*	+	2931	0,229	+	+MB	+MB	L. mono L.innocua	+	PA	2902	0,220	+	+HA	+HA	*L. mono L.innocua*	+	PA	2	b

MEAT PRODUCTS																											
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										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C										
				Fraser 1/2		Fraser		Confir-mation	Result L.spp	TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*		OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	N23		American filet	+LB	+LB	+MB	+MB	*L. mono*	+	3040	0,229	+	+MA	+HB	*L. mono*	+	**PA**	2746	0,220	+	+MB	+HB	*L. mono*	+	**PA**	2	b
IPL	N25		Sausage meat	+MB	+MB	+MB	+MB	*L. mono L.innocua*	+	2118	0,229	+	+MB	+HB	L. mono L.innocua	+	**PA**	3041	0,220	+	+HB	+HB	*L. mono L.innocua*	+	**PA**	2	b
ADRIA (2019)	6010	Carpaccio de bœuf marinade pesto rouge	Seasoned beef meat with pesto	-	-	st	st	/	-	0,063	0,169	-	-	st	/	-	**NA**									2	b
ADRIA (2019)	6011	Carpaccio pur bœuf	Beef carpaccio	st	-	st	-	/	-	0,061	0,169	-	st	-	/	-	**NA**									2	b
ADRIA (2019)	6012	Poulet rôti	Roast chicken meat	st	st	st	st	/	-	0,083	0,169	-	st	st	/	-	**NA**									2	b
IPL	J6		Sausages	Ø	Ø	Ø	Ø	/	-	0,126	0,284	-	/	/	/	-	**NA**									2	c
IPL	A5		Smoked bacon	-LE	+LD	-MA	+HB	*L.innocua*	+	0,051	0,217	-	Ø	Ø	Ø	-	**ND**	0,047	0,220	-	Ø	Ø	Ø	-	**ND**	2	c
IPL	A6		Pork caul	+LA	+LA	+MB	+MB	*L. mono*	+	3026	0,217	+	+MA	+MB	*L. mono*	+	**PA**	3011	0,220	+	+MA	+MB	*L. mono*	+	**PA**	2	c
IPL	A7		Peppered salami-type sausage	Ø	Ø	-LA	+HA	*L.innocua*	+	0,037	0,217	-	Ø	Ø	Ø	-	**ND**	0,040	0,220	-	Ø	Ø	Ø	-	**ND**	2	c
IPL	A8		Salami-type sausage	+LB	+LB	+MB	+HB	*L. mono*	+	3021	0,217	+	+MB	+HB	*L. mono*	+	**PA**	2972	0,220	+	+MB	+MB	*L. mono*	+	**PA**	2	c
IPL	A9		Bacon	Ø	Ø	Ø	Ø	/	-	0,037	0,217	-	/	/	/	-	**NA**									2	c
IPL	A10		Sausage	-LE	Ø	-LA	+HA	*L.innocua*	+	0,254	0,217	+	-LA	+LA	*L.innocua*	+	**PA**	1397	0,220	+	-LA	+LA	*L.innocua*	+	**PA**	2	c
IPL	A18		Smoked bacon	+LB	+LB	+LB	+HB	*L. mono L.welshimeri*	+	3053	0,217	+	+MB	+HB	*L. mono* L.welshimeri	+	**PA**	2983	0,220	+	+LB	+LB	*L. mono/ L.welshimeri*	+	**PA**	2	c
IPL	A19		Pâté de campagne	Ø	Ø	Ø	Ø	/	-	0,041	0,217	-	/	/	/	-	**NA**									2	c
IPL	A20		Cooked chitterlings sausage	-ME	-ME	-ME	-ME	/	-	0,054	0,217	-	/	/	/	-	**NA**									2	c
IPL	A21		Cooked chitterlings sausage	-ME	-ME	-LE	-LE	/	-	0,044	0,217	-	/	/	/	-	**NA**									2	c
IPL	B5		Streaky bacon	Ø	Ø	Ø	Ø	/	-	0,052	0,215	-	/	/	/	-	**NA**									2	c
IPL	B6		Rolled and stuffed ham	-LE	-LE	-ME	-ME	/	-	0,048	0,215	-	/	/	/	-	**NA**									2	c
IPL	B7		Pâté de campagne	-LE	-LE	-ME	-ME	/	-	0,040	0,215	-	/	/	/	-	**NA**									2	c
IPL	B8		Pork head pâté	Ø	Ø	Ø	Ø	/	-	0,046	0,215	-	/	/	/	-	**NA**									2	c
IPL	B9		Horse salami-like sausage	-LE	-LE	Ø	Ø	/	-	0,045	0,215	-	/	/	/	-	**NA**									2	c
IPL	B10		Grilled chicken	Ø	Ø	Ø	Ø	/	-	0,041	0,215	-	/	/	/	-	**NA**									2	c
IPL	B11		Saveloy	Ø	Ø	Ø	Ø	/	-	0,045	0,215	-	/	/	/	-	**NA**									2	c
IPL	J1		Foie gras	+MA	+HA	+MA	+MB	*L. mono*	+	3028	0,284	+	+LA	+MA	*L. mono*	+	**PA**	3012	0,252	+	+MA	+HA	*L. mono*	+	**PA**	2	c
IPL	J2		Sliced smoked bacon	-LA	+LA	-MB	+HA	*L.welshimeri*	+	3154	0,284	+	-LA	+HA	*L.welshimeri*	+	**PA**	3015	0,252	+	-MA	+HA	*L.welshimeri*	+	**PA**	2	c
IPL	J10		Peppered salami-type sausage	Ø	-LE	Ø	-LE	/	-	0,113	0,284	-	/	/	/	-	**NA**									2	c
IPL	J11		Bacon	+LA	+LA	+MA	+MA	*L. mono*	+	3191	0,284	+	+LA	+LA	*L. mono*	+	**PA**	2993	0,252	+	+LA	+LA	*L. mono*	+	**PA**	2	c
IPL	J12		Thin sliced pork + mustard	-LE	Ø	Ø	Ø	/	-	0,113	0,284	-	/	/	/	-	**NA**									2	c
IPL	J13		Smoked bacon	Ø	Ø	Ø	Ø	/	-	0,197	0,284	-	/	/	/	-	**NA**									2	c
IPL	L32		Salami-type sausage	-ME	Ø	-ME	Ø	/	-	0,113	0,273	-	/	/	/	-	**NA**									2	c
IPL	M15		Cooked sausage	+LA	+LA	+LA	+MA	*L. mono*	+	3046	0,266	+	+MA	+LB	*L. mono*	+	**PA**	2979	0,228	+	+MA	+HA	*L. mono*	+	**PA**	2	c
IPL	M16		Duck pâté	+LA	+LA	+MA	+MA	*L. mono*	+	2985	0,266	+	+MA	+MB	*L. mono*	+	**PA**	3004	0,228	+	+MA	+MA	*L. mono*	+	**PA**	2	c
IPL	N17		Pâté de campagne	Ø	Ø	Ø	Ø	/	-	0,050	0,229	-	/	/	/	-	**NA**									2	c
IPL	N18		Foie gras	Ø	Ø	Ø	Ø	/	-	0,051	0,229	-	Ø	Ø	Ø	-	**NA**	0,043	0,220	-	Ø	Ø	Ø	-	**NA**	2	c
IPL	N22		Sliced smoked bacon	+LA(5)	+LB(2)	+MA	+HA	*L. mono*	+	1008	0,229	+	+MA	+HA	*L. mono*	+	**PA**	3006	0,220	+	+HA	+HA	*L. mono*	+	**PA**	2	c
IPL	T1		Rillettes	Ø	Ø	Ø	Ø	/	-	0,050	0,229	-	/	/	/	-	**NA**									2	c

DAIRY PRODUCTS																											
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				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	A25		"Maroilles fermier" raw milk cheese	+MA	+MA	+MA	+HA	*L. mono*	+	3078	0,217	+	+MA	+HA	*L. mono*	+	**PA**	2987	0,220	+	+MA	+HA	*L. mono*	+	**PA**	3	a
IPL	A26		"Tome de Cambrai" raw milk cheese	+LB	+LB	+MB	+MB	*L. mono*	+	0,101	0,217	-	+LA	+LA	*L. mono*	-	**ND**	0,126	0,220	-	+LA	+LA	*L. mono*	-	**ND**	3	a
IPL	A28		"Maroilles fermier" raw milk cheese	+MA	+MB	+MB	+HB	*L. mono*	+	2870	0,217	+	+MA	+HB	*L. mono*	+	**PA**	2898	0,220	+	+MA	+HB	*L. mono*	+	**PA**	3	a
IPL	B17		"Reblochon" raw milk cheese	Ø	Ø	Ø	Ø	/	-	0,043	0,215	-	/	/	/	-	**NA**									3	a
IPL	B18		"Reblochon" raw milk cheese	Ø	Ø	Ø	Ø	/	-	0,043	0,215	-	/	/	/	-	**NA**									3	a
IPL	B19		"Maroilles" raw milk cheese	Ø	Ø	Ø	Ø	/	-	0,030	0,215	-	/	/	/	-	**NA**									3	a
IPL	B20		"Epoisses" raw milk cheese	Ø	Ø	Ø	Ø	/	-	0,031	0,215	-	/	/	/	-	**NA**									3	a
IPL	K17		Raw milk cheese	Ø	Ø	Ø	Ø	/	-	0,155	0,263	-	/	/	/	-	**NA**									3	a
IPL	K18		Raw milk cheese	Ø	Ø	-LE	-ME	/	-	0,078	0,263	-	/	/	/	-	**NA**									3	a
IPL	**L26**		**"Camembert" raw milk cheese**	Ø	Ø	Ø	Ø	/	-	0,102	0,273	-	/	/	/	-	**NA**									3	a
IPL	M31		"Camembert" raw milk cheese	Ø	Ø	Ø	-LE	/	-	0,034	0,266	-	/	/	/	-	**NA**									3	a
IPL	M32		"Camembert" raw milk cheese	-LE	Ø	Ø	Ø	/	-	0,027	0,266	-	/	/	/	-	**NA**									3	a
IPL	A24		"Roquefort" cheese	Ø	Ø	Ø	Ø	/	-	0,044	0,217	-	/	/	/	-	**NA**									3	a
IPL	A27		"Petit vinageois" raw milk cheese	+LA	+MA	+MA	+HA	*L. mono*	+	3059	0,217	+	+MA	+HA	*L. mono*	+	**PA**	2863	0,220	+	+LA	+MA	*L. mono*	+	**PA**	3	a
IPL	A29		Raw goat milk cheese	+MA	+MA	+MA	+MA	*L. mono*	+	2984	0,217	+	+MA	+HA	*L. mono*	+	**PA**	2869	0,220	+	+MA	+HA	*L. mono*	+	**PA**	3	a
IPL	B14		"Selles sur Cher" raw goat milk cheese	Ø	Ø	Ø	Ø	/	-	0,039	0,215	-	/	/	/	-	**NA**									3	a
IPL	B15		"Valençay" raw goat milk cheese	Ø	Ø	Ø	Ø	/	-	0,047	0,215	-	/	/	/	-	**NA**									3	a
IPL	B16		"Selles sur Cher" raw goat milk cheese	Ø	Ø	Ø	Ø	/	-	0,036	0,215	-	/	/	/	-	**NA**									3	a
ADRIA (2019)	**5858**	**Tomme du Jura au lait cru**	**Raw milk cheese**	H-	+	H-	+	*L. mono* (PALCAM)/ *L. innocua*	+	3,366	0,172	+	H-	+	*L. innocua*	+	**PA**	3,502	0,254	+	H-	+	/	+	**PA**	3	a
ADRIA (2019)	**5859**	**Petit camembert au lait cru**	**Raw milk cheese**	st	-	st	st	/	-	0,065	0,172	-	st	st	/	-	**NA**									3	a
ADRIA (2019)	**5860**	**Neufchatel au lait cru**	**Raw milk cheese**	H+	+	H+/H-	+	*L. mono / L. innocua*	+	2,967	0,172	+	H+/H-	+	*L. mono / L. innocua*	+	**PA**	3,479	0,254	+	H+/H-	+	/	+	**PA**	3	a
ADRIA (2019)	**5861**	**Roquefort au lait cru**	**Raw milk cheese**	H+/H-	+	H-	+	*L. mono / L. innocua*	+	3,422	0,172	+	H-	+	*L. innocua*	+	**PA**	3,462	0,254	+	H-	+	/	+	**PA**	3	a
ADRIA (2019)	**5862**	**Fromage de chèvre au lait cru**	**Raw milk cheese**	st	st	st	st	/	-	0,107	0,172	-	st	st	/	-	**NA**									3	a
ADRIA (2019)	**7141**	**Morbier au lait cru**	**Raw milk cheese**	H-	+	H-	+	*L. innocua*	+	1,415	0,226	+	H-d	+	*L. innocua*	+	**PA**	0,999	0,292	+	H-	+	/	+	**PA**	3	a
ADRIA (2019)	**7142**	**Roquefort au lait cru**	**Raw milk cheese**	+d/+	+	+	+	*L. innocua*	+	3,415	0,226	+	H-	+	*L. innocua*	+	**PA**	3,359	0,189	+	H-	+	/	+	**PA**	3	a
ADRIA (2019)	**7143**	**Roquefort au lait cru**	**Raw milk cheese**	-	-	st	st	/	-	0,133	0,226	-	st	st	/	-	**NA**									3	a
ADRIA (2019)	**7144**	**Chabichou du Poitou au lait cru**	**Raw milk cheese**	st	st	st	st	/	-	0,113	0,226	-	st	st	/	-	**NA**									3	a
IPL	**M29**		**Raw milk**	+LA	+LA	+MA	+MA	*L. mono*	+	3014	0,266	+	+LA	+HA	*L. mono*	+	**PA**	3029	0,228	+	+MA	+HA	*L. mono*	+	**PA**	3	b

DAIRY PRODUCTS																											
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				Fraser 1/2		Fraser		Confir-mation	Result L.spp	TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*		OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
ADRIA (2019)	**5863**	**Lait cru fermier**	**Raw milk**	H-	+	H-	+	*L. welshimeri*	+	3,320	0,172	+	H-	+	*L. welshimeri*	+	**PA**	3,568	0,254	+	H-	+	/	+	**PA**	3	b
ADRIA (2019)	**5864**	**Lait cru fermier**	**Raw milk**	H+/H-	+	H+/H-	+	*L. mono / L. innocua*	+	3,309	0,172	+	H+/H-	+	*L. mono / L. innocua*	+	**PA**	3,515	0,254	+	H+/H-	+	/	+	**PA**	3	b
ADRIA (2019)	5865	Lait cru fermier	Raw milk	H+d	+d	H-d	-	*L. Ivanovii*	+	0,102	0,172	-	H-d	-	NC (GRAM-)	-	**ND**	0,078	0,254	-	-	st		-	**ND**	3	b
ADRIA (2019)	**5866**	**Lait cru**	**Raw milk**	H+d	+	H-	+	*L. welshimeri*	+	3,321	0,172	+	H-	+	*L. welshimeri*	+	**PA**	3,576	0,254	+	H-	+	/	+	**PA**	3	b
ADRIA (2019)	**5867**	**Lait cru**	**Raw milk**	H+d/H-	+	H+	+	*L. mono / L. innocua*	+	3,338	0,172	+	H+	+	*L. mono*	+	**PA**	3,491	0,254	+	H+	+	/	+	**PA**	3	b
ADRIA (2019)	5868	Lait cru	Raw milk	H-/-	-	H-d/-	-	NC	-	0,236/ 0,065/ 0,088	0,172/ 0,176/ 0,176	+/-/-	-	st	/	-	**PPNA**	0,131	0,254	-	-	-	/	-	**NA**	3	b
ADRIA (2019)	**5869**	**Lait cru de vache**	**Raw milk**	H-	+	H-	+	*L. welshimeri*	+	3,359	0,172	+	H-	+	*L. welshimeri*	+	**PA**	3,585	0,254	+	H-	+	/	+	**PA**	3	b
ADRIA (2019)	**5870**	**Lait cru de vache**	**Raw milk**	H+	+	H+	+	*L. mono*	+	3,340	0,172	+	H+	+	*L. mono*	+	**PA**	3,556	0,254	+	H+	+	/	+	**PA**	3	b
ADRIA (2019)	5871	Lait cru de vache	Raw milk	-	-	-	-	/	-	0,102	0,172	-	-	st	/	-	**NA**									3	b
ADRIA (2019)	**7145**	**Lait cru**	**Raw milk**	H-	+	H-	+	*L. innocua*	+	3,379	0,226	+	H-	+	*L. innocua*	+	**PA**	3,404	0,189	+	H-	+	/	+	**PA**	3	b
ADRIA (2019)	**7146**	**Lait cru**	**Raw milk**	st	-	H+	+	*L. ivanovi*	+	0.356	0,226	+	H+	+	*L. ivanovi*	+	**PA**	0,931	0,189	+	H+	+	/	+	**PA**	3	b
ADRIA (2019)	7208	Lait cru	Raw milk	-	st	st	st	/	-	0,130	0,226	-	st	st	/	-	**NA**									3	b
ADRIA (2019)	7209	Lait cru	Raw milk	-	-	st	st	/	-	0,151	0,226	-	st	-	/	-	**NA**									3	b
ADRIA (2019)	**7367**	**Lait cru**	**Raw milk**	H-d (gram -)	-	st	-	/	-	0,198	0,307	-	-	-	/	-	**NA**									3	b
ADRIA (2019)	7368	Lait cru	Raw milk	H-d (gram -)	+d (gram -)	-	-	/	-	0,189	0,307	-	-	-	/	-	**NA**									3	b
ADRIA (2019)	**7369**	**Lait cru**	**Raw milk**	-	-	st	+ (1)	*L.ivanovii*	+	0,210/ 0,141/ 0,139	0,307 /0,254/ 0,254	-/-/-	-	-	/	-	**ND**	0,231/ 0,187/ 0,200	0,261/ 0,254/ 0,254	-/-/-	H+	+	*L.ivanovii*	-	**ND**	3	b
ADRIA (2019)	7370	Lait cru	Raw milk	-	-	-	-	/	-	0,193	0,307	-	-	-	/	-	**NA**									3	b
ADRIA (2019)	**7371**	**Lait cru**	**Raw milk**	H-	+	H-	+	*L.seeligeri*	+	3,418	0,307	+	H-	+	*L.seeligeri*	+	**PA**	3,357	0,261	+	H-	+	/	+	**PA**	3	b
ADRIA (2019)	7372	Lait cru	Raw milk	st	-	-	-	/	-	0,253	0,307	-	-	st	/	-	**NA**									3	b
IPL	A23		Feta cheese	+LA	+LA	+MA	+MB	*L. mono*	+	1860	0,217	+	+LA	+LA	*L. mono*	+	**PA**	2199	0,220	+	+LA	+LA	*L. mono*	+	**PA**	3	c
IPL	K19		"Epoisses" cheese	+LB	+LB	+MB	+HB	*L. mono L.innocua*	+	3018	0,263	+	+MB	+MB	L. mono L.innocua	+	**PA**	3026	0,245	+	+MA	+MA	*L. mono L.innocua*	+	**PA**	3	c
IPL	K20		"Pont l'Evêque" cheese	+LB	+LB	+MB	+MB	*L. mono*	+	2870	0,263	+	+MA	+MA	*L. mono*	+	**PA**	3019	0,245	+	+LA	+LA	*L. mono*	+	**PA**	3	c
IPL	**L27**		**"Reblochon" cheese**	-LE	-LE	Ø	Ø	/	-	0,092	0,273	-	/	/	/	-	**NA**									3	c
IPL	**M26**		**"Petit Billy affiné" cheese**	+LA(3)	+LA(4)	+MA	+MA	*L. mono*	+	3071	0,266	+	+MA	+MA	*L. mono*	+	**PA**	3034	0,228	+	+MA	+LA	*L. mono*	+	**PA**	3	c
IPL	M33		"Neufchâtel" cheese	-LE	Ø	Ø	Ø	/	-	0,031	0,266	-	/	/	/	-	**NA**									3	c
IPL	A30		"Munster fermier" cheese	+LA	+LA	+MA	+MA	*L. mono*	+	2926	0,217	+	+MA	+HA	*L. mono*	+	**PA**	2997	0,220	+	+MA	+MA	*L. mono*	+	**PA**	3	c
IPL	A31		"Munster fermier" cheese	+MA	+LA	+MA	+MA	*L. mono*	+	3012	0,217	+	+MA	+HA	*L. mono*	+	**PA**	3040	0,220	+	+MA	+MA	*L. mono*	+	**PA**	3	c
IPL	B12		Goat cheese	Ø	Ø	Ø	Ø	/	-	0,033	0,215	-	/	/	/	-	**NA**									3	c
IPL	B13		Goat cheese	-LE	Ø	Ø	Ø	/	-	0,034	0,215	-	/	/	/	-	**NA**									3	c

DAIRY PRODUCTS																											
Year of analysis	N° sample	Product (French name)	Product	Reference Method ISO 11290-1/A1						Alternative method - TRANSIA® PLATE *Listeria*															Category	Type
										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C										
				Fraser 1/2		Fraser		Confir-mation	Result L.spp	TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*		OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	**L23**		**Pasteurized goat cheese**	-LE	-LE	Ø	-LE	/	-	0,086	0,273	-	/	/	/	-	**NA**									3	c
IPL	**L24**		**Pasteurized goat cheese**	+LB	+LB(3)	+LB	+MB	*L. mono L.innocua*	+	3122	0,273	+	+LA	+MA	*L. mono*	+	**PA**	2988	0,266	+	+MA	+HA	*L. mono*	+	**PA**	3	c
IPL	**L28**		**Pasteurized goat cheese**	Ø	-LE	Ø	Ø	/	-	0,098	0,273	-	/	/	/	-	**NA**									3	c
IPL	**M21**		**"Sainte Maure" ashy goat cheese**	Ø	Ø	Ø	Ø	/	-	0,032	0,266	-	/	/	/	-	**NA**									3	c
IPL	**M23**		**Goat cheese**	Ø	Ø	Ø	Ø	/	-	0,029	0,266	-	/	/	/	-	**NA**									3	c
IPL	M30		"Petit Pouligny" goat cheese	Ø	Ø	Ø	Ø	/	-	0,028	0,266	-	/	/	/	-	**NA**									3	c
IPL	M35		Goat cheese	Ø	Ø	Ø	Ø	/	-	0,028	0,266	-	/	/	/	-	**NA**									3	c
IPL	M36		Goat cheese	Ø	Ø	Ø	Ø	/	-	0,038	0,266	-	/	/	/	-	**NA**									3	c
IPL	**N11**		**Goat cheese**	-LE	-LE	-LE	-ME	/	-	0,050	0,229	-	/	/	/	-	**NA**	0,049	0,220	-	/	/	/	-	**NA**	3	c
IPL	**K8**		**Vanilla ice-cream**	+LA	+LA	+MA	+HB	*L. mono*	+	3014	0,263	+	+LA	+LA	*L. mono*	+	**PA**	3019	0,245	+	+LA	+MA	*L. mono*	+	**PA**	3	c
IPL	**K9**		**"Mystère" ice-cream**	-MB	+MB	-MA	+HA	*L.innocua*	+	2920	0,263	+	-MB	+HA	*L.innocua*	+	**PA**	2914	0,245	+	-MA	+HA	*L.innocua*	+	**PA**	3	c
IPL	**K13**		**Milk powder**	-LA	+LA	-MA	+HA	*L.innocua*	+	2990	0,263	+	-MA	+MA	*L.innocua*	+	**PA**	3011	0,245	+	-MA	+MA	*L.innocua*	+	**PA**	3	c

FISHERY PRODUCTS

Year of analysis	N° sample	Product (French name)	Product	Reference Method ISO 11290-1/A1						Alternative method - TRANSIA® PLATE *Listeria*														Category	Type
										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C									
				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation					TP *Listeria*			CONFIRMATION						
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*	Final result TP Listeria	Agree-ment	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*	Final result TP *Listeria*	Agree-ment		
IPL	C10		Shrimps	+MB	+LB	+MB	+MB	*L. mono*	+	3244	0,265	+	+MA	+MA	*L. mono*	+	**PA**	3159	0,243	+	+MA	+MA	*L. mono*	+	**PA**	4	a
IPL	C11		Shrimps	+MB	+LA	+MB	+MA	*L. mono*	+	3218	0,265	+	+MA	+MA	*L. mono*	+	**PA**	3206	0,243	+	+MA	+MA	*L. mono*	+	**PA**	4	a
IPL	C12		Shrimps	-LE	-LE	-ME	-ME	/	-	0,145	0,265	-	-LE	-LE	/	-	**NA**									4	a
IPL	C13		Shrimps	+MA	+MB	+MA	+MB	*L. mono*	+	3254	0,265	+	+MA	+MA	*L. mono*	+	**PA**	3156	0,243	+	+MA	+HA	*L. mono*	+	**PA**	4	a
IPL	D12		Mixed seafood	+LB(1)	+LB(5)	+MA	+MA	*L. mono*	+	3221	0,243	+	+MA	+MA	*L. mono*	+	**PA**	3063	0,239	+	+MA	+HA	*L. mono*	+	**PA**	4	a
IPL	D14		Mixed seafood	+LB	+LD	+MB	+HA	*L. mono*	+	0,418	0,243	+	+LB	+MB	*L. mono*	+	**PA**	3107	0,239	+	+MA	+HB	*L. mono*	+	**PA**	4	a
IPL	D16		Sweet herring fillet	+LA	Ø	+MB	+HB	*L. mono*	+	3029	0,243	+	+LA	+MA	*L. mono*	+	**PA**	2986	0,239	+	+MA	+MA	*L. mono*	+	**PA**	4	a
IPL	D17		Frozen salmon fillet	+LA	+LA	+MA	+MA	*L. mono*	+	3139	0,243	+	+MA	+MA	*L. mono*	+	**PA**	3237	0,239	+	+MA	+HA	*L. mono*	+	**PA**	4	a
IPL	E15		Shrimps	-LE	Ø	-LA	+LD	*L.grayi*	+	3209	0,219	+	-LB	+LD	*L.grayi*	+	**PA**	2949	0,239	+	-LB	+LD	*L.grayi*	+	**PA**	4	a
IPL	G1		Raw fish	Ø	-LE	Ø	Ø	/	-	0,100	0,270	-	/	/	/	-	**NA**									4	a
IPL	G3		Fresh halibut	Ø	Ø	Ø	Ø	/	-	0,165	0,270	-	/	/	/	-	**NA**									4	a
IPL	G4		Fresh salmon	+MA	+MA	+MA	+MA	*L. mono*	+	3034	0,270	+	+MA	+MA	*L.mono*	+	**PA**	3024	0,305		+MA	+MA	*L.mono*	+	**PA**	4	a
IPL	G5		Fresh herring	Ø	Ø	-LE	-LE	/	-	0,084	0,270	-	/	/	/	-	**NA**									4	a
IPL	H11		Haddock fillet	-LA(3)	+LB	-MA	+HA	*L.innocua*	+	2997	0,239	+	-LA	+LA	*L.innocua*	+	**PA**									4	a
IPL	H12		Sweet herring fillet	-MA	+MA	-MA	+MB	*L.innocua*	+	3040	0,239	+	-LB	+LB	*L.innocua*	+	**PA**									4	a
IPL	I9		Sweet herring fillet	Ø	Ø	Ø	-LE	/	-	0,141	0,321	-	/	/	/	-	**NA**	0,081	0,261	-	/	/	/	-	**NA**	4	a
IPL	I10		Haddock	+MB	+MB	+LB	+LB	*L. mono* *L.innocua*	+	3028	0,321	+	+MB	+MB	L. mono L.innocua	+	**PA**	3154	0,261	+	+LB	+MB	*L. mono* *L.innocua*	+	**PA**	4	a
IPL	I11		Skate	-LE	Ø	-LE	-LE	/	-	0,186	0,321	-	Ø	Ø	Ø	-	**NA**	0,089	0,261	-						4	a
IPL	J15		Fish fillet	-LA	+LA	-MA	+MA	*L.innocua*	+	3118	0,284	+	-MA	+HA	*L.innocua*	+	**PA**	2991	0,252	+	-MA	+HA	*L.innocua*	+	**PA**	4	a
IPL	J21		Medium sole	Ø	Ø	-LE	-LE	/	-	0,110	0,284	-	/	/	/	-	**NA**									4	a
IPL	J22		Sea perch from Iceland	Ø	Ø	Ø	Ø	/	-	0,115	0,284	-	/	/	/	-	**NA**									4	a
IPL	J23		Panga fillet	+HB	+HB	+MB	+MB	*L. mono* *L.innocua*	+	3118	0,284	+	+MB	+MB	L. mono L.innocua	+	**PA**	3009	0,252	+	+MB	+MB	*L. mono* *L.innocua*	+	**PA**	4	a
IPL	J24		Cod fillet	Ø	Ø	-LE	Ø	/	-	0,108	0,284	-	/	/	/	-	**NA**									4	a
IPL	J25		Scallop	-ME	-LE	-ME	-ME	/	-	0,108	0,284	-	/	/	/	-	**NA**									4	a
IPL	K22		Shrimps	Ø	Ø	Ø	Ø	/	-	0,070	0,263	-	/	/	/	-	**NA**									4	a
IPL	K23		Frozen salmon	Ø	Ø	Ø	Ø	/	-	0,086	0,263	-	/	/	/	-	**NA**									4	a
IPL	C1		Smoked salmon tartare	Ø	Ø	Ø	Ø	/	-	0,090	0,265	-	/	/	/	-	**NA**									4	b
IPL	C2		Smoked salmon	Ø	Ø	Ø	Ø	/	-	0,089	0,265	-	/	/	/	-	**NA**									4	b
IPL	C4		Smoked salmon bits	+LA	+LA	+MA	+MA	*L. mono*	+	3239	0,265	+	+MA	+HA	*L. mono*	+	**PA**	3221	0,243	+	+MA	+HA	*L. mono*	+	**PA**	4	b
IPL	C5		Smoked salmon from Atlantic	Ø	Ø	Ø	Ø	/	-	0,100	0,265	-	/	/	/	-	**NA**									4	b
IPL	C6		Smoked salmon carpaccio	Ø	Ø	Ø	Ø	/	-	0,098	0,265	-	/	/	/	-	**NA**									4	b
IPL	C7		Smoked salmon from Ireland	Ø	Ø	Ø	Ø	/	-	0,088	0,265	-	/	/	/	-	**NA**									4	b
IPL	C9		Smoked kippers	-LA	+LA	-MA	+HA	*L.innocua*	+	3232	0,265	+	-MA	+MA	*L.innocua*	+	**PA**	3175	0,243	+	-LA	+MA	*L.innocua*	+	**PA**	4	b
IPL	D1		Smoked salmon bits	Ø	Ø	Ø	Ø	/	-	0,051	0,243	-	/	/	/	-	**NA**									4	b
IPL	D2		Smoked salmon from Atlantic	Ø	Ø	Ø	Ø	/	-	0,049	0,243	-	/	/	/	-	**NA**									4	b
IPL	D5		Smoked salmon carpaccio	+MB	+MB	+MB	+HB	*L. mono*	+	3176	0,243	+	+MB	+MB	*L. mono*	+	**PA**	3212	0,239	+	+MB	+MB	*L. mono*	+	**PA**	4	b
IPL	D6		Smoked kippers	-LA	+LA	+MB	+HB	*L. mono* *L.innocua*	+	3212	0,243	+	+MB	+MB	L. mono L.innocua	+	**PA**	3128	0,239	+	+MB	+MB	*L. mono* *L.innocua*	+	**PA**	4	b
IPL	D7		Smoked salmon from Norway	Ø	Ø	+MA	+HA	*L. mono*	+	3118	0,243	+	+LA	+LA	*L. mono*	+	**PA**	3163	0,239	+	+MA	+MA	*L. mono*	+	**PA**	4	b
IPL	D8		Smoked haddock	Ø	Ø	+MB	+MB	*L. mono*	+	3162	0,243	+	+LA	+MB	*L. mono*	+	**PA**	3184	0,239	+	+MA	+HA	*L. mono*	+	**PA**	4	b
IPL	D9		Small smoked trout	-LE	-ME	-LE	-ME	/	-	0,048	0,243	-	/	/	/	-	**NA**									4	b
IPL	D10		Small slice of smoked trout	+LA	+LA	+MA	+MB	*L. mono*	+	3217	0,243	+	+MA	+MA	*L. mono*	+	**PA**	2989	0,239	+	+MA	+MA	*L. mono*	+	**PA**	4	b
IPL	E1		Smoked salmon from Norway	+LA(5)	+LA(3)	+MA	+HA	*L. mono*	+	1096	0,219	+	+MA	+MA	*L. mono*	+	**PA**	2956	0,239	+	+MA	+MA	*L. mono*	+	**PA**	4	b
IPL	E2		Salmon tartare	Ø	Ø	Ø	Ø	/	-	0,039	0,219	-	/	/	/	-	**NA**									4	b

FISHERY PRODUCTS																											
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				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	E3		Smoked truit	Ø	Ø	Ø	Ø	/	-	0,048	0,219	-	/	/	/	-	NA									4	b
IPL	E4		Thin sliced salmon	Ø	Ø	Ø	Ø	/	-	0,046	0,219	-	/	/	/	-	NA									4	b
IPL	E5		Smoked salmon from Atlantic	Ø	Ø	Ø	Ø	/	-	0,045	0,219	-	/	/	/	-	NA									4	b
IPL	E6		Smoked haddock	+LA	+MB	+MA	+MB	*L. mono*	+	3191	0,219	+	+MB	+MB	*L. mono*	+	PA	3039	0,239	+	+MB	+MB	*L. mono*	+	PA	4	b
IPL	E7		Smoked salmon bits	Ø	Ø	Ø	Ø	/	-	0,039	0,219	-	Ø	Ø	/	-	NA									4	b
IPL	**E10**		**Smoked salmon from Scotland**	+MA	+MA	+MA	+MA	*L. mono*	+	3249	0,219	+	+MB	+HB	*L. mono*	+	PA	2756	0,239	+	+MB	+HB	*L. mono*	+	PA	4	b
IPL	G2		Kippers	Ø	Ø	Ø	Ø	/	-	0,092	0,270	-	/	/	/	-	NA									4	b
IPL	H5		Kippers	Ø	Ø	Ø	Ø	/	-	0,098	0,239	-	/	/	/	-	NA									4	b
IPL	C8		Shrimps in spicy sauce	Ø	-LE	Ø	Ø	/	-	0,096	0,265	-	/	/	/	-	NA									4	c
IPL	D11		Cooked mussels from Chile	-LE	-LE	-LE	Ø	/	-	0,045	0,243	-	/	/	/	-	NA									4	c
IPL	D13		Salad of scampi	-ME	-LE	-ME	-LE	/	-	0,049	0,243	-	Ø	-LE	/	-	NA									4	c
IPL	D15		Shrimps in sauce	+LA	+MA	+MA	+MA	*L. mono*	+	3223	0,243	+	+MA	+MA	*L. mono*	+	PA	3122	0,239	+	+MA	+MA	*L. mono*	+	PA	4	c
IPL	**E9**		**Fish fritter with curry sauce**	+MA	+MA	+MA	+MA	*L. mono*	+	3238	0,219	+	+MA	+MB	*L. mono*	+	PA	2971	0,239	+	+MA	+MB	*L. mono*	+	PA	4	c
IPL	**E12**		**Flaked crab**	+MA	+MA	+MA	+MA	*L. mono*	+	3179	0,219	+	+MA	+MA	*L. mono*	+	PA	2878	0,239	+	+MA	+MA	*L. mono*	+	PA	4	c
IPL	E14		Accras de morue	Ø	Ø	Ø	Ø	/	-	0,044	0,219	-	/	/	/	-	NA									4	c
IPL	E16		Salad of tuna	Ø	Ø	Ø	Ø	/	-	0,043	0,219	-	/	/	/	-	NA									4	c
IPL	E17		Crab stick	Ø	Ø	Ø	Ø	/	-	0,039	0,219	-	/	/	/	-	NA									4	c
IPL	I6		Salmon tartare	+LA	+LA	+HB*	+MB	*L. mono*	+	3020	0,321	+	+MA	+HB	*L. mono*	+	PA	3125	0,261	+	+MA	+HB	*L. mono*	+	PA	4	c
IPL	J26		Salmon cake	Ø	Ø	Ø	Ø	/	-	0,109	0,284	-	/	/	/	-	NA									4	c
ADRIA (2019)	**5872**	**Terrine truite éclats d'amandes**	**Seafood terrine**	H-	+	H-	+	*L. innocua*	+	3,416	0,172	+	H-	+	*L. innocua*	+	PA	3,576	0,254	+	H-	+	/	+	PA	4	c
ADRIA (2019)	**5873**	**Terrine aux deux saumons**	**Salmon terrine**	H+/H-	+	H+/H-	+	*L. mono / L. innocua*	+	3,383	0,172	+	H+/H-	+	*L. mono / L. innocua*	+	PA	3,815	0,254	+	H+/H-	+	/	+	PA	4	c
ADRIA (2019)	**5874**	**Terrine saumon et saumon fumé**	**Salmon and smoked salmon terrine**	H+/H-	+	H+/H-	+	*L. mono / L. innocua*	+	3,445	0,172	+	H+/H-	+	*L. mono / L. innocua*	+	PA	3,614	0,254	+	H+/H-	+	/	+	PA	4	c
ADRIA (2019)	**5875**	**Empanadas au thon**	**RTRH fish**	H-	+	H-	+	*L. welshimeri*	+	3,426	0,172	+	H-	+	*L. welshimeri*	+	PA	3,579	0,254	+	H-	+	/	+	PA	4	c
ADRIA (2019)	**5876**	**Moules farcies**	**Stuffed mussels**	H-	+	H-	+	*L. welshimeri*	+	3,416	0,172	+	H-	+	*L. welshimeri*	+	PA	3,655	0,254	+	H-	+	/	+	PA	4	c
ADRIA (2019)	**7373**	**Terrine de poisson aux éclats d'amandes**	**Fish terrines**	H-	+	H-	+	*L.welshimeri*	+	3,351	0,307	+	H-	+	*L.welshimeri*	+	PA	3,328	0,261	+	H-	+	/	+	PA	4	c
ADRIA (2019)	**7374**	**Terrine saumon fumé et saumon**	**Salmon terrine**	H-	+	H-	+	*L.welshimeri*	+	3,338	0,307	+	H-	+	*L.welshimeri*	+	PA	3,309	0,261	+	H-	+	/	+	PA	4	c
ADRIA (2019)	**7375**	**Crevettes**	**Shrimps**	H-	+	H-	+	*L.welshimeri*	+	3,358	0,307	+	H-	+	*L.welshimeri*	+	PA	3,324	0,261	+	H-	+	/	+	PA	4	c
ADRIA (2019)	**7376**	**Cake au thon**	**Tuna cake**	H-	+	H-	+	*L.welshimeri*	+	3,344	0,307	+	H-	+	*L.welshimeri*	+	PA	3,339	0,254	+	H-	+	/	+	PA	4	c

VEGETABLES																											
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										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C										
				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	D20		Frozen chopped parsley	-LE	-LE	-ME	-HE	/	-	0,011	0,243	-	Ø	Ø	/	-	NA	0,063	0,239	-	/	/	/	-	NA	5	a
IPL	**E19**		**Frozen chopped spinach**	+MA	+MA	+MA	+MB	*L. mono*	+	3202	0,219	+	+MA	+MA	*L. mono*	+	PA	2871	0,239	+	+MA	+MA	*L. mono*	+	PA	5	a
IPL	I13		Frozen cauliflower	-LE	-LE	-ME	-ME	/	-	0,161	0,321	-	/	/	/	-	NA	0,134	0,261	-	/	/	/	-	NA	5	a
IPL	I14		Frozen Brussels sprout	-LE	Ø	-HE	-ME	/	-	0,161	0,321	-	Ø	Ø	Ø	-	NA	0,120	0,261	-	/	/	/	-	NA	5	a
IPL	I15		Frozen leaf spinach	-LE	-LE	-HE	-ME	/	-	0,144	0,321	-	-LE	-LE	Ø	-	NA	0,079	0,261	-	/	/	/	-	NA	5	a
IPL	**L10**		**String beans**	-LA	+LA	-MA	+MA	*L.innocua*	+	3149	0,273	+	-LA	+LA	*L.innocua*	+	PA	2986	0,266	+	-LA	+LA	*L.innocua*	+	PA	5	a
IPL	**D26**		**Red cabbage**	Ø	Ø	+MB	+HB	*L. mono*	+	3162	0,243	+	+LA	+MA	*L. mono*	+	PA	3232	0,239	+	+MA	+HB	*L. mono*	+	PA	5	a
IPL	E22		Beetroot	Ø	Ø	Ø	-LE	/	-	0,058	0,219	-	/	/	/	-	NA									5	a
IPL	**L3**		**String beans**	+LA	+LB	+HB	+MB	*L. mono*	+	3010	0,273	+	+LA	+MB	*L. mono*	+	PA	2913	0,266	+	+LA	+MB	*L. mono*	+	PA	5	a
IPL	**L4**		**Chickpeas**	+MA	+MA	+HB	+MB	*L. mono*	+	3002	0,273	+	+MA	+MB	*L. mono*	+	PA	3106	0,266	+	+MB	+HA	*L. mono*	+	PA	5	a
IPL	T2		Mixed vegetables	Ø	Ø	-LE	-LE	/	-	0,083	0,285	-	/	/	/	-	NA									5	a
IPL	D22		Mixed vegetable panful	+LA	+LA(1)	+MB	+HB	*L. mono*	+	3094	0,243	+	+MA	+MA	*L. mono*	+	PA	2847	0,239	+	+MA	+MA	*L. mono*	+	PA	5	a
ADRIA (2019)	**5883**	**Haricots verts plats congelés**	**Frozen green beans**	H+	+	H+	+	*L. mono*	+	3,359	0,181	+	H+	+	*L. mono*	+	PA	3,353	0,181	+	H+	+	/	+	PA	5	a
ADRIA (2019)	**5884**	**Poireaux congelé**	**Frozen leek**	st	st	st	-	/	-	0,088	0,181	-	st	st	/	-	NA									5	a
ADRIA (2019)	**5885**	**Choux de Bruxelles congelé**	**Frozen Brussels sprout**	H-	+	H-	+	*I. welshimeri*	+	3,393	0,181	+	H-	+	*I. welshimeri*	+	PA	3,457	0,181	+	H-	+	/	+	PA	5	a
ADRIA (2019)	**5886**	**Petits pois doux congelés**	**Frozen green beans**	H-	+	H-	+	*I. welshimeri*	+	3,351	0,181	+	H-	+	*I. welshimeri*	+	PA	3,413	0,181	+	H-	+	/	+	PA	5	a
ADRIA (2019)	7196	Poireaux en rondelles surgelés	Frozen cut leeks	H-d/-	-	-	-	/	-	0,512/ 0,143/ 0,145	0,226/ 0,254/ 0,254	+/-/-	st	st	/	-	PPNA									5	a
ADRIA (2019)	7197	Choux de Bruxelles surgelés	Frozen Brussels sprout	-	-	-	-	/	-	0,466/ 0,141/ 0,145	0,226/ 0,254/ 0,254	+/-/-	st	st	/	-	PPNA									5	a
ADRIA (2019)	7198	Haricots vert fin	Green beans	-	-	-	-	/	-	0,465/ 0,139/ 0,146	0,226/ 0,254/ 0,255	+/-/-	-	-	/	-	PPNA									5	a
ADRIA (2019)	7199	Champignon blanc	Mushroom	st	st	st	st	/	-	0,288/ 0,149/ 0,149	0,226/ 0,254/ 0,256	+/-/-	st	st	/	-	PPNA									5	a
IPL	D18		Pre-cooked potatoes	-LE	Ø	Ø	Ø	/	-	0,016	0,243	-	/	/	/	-	NA									5	b
IPL	D19		Pre-cooked potatoes	Ø	Ø	Ø	Ø	/	-	0,010	0,243	-	/	/	/	-	NA									5	b
IPL	D21		Pre-cooked potatoes	Ø	Ø	Ø	Ø	/	-	0,012	0,243	-	/	/	/	-	NA									5	b
IPL	D23		Frozen fries	+MA	+MA	+HA	+HA	*L. mono*	+	3152	0,243	+	+LA	+MA	*L. mono*	+	PA	3201	0,239	+	+MA	+MA	*L. mono*	+	PA	5	b
IPL	E26		Frozen fries	-MA	-LE	-MA	+MD	*L.grayi*	+	3251	0,219	+	-LA	+LD	*L.grayi*	+	PA	2910	0,239	+	-LA	+LD	*L.grayi*	+	PA	5	b
IPL	I4		Frozen fries	Ø	Ø	Ø	Ø	/	-	0,102	0,321	-	/	/	/	-	NA	0,091	0,261	-	/	/	/	-	NA	5	b
IPL	I5		Frozen fries	+MA	+MA	+MB	+MB	*L. mono*	+	3042	0,321	+	+MA	+MA	*L. mono*	+	PA	3101	0,261	+	+MA	+MA	*L. mono*	+	PA	5	b
IPL	I7		Frozen fries	Ø	Ø	Ø	Ø	/	-	0,182	0,321	-	/	/	/	-	NA	0,081	0,261	-	/	/	/	-	NA	5	b
IPL	K21		Frozen fries	-LE	+LB	-LA	+LB	*L. seeligeri*	+	2990	0,263	+	-LB	Ø	*L. seeligeri*	+	PA	3002	0,245	+	+LB	+LB	*L. seeligeri*	+	PA	5	b
IPL	L5		Frozen fries	+MA	+MA	+MB	+HB	*L. mono*	+	3055	0,273	+	+MA	+MA	*L. mono*	+	PA	3034	0,266	+	+MA	+MB	*L. mono*	+	PA	5	b
IPL	**K2**		**Steamed turnip**	Ø	Ø	Ø	Ø	/	-	0,083	0,263	-	/	/	/	-	NA									5	b
IPL	**K3**		**Steamed carrots**	-LA	+LA	-LA	+MA	*L.innocua*	+	3018	0,263	+	-MA	+MA	*L.innocua*	+	PA	3014	0,245	+	-MA	+MA	*L.innocua*	+	PA	5	b
ADRIA (2019)	**5877**	**Pastèque coupée**	**Cut watermelon**	H-	+	H-	+	*L. innocua*	+	3,412	0,172	+	H-	+	*L. innocua*	+	PA	3,476	0,254	+	H-	+	/	+	PA	5	b

VEGETABLES																												
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				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
ADRIA (2019)	**5878**	**Melon charentais coupé**	**Cut cantaloupe**	H-	+	H-	+	*L. innocua*	+	3,423	0,172	+	H-	+	*L. innocua*	+	**PA**	3,504	0,254	+	H-	+	/	+	**PA**	5	b
ADRIA (2019)	**5879**	**Ananas coupé extra sweet**	**Cut pineapple**	H-	+	H-	+	*L. innocua*	+	3,449	0,172	+	H-	+	*L. innocua*	+	**PA**	3,485	0,254	+	H-	+	/	+	**PA**	5	b
ADRIA (2019)	**5880**	**Edamame cuit à la vapeur**	**Cooked edamame**	H-	+	H-	+	*L. innocua*	+	3,477	0,172	+	H-	+	*L. innocua*	+	**PA**	3,660	0,254	+	H-	+	/	+	**PA**	5	b
ADRIA (2019)	**5881**	**Pomme de terre cuites à la vapeur**	**Cooked potatoes**	H-	+	H-	+	*L. innocua*	+	3,528	0,172	+	H-	+	*L. innocua*	+	**PA**	3,494	0,254	+	H-	+	/	+	**PA**	5	b
ADRIA (2019)	7200	Pommes de terre en cubes cuisson vapeur	Cooked cut potatoes	st	st	st	st	/	-	0,178	0,226	-	st	st	/	-	**NA**									5	b
ADRIA (2019)	7201	Carottes en rondelles cuisson vapeur	Cooked cut carrots	st	st	st	st	/	-	0,160	0,226	-	st	st	/	-	**NA**									5	b
ADRIA (2019)	7202	Flageolets cuisson vapeur	Cooked flageolet	st	st	-	-	/	-	0,129	0,226	-	st	-	/	-	**NA**									5	b
IPL	E24		Mixed salad	Ø	Ø	Ø	Ø	/	-	0,042	0,219	-	/	/	/	-	**NA**									5	c
IPL	I12		Fresh fruit salad	Ø	Ø	-ME	-HE	/	-	0,151	0,321	-	/	/	/	-	**NA**	0,091	0,261	-	/	/	/	-	**NA**	5	c
IPL	**K7**		**Grated red cabbage**	Ø	Ø	Ø	Ø	/	-	0,079	0,263	-	/	/	/	-	**NA**									5	c
IPL	**L1**		**Grated carrots**	-LE	Ø	-LE	Ø	/	-	0,097	0,273	-	/	/	/	-	**NA**									5	c
IPL	**L2**		**Mixed salad**	+LA(1)	Ø	+MB	+MB	*L. mono*	+	3073	0,273	+	+LA	+LA	*L. mono*	+	**PA**	3076	0,266	+	+MA	+MA	*L. mono*	+	**PA**	5	c
IPL	**L7**		**Mixed salad**	Ø	Ø	Ø	Ø	/	-	0,084	0,273	-	Ø	Ø	Ø	-	**NA**	0,040	0,266	-	Ø	Ø	Ø	-	**NA**	5	c
IPL	**L8**		**Mixed vegetables**	-LA	+LA	-MA	+LA	*L.innocua*	+	3133	0,273	+	-LA	+MA	*L.innocua*	+	**PA**	2846	0,266	+	-MA	+HA	*L.innocua*	+	**PA**	5	c
IPL	**M4**		**Grated carrots**	Ø	Ø	Ø	Ø	/	-	0,043	0,266	-	/	/	/	-	**NA**									5	c
IPL	**N1**		**Grated carrots**	+MB	+MB	+MB	+MB	*L. mono*	+	2971	0,229	+	+MA	+MA	*L. mono*	+	**PA**	2991	0,220	+	+MB	+MA	*L. mono*	+	**PA**	5	c
IPL	D24		Tabbouleh with vegetables	-LE	Ø	-ME	-ME	/	-	0,017	0,243	-	Ø	Ø	Ø	-	**NA**									5	c
IPL	E23		Cucumbers with cream	-LE	-LE	-ME	-ME	/	-	0,046	0,219	-	/	/	/	-	**NA**									5	c
IPL	E25		Macedoine of vegetables	-LE	-LE	Ø	-ME	/	-	0,039	0,219	-	/	/	/	-	**NA**									5	c
IPL	I1		"Rustic" potatoes	+MA	+MA	+MB	+MB	*L. mono*	+	3036	0,321	+	+MA	+LA	*L. mono*	+	**PA**	3164	0,261	+	+MA	+LA	*L. mono*	+	**PA**	5	c
IPL	I2		Mixed vegetable panful	-LE	-LE	-LE	-LE	/	-	0,101	0,321	-	/	/	/	-	**NA**	0,084	0,261	-	/	/	/	-	**NA**	5	c
IPL	I3		Sauté potatoes	+MB	+LB	+MB	+MB	*L. mono L.innocua*	+	3041	0,321	+	+MB	+MB	L. mono L.innocua	+	**PA**	3191	0,261	+	+MB	+MB	*L. mono L.innocua*	+	**PA**	5	c
IPL	I16		Cauliflower and broccoli cake	+MA	+MA	+MB	+HA	*L.innocua L.mono*	+	3032	0,321	+	+MB	+MB	L. mono L.innocua	+	**PA**	3135	0,261	+	+MB	+MB	*L. mono L.innocua*	+	**PA**	5	c
IPL	**K1**		**Saffron-flavored rice**	Ø	-LE	-ME	-ME	/	-	0,141	0,263	-	/	/	/	-	**NA**									5	c
IPL	**K4**		**Ratatouille**	Ø	Ø	Ø	Ø	/	-	0,094	0,263	-	/	/	/	-	**NA**									5	c
IPL	**K5**		**Cooked mixed vegetables**	Ø	Ø	Ø	Ø	/	-	0,082	0,263	-	/	/	/	-	**NA**									5	c
IPL	**K6**		**Mixed salad (curly lettuce/walnuts/corn)**	Ø	Ø	Ø	Ø	/	-	0,070	0,263	-	Ø	Ø	Ø	-	**NA**				Ø	Ø	Ø			5	c
IPL	**L11**		**Seasoned grated carrots**	Ø	Ø	Ø	Ø	/	-	0,086	0,273	-	/	/	/	-	**NA**									5	c
IPL	**L12**		**Seasoned red cabbage**	-LA	+LA	-HB	+MB	*L.innocua*	+	3025	0,273	+	-MA	+HA	*L.innocua*	+	**PA**	3091	0,266	+	-MA	+HA	*L.innocua*	+	**PA**	5	c
IPL	**M1**		**Spinach with cream**	-LE	Ø	Ø	Ø	/	-	0,032	0,266	-	/	/	/	-	**NA**									5	c
IPL	**M5**		**Cauliflower and potato gratin**	Ø	Ø	Ø	Ø	/	-	0,044	0,266	-	/	/	/	-	**NA**									5	c
ADRIA (2019)	**5888**	**Pavés de légumes au romarin**	**RTRH vegetables food**	H+/H-	+	H+/H-	+	*L. mono / L. seeligeri*	+	3,410	0,254	+	H+/H-	+	*L. mono / L. seeligeri*	+	**PA**	3,499	0,176	+	H+/H-	+	/	+	**PA**	5	c
ADRIA (2019)	**5889**	**Gratin aux asperges**	**RTRH zucchini gratin**	H-	+	H-	+	*L. seeligeri*	+	3,460	0,254	+	H-	+	*L. seeligeri*	+	**PA**	3,483	0,176	+	H-	+	/	+	**PA**	5	c

VEGETABLES																													
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				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	**Result**	O&A	Palcam	*Identifi-cation*			OD	Cut-off	**Result**	O&A	Palcam	*Identifi-cation*				
ADRIA (2019)	**5890**	**Gratin dauphinois légumes (carottes poireaux)**	**RTRH carrots leaks gratin**	H+/H-	+	H+/H-	+	*L. mono/ L. seeligeri*	**+**	3,434	0,254	**+**	H+/H-	+	*L. mono / L. seeligeri*	**+**	**PA**	3,480	0,176	**+**	H+/H-	+	/	**+**	**PA**	5	c
ADRIA (2019)	7192	Choucroute cuite	Cooked sauerkraut	st	st	st	st	/	**-**	0,134	0,226	**-**	st	st	/	**-**	**NA**									5	c
ADRIA (2019)	7193	Tarte bio à la provençale (tomates, courgettes et poivrons)	Vegetables pie	st	st	st	st	/	**-**	0,170	0,226	**-**	st	st	/	**-**	**NA**									5	c
ADRIA (2019)	7194	Terrine bio légumes et céréales	Vegetables terrine	st	st	st	st	/	**-**	0,168	0,226	**-**	st	st	/	**-**	**NA**									5	c
ADRIA (2019)	7195	Terrine légumes confits et feta	Vegetables terrine	st	st	st	st	/	**-**	0,136	0,226	**-**	st	st	/	**-**	**NA**									5	c

PRODUCTION ENVIRONMENTAL SAMPLES																											
Year of analysis	N° sample	Product (French name)	Product	Reference Method ISO 11290-1/A1						Alternative method - TRANSIA® PLATE *Listeria*															Category	Type
										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C										
				Fraser 1/2		Fraser		Confir-mation		TP *Listeria*			Confirmation					TP *Listeria*			CONFIRMATION						
				O&A	Palcam	O&A	Palcam	*Identifi-cation*	*Result L.spp*	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*	Final result TP Listeria	Agree-ment	OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*	Final result TP *Listeria*	Agree-ment		
IPL	**D29**		**Process water**	+LA	+LA	+MA	+HA	*L. mono*	+	3118	0,243	+	+MB	+HB	*L. mono*	+	**PA**	3063	0,239	+	+MB	+HB	*L. mono*	+	**PA**	6	a
IPL	H8		Washbasin in dishwashing room	Ø	-LE	-LE	-LE	/	-	0,087	0,239	-	/	/	/	-	**NA**									6	a
IPL	H18		Pickler	-LE	-LE	Ø	Ø	/	-	0,072	0,239	-	/	/	/	-	**NA**									6	a
IPL	J16		Water from collecting trap during work	Ø	Ø	Ø	Ø	/	-	0,109	0,284	-	/	/	/	-	**NA**									6	a
IPL	**L17**		**Process water**	Ø	Ø	Ø	Ø	/	-	0,087	0,273	-	/	/	/	-	**NA**									6	a
IPL	M13		Stagnant water in dirty container	+LA	+MA	+MB	+MB	*L. mono*	+	2993	0,266	+	+MA	+HA	*L. mono*	+	**PA**	2999	0,228	+	+MA	+MA	*L. mono*	+	**PA**	6	a
ADRIA (2019)	**5887**	**Eau de rinçage (production végétaux, chou-fleur en fleurettes congelé)**	**Rinse water (vegetables, frozen cauliflower)**	H-	+	H-	+	*I. welshimeri*	+	3,407	0,181	+	H-	+	*I. welshimeri*	+	**PA**	3,401	0,181	+	H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5893**	**Eau de rinçage (fabrication produits laitiers)**	**Rinse water (dairy products production)**	H+/H-	+	H+/H-	+	*L. monos/ L. seeligeri*	+	3,398	0,254	+	H+/H-	+	*L. mono/ L. seeligeri*	+	**PA**	3,705	0,176	+	H+/H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5894**	**Eau de rinçage de cutter (produits laitiers)**	**Rinse water (dairy products production)**	H+	+	H+	+	*L. mono*	+	3,371	0,254	+	H+	+	*L. mono*	+	**PA**	3,999	0,176	+	H+	+	/	+	**PA**	6	a
ADRIA (2019)	**5895**	**Eau de rinçage (produits laitiers)**	**Rinse water (dairy products production)**	H+	+	H+/H-	+	*L. mono/ L. seeligeri*	+	3,425	0,254	+	H+/H-	+	*L. mono/ L. seeligeri*	+	**PA**	3,758	0,176	+	H+/H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5896**	**Eau de rinçage (végétaux)**	**Rinse water (vegetables production)**	H-	+	H+d	+	*L. seeligeri*	+	3,566	0,254	+	H-	+	*L. seeligeri*	+	**PA**	3,805	0,176	+	H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5897**	**Eau de rinçage de cutter (volaille)**	**Rinse water (poultry meat)**	H-	+	H-	+	*L. seeligeri*	+	3,430	0,254	+	H-	+	*L. seeligeri*	+	**PA**	3,531	0,176	+	H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5898**	**Eau de rinçage de cutter (volaille)**	**Rinse water (poultry meat)**	H+d/H-	+	H+d/H-	+	*L. mono/ L. seeligeri*	+	3,402	0,254	+	H-	+	*L. seeligeri*	+	**PA**	3,517	0,176	+	H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5899**	**Eau de rinçage de cutter (volaille)**	**Rinse water (poultry meat)**	H-	+	H-	+	*L. innocua*	+	3,394	0,254	+	H-	+	*L. innocua*	+	**PA**	3,490	0,176	+	H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5900**	**Eau de rinçage de cutter (volaille)**	**Rinse water (poultry meat)**	H-	+	H-	+	*L. innocua*	+	3,378	0,254	+	H-	+	*L. innocua*	+	**PA**	3,442	0,176	+	H-	+	/	+	**PA**	6	a
ADRIA (2019)	**5901**	**Eau de rinçage (végétaux)**	**Rinse water (vegetables production)**	H-	+	H-	+	*L. innocua*	+	3,439	0,254	+	H-	+	*L. innocua*	+	**PA**	3,459	0,176	+	H-	+	/	+	**PA**	6	a
ADRIA (2019)	7203	Eau de rinçage cutter volaille	Rinse water (poultry meat)	st	st	st	st	/	-	0,139	0,226	-	st	st	/	-	**NA**									6	a
ADRIA (2019)	7204	Eau laitier cutter	Rinse water (dairy product)	st	st	st	st	/	-	0,147	0,226	-	st	st	/	-	**NA**									6	a
ADRIA (2019)	7205	Eau de rinçage bol laitier fromage	Rinse water utensils (dairy product)	st	st	st	st	/	-	0,237/ 0,152/ 0,136	0,226/ 0,254/ 0,255	+/-/-	st	st	/	-	**PPNA**									6	a
ADRIA (2019)	7206	Eau de rinçage robot coupe mélé jambon végétal	Rinse water (production of vegetables ham)	st	st	st	st	/	-	0,145	0,226	-	st	st	/	-	**NA**									6	a
IPL	D31		Surface of filleting table	-LA	Ø	+MB	+HB	*L. mono L.innocua*	+	1920	0,243	+	+LB	+LB	L. mono L.innocua	+	**PA**	3183	0,239	+	+MB	+MB	*L. mono L.innocua*	+	**PA**	6	b
IPL	D32		Stainless steel table in workroom	Ø	Ø	Ø	Ø	/	-	0,367	0,243	+	Ø	Ø	Ø	-	**PPNA**	0,071	0,239	-	Ø	Ø	Ø	-	**NA**	6	b
IPL	**D39**		**Surface grille haddock**	+LA(3)	+LA(1)	+MA	+MA	*L. mono*	+	0,281	0,243	+	+MA	+LA	*L. mono*	+	**PA**	0,846	0,239	+	+MA	+MA	*L. mono*	+	**PA**	6	b
IPL	G6		Fish container	+MA	+MB	+MA	+MB	*L. mono*	+	3015	0,270	+	+MA	+MA	*L. mono*	+	**PA**	3021	0,305	+	+MA	+MA	*L. mono*	+	**PA**	6	b
IPL	G7		Fish bone extractor	+LA	+MB	+MB	+MB	*L. mono*	+	3011	0,270	+	+MA	+MA	*L. mono*	+	**PA**	2980	0,305	+	+HA	+MA	*L. mono*	+	**PA**	6	b
IPL	G8		Plastic pallet	+MA	+MA	+MB	+MB	*L. mono*	+	3027	0,270	+	+MA	+MA	*L. mono*	+	**PA**	3016	0,305	+	+MA	+MB	*L. mono*	+	**PA**	6	b
IPL	G9		Thawing chamber	-LE	-LE	Ø	-LE	/	-	0,224	0,270	-	/	/	/	-	**NA**									6	b
IPL	G10		Salmon container	+MA	+MA	+MA	+MB	*L. mono*	+	3034	0,270	+	+MA	+MA	*L. mono*	+	**PA**	3001	0,305	+	+MA	+HA	*L. mono*	+	**PA**	6	b
IPL	G11		Plastic bin	+LA	+MA	+MA	+MA	*L. mono*	+	3034	0,270	+	+LA	+MA	*L. mono*	+	**PA**	3008	0,305	+	+MA	+MA	*L. mono*	+	**PA**	6	b
IPL	G12		Grille	Ø	Ø	Ø	Ø	/	-	0,096	0,270	-	/	/	/	-	**NA**									6	b

PRODUCTION ENVIRONMENTAL SAMPLES																													
				Reference Method ISO 11290-1/A1						Alternative method - TRANSIA® PLATE *Listeria*																			
										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C											
Year of analysis	N° sample	Product (French name)	Product	Fraser 1/2		Fraser		Confir-mation	Result L.spp	TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment	Category	Type
				O&A	Palcam	O&A	Palcam	*Identifi-cation*		OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
IPL	G13		Dry salt table	-LE	-LE	-LE	-LE	/	-	0,091	0,270	-	/	/	/	-	**NA**									6	b
IPL	G14		Peeling table	Ø	Ø	-LE	-LE	/	-	0,108	0,270	-	/	/	/	-	**NA**									6	b
IPL	G15		Stainless steel table	Ø	Ø	Ø	Ø	/	-	0,101	0,270	-	/	/	/	-	**NA**									6	b
IPL	H1		"Bolness" tank	Ø	Ø	Ø	Ø	/	-	0,069	0,239	-	/	/	/	-	**NA**									6	b
IPL	H2		Vacuum scales	Ø	Ø	Ø	Ø	/	-	0,077	0,239	-	/	/	/	-	**NA**									6	b
IPL	H3		Filleting table	Ø	Ø	Ø	Ø	/	-	0,084	0,239	-	/	/	/	-	**NA**									6	b
IPL	H7		Vacuum machine	Ø	Ø	Ø	Ø	/	-	0,074	0,239	-	/	/	/	-	**NA**									6	b
IPL	H9		Filleting table	Ø	-LE	Ø	Ø	/	-	0,068	0,239	-	/	/	/	-	**NA**									6	b
IPL	H10		MAIE equipment	Ø	Ø	Ø	Ø	/	-	0,070	0,239	-	/	/	/	-	**NA**									6	b
IPL	H13		Racks	Ø	-LE	Ø	Ø	/	-	0,074	0,239	-	/	/	/	-	**NA**									6	b
IPL	H14		Table for roasts and skewers	-LE	-LE	-LE	-ME	/	-	0,078	0,239	-	/	/	/	-	**NA**									6	b
IPL	H15		Scale for salted meat	-LE	-LE	Ø	-LE	/	-	0,082	0,239	-	/	/	/	-	**NA**									6	b
IPL	H16		Salted meat rack	-LE	-LE	-ME	-ME	/	-	0,078	0,239	-	/	/	/	-	**NA**									6	b
IPL	H17		Grille	-LE	-LE	-ME	-ME	/	-	0,071	0,239	-	/	/	/	-	**NA**									6	b
IPL	H19		Door to scrap room	-LE	-LE	-LE	-ME	/	-	0,068	0,239	-	/	/	/	-	**NA**									6	b
IPL	H21		Scale for salmons	Ø	Ø	-LE	-ME	/	-	0,074	0,239	-	/	/	/	-	**NA**									6	b
IPL	H22		Table for manual filleting	Ø	-LE	Ø	-LE	/	-	0,078	0,239	-	/	/	/	-	**NA**									6	b
IPL	J17		Table for salmons	-LE	Ø	Ø	Ø	/	-	0,109	0,284	-	/	/	/	-	**NA**									6	b
IPL	H4		Grille for salmon	Ø	Ø	Ø	-LE	/	-	0,085	0,239	-	/	/	/	-	**NA**									6	b
IPL	H6		Grille for haddock	-LE	-LE	Ø	-LE	/	-	0,078	0,239	-	/	/	/	-	**NA**									6	b
IPL	H20		Salmon cutting machine	Ø	Ø	Ø	-LE	/	-	0,070	0,239	-	/	/	/	-	**NA**									6	b
ADRIA (2019)	**5882**	**Eponge surface (production végétaux, carottes lamelles cuites à la vapeur)**	**Surface sponge (vegetables, cooked cut carrots)**	H-	+	H-	+	*L. innocua*	+	3,488	0,172	+	H-	+	*L. innocua*	+	**PA**	3,541	0,254	+	H-	+	/	+	**PA**	6	b
IPL	D34		Salmon scraps from dirty tank	Ø	Ø	Ø	-LE	/	-	0,014	0,243	-	/	/	/	-	**NA**									6	c
IPL	D35		Scraps from kipper's container	-LA	+LA	-MB	+HB	*L.innocua*	+	3157	0,243	+	-MA	+MA	*L.innocua*	+	**PA**	3252	0,239	+	-MA	+MA	*L.innocua*	+	**PA**	6	c
IPL	**D36**		**Scraps from vacuum machine**	Ø	Ø	-LE	Ø	/	-	0,028	0,243	-	/	/	/	-	**NA**									6	c
IPL	**D37**		**Scraps from workroom's floor**	Ø	+LA	+MA	+MA	*L. mono*	+	0,091	0,243	-	+LA	+LA	*L. mono*	-	**ND**	0,263	0,239	+	+LA	+MA	*L. mono*	+	**PA**	6	c
IPL	D38		Scraps from dirty tank fish shop	+MA	+HA	+MA	+HA	*L. mono*	+	3157	0,243	+	+MA	+MA	*L. mono*	+	**PA**	3192	0,239	+	+MA	+MA	*L. mono*	+	**PA**	6	c
IPL	J19		Scraps from ice tank	Ø	-LE	Ø	Ø	/	-	0,115	0,284	-	/	/	/	-	**NA**									6	c
IPL	J20		Fish display during work	-LE	-LE	Ø	Ø	/	-	0,110	0,284	-	/	/	/	-	**NA**									6	c
IPL	L13		Scraps from cutting table	-LE	-LE	-LE	Ø	/	-	0,083	0,273	-	/	/	/	-	**NA**									6	c
IPL	L14		Scraps from stainless steel table	-LE	-LE	-ME	-LE	/	-	0,086	0,273	-	/	/	/	-	**NA**									6	c
IPL	L15		Salmon scraps from dirty tank	-LE	Ø	Ø	Ø	/	-	0,082	0,273	-	/	/	/	-	**NA**									6	c
IPL	L16		Scraps from dirty container	+LA	+LA	+MA	+MB	*L. mono*	+	3130	0,273	+	+MB	+HA	*L. mono*	+	**PA**	3,023	0,266	+	+MA	+MA	*L. mono*	+	**PA**	6	c
IPL	M10		Scraps from vegetable production line	+HA	+MA	+MA	+MA	*L. mono*	+	3032	0,266	+	+MA	+MA	*L. mono*	+	**PA**	2,674	0,228	+	+MA	+MA	*L. mono*	+	**PA**	6	c
IPL	M11		Scraps from production area's floor	+HB	+MB	+MA	+MB	*L. mono*	+	3097	0,266	+	+MB	+MB	*L. mono*	+	**PA**	2,927	0,228	+	+MB	+MB	*L. mono*	+	**PA**	6	c
IPL	M12		Scraps from stainless steel table (cutting room)	+MB	+LB	+MB	+MB	*L. mono*	+	3,014	0,266	+	+MB	+HB	*L. mono*	+	**PA**	2,921	0,228	+	+MA	+MA	*L. mono*	+	**PA**	6	c

PRODUCTION ENVIRONMENTAL SAMPLES																													
Year of analysis	N° sample	Product (French name)	Product	Reference Method ISO 11290-1/A1						Alternative method - TRANSIA® PLATE *Listeria*																Category	Type
										225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C								225 ml half Fraser broth - 20 h at 30°C ± 1°C + Subculture in Fraser broth (0.25 ml) - 22 h at 30°C ± 1°C + 72 h at 5°C ± 3°C											
				Fraser 1/2		Fraser		Confir-mation	Result L.spp	TP *Listeria*			Confirmation			Final result TP Listeria	Agree-ment	TP *Listeria*			CONFIRMATION			Final result TP *Listeria*	Agree-ment		
				O&A	Palcam	O&A	Palcam	*Identifi-cation*		OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*			OD	Cut-off	Result	O&A	Palcam	*Identifi-cation*				
ADRIA (2019)	**5903**	**Déchets plan de travail (volaille)**	**Waste working plan (poultry)**	H+/H-	+	H+/H-	+	*L. mono/ L. innocua*	**+**	3,328	0,254	**+**	H+/H-	+	*L. mono/ L. innocua*	**+**	**PA**	3,947	0,176	**+**	H+/H-	+	/	**+**	**PA**	6	c
ADRIA (2019)	**5904**	**Déchets plan de travail (volaille)**	**Waste working plan (poultry)**	H+/H-	+	H+/H-	+	*L. mono/ L. seeligeri*	**+**	3,386	0,254	**+**	H+/H-	+	*L. mono/ L. seeligeri*	**+**	**PA**	3,584	0,176	**+**	H+/H-	+	/	**+**	**PA**	6	c
ADRIA (2019)	**5905**	**Déchets (production volaille)**	**Waste (poultry)**	H+/H-	+	H-	+	*L. mono/ L. innocua*	**+**	3,354	0,254	**+**	H+/H-	+	*L. mono/ L. innocua*	**+**	**PA**	4,000	0,176	**+**	H+/H-	+	/	**+**	**PA**	6	c
ADRIA (2019)	**5906**	**Déchets (production volaille)**	**Waste (poultry)**	H+/H-	+	H+/H-	+	*L. mono/ L. seeligeri*	**+**	3,612	0,254	**+**	H-	+	*L. seeligeri*	**+**	**PA**	3,409	0,176	**+**	H-	+	/	**+**	**PA**	6	c
ADRIA (2019)	**5907**	**Déchets (production laitiers)**	**Waste (dairy products)**	H+/H-	+	H-	+	*L. mono/ L. innocua*	**+**	3,236	0,254	**+**	H-	+	*L. innocua*	**+**	**PA**	3,332	0,176	**+**	H-	+	/	**+**	**PA**	6	c
ADRIA (2019)	7207	Déchet poisson	Waste of fish	-	-	st	-	/	**-**	0,152	0,226	**-**	st	st	/	**-**	**NA**									6	c

Appendix 5 – Relative level of detection study: raw data

Matrix: Deli salad **ADRIA Développement (2019)**
Strain: *Listeria seeligeri* Ad1293 Aerobic mesophilic flora: 3.10^5 CFU/g

Sample N°	Level	Inoculation level (CFU/25g)	Reference method: ISO 11290-1♦						Alternative method: TRANSIA® PLATE *Listeria*					
			Half Fraser		Fraser		Final Result *Listeria* spp.	Number positive samples/Total	225ml half Fraser broth - 20h at 30°C±1°C + subculture in Fraser broth (0,25ml) - 22h at 30°C±1°C					
									ELISA test			Confir-mation	Final result	Number positive samples/Total
			O&A	Palcam	O&A	Palcam			O.D.	Cut-off	Result			
5979	0	/	st	st	st	st	-	0/5	0,054	0,169	-	-	-	0/5
5980			st	st	st	st	-		0,053	0,169	-	-	-	
5981			st	st	st	st	-		0,06	0,169	-	-	-	
5982			-	-	st	st	-		0,051	0,169	-	-	-	
5983			-	st	st	st	-		0,057	0,169	-	-	-	
7040	Low	0,8	H-	+	H-	+	+	15/20	3,363	0,176	+	+	+	15/20
7041			H-	+	H-	+	+		3,425	0,176	+	+	+	
7042			H-	+	H-	+	+		3,375	0,176	+	+	+	
7043			st	-	st	st	-		0,085	0,176	-	-	-	
7044			st	-	st	st	-		0,068	0,176	-	-	-	
7045			H-	+	H-	+	+		3,333	0,176	+	+	+	
7046			H-	+	H-	+	+		3,299	0,176	+	+	+	
7047			H-	+	H-	+	+		3,316	0,176	+	+	+	
7048			H-	+	H-	+	+		3,340	0,176	+	+	+	
7049			H-	+	H-	+	+		3,307	0,176	+	+	+	
7050			H-	+	H-	+	+		3,362	0,176	+	+	+	
7051			H-	+	H-	+	+		3,318	0,176	+	+	+	
7052			H-	+	H-	+	+		3,295	0,176	+	+	+	
7053			H-	+	H-	+	+		3,439	0,176	+	+	+	
7054			-	st	st	st	-		0,064	0,176	-	-	-	
7055			H-	+	H-	+	+		3,381	0,176	+	+	+	
7056			H-	+	H-	+	+		3,416	0,176	+	+	+	
7057			-	-	st	st	-		0,072	0,176	-	-	-	
7058			H-	+	H-	+	+		3,446	0,176	+	+	+	
7059			st	st	st	st	-		0,079	0,176	-	-	-	
7060	High	2,4	H-	+	H-	+	+	5/5	3,397	0,176	+	+	+	5/5
7061			H-	+	H-	+	+		3,469	0,176	+	+	+	
7062			H-	+	H-	+	+		3,488	0,176	+	+	+	
7063			H-	+	H-	+	+		3,523	0,176	+	+	+	
7064			H-	+	H-	+	+		3,515	0,176	+	+	+	

♦ Analyses performed according to the COFRAC accreditation

Matrix: Rillettes **IPL (2007)**

Strain: *Listeria welshimeri* L90 Aerobic mesophilic flora: 75 000 CFC/g and *20 000 CFU/g

Contamination level	Level inoculation (CFU/25 g)	Reference method: ISO 11290-1/A1						Alternative method: TRANSIA® PLATE *Listeria*						
		Half Fraser (10 µl)		Fraser		Result	Number positive samples/Total	TRANSIA PLATE *Listeria*			Confirmation		Final result	Number positive samples/Total
		O&A	Palcam	O&A	Palcam			O.D.	Cut-off	Result	Palcam	O&A		
1	0	∅	∅	∅	∅	-	0/6	0.094	0.283	-	/	/	-	0/6
		∅	∅	∅	∅	-		0.094	0.283	-	/	/	-	
		-LE	∅	∅	∅	-		0.121	0.283	-	/	/	-	
		-LE	∅	∅	∅	-		0.097	0.283	-	/	/	-	
		-LE	∅	∅	∅	-		0.093	0.283	-	/	/	-	
		∅	∅	∅	∅	-		0.108	0.283	-	/	/	-	
2*	0.31	+LB	-LA	+HA	-MA	+	1/6	3.013	0.226	+	+MA	-LA	+	1/6
		∅	∅	∅	∅	-		0.042	0.226	-	/	/	-	
		∅	∅	∅	∅	-		0.047	0.226	-	/	/	-	
		∅	∅	∅	∅	-		0.046	0.226	-	/	/	-	
		∅	∅	∅	∅	-		0.044	0.226	-	/	/	-	
		∅	∅	∅	∅	-		0.050	0.226	-	/	/	-	
3*	0.63	∅	∅	∅	∅	-	3/6	0.045	0.226	-	/	/	-	3/6
		∅	∅	∅	∅	-		0.048	0.226	-	/	/	-	
		∅	∅	∅	∅	-		0.048	0.226	-	/	/	-	
		+LA	-MA	+MA	-MA	+		2.733	0.226	+	+HA	-MA	+	
		+MA	-MA	+HA	-MA	+		2.996	0.226	+	+HA	-MA	+	
		+LA	-LA	+HA	-MA	+		3.025	0.226	+	+MA	-MA	+	
4*	1.57	∅	∅	∅	∅	-	5/6	0.049	0.226	-	/	/	-	5/6
		+LA	-LA	+MA	-MA	+		1.076	0.226	+	+HA	-MA	+	
		+LA	-LA	+MA	-LA	+		2.953	0.226	+	+HA	-MA	+	
		+LA	-MA	+MA	-MA	+		2.917	0.226	+	+HA	-MA	+	
		+LA	-LA	+MA	-MA	+		1.585	0.226	+	+HA	-MA	+	
		+LA	-LA	+MA	-MA	+		3.023	0.226	+	+HA	-MA	+	
5	3.06	+MA	-MA	+HA	-MA	+	6/6	3.224	0.265	+	+HA	-MA	+	6/6
		+MA	-LA	+HA	-MA	+		3.154	0.265	+	+HA	-MA	+	
		+MA	-MA	+HA	-MA	+		3.184	0.265	+	+MA	-MA	+	
		+MA	-MA	+HA	-MA	+		3.236	0.265	+	+MA	-MA	+	
		+MA	-LA	+HA	-MA	+		3.159	0.265	+	+MA	-MA	+	
		+MA	-MA	+HA	-MA	+		3.176	0.265	+	+HA	-MA	+	

Matrix: Raw milk **IPL (2007)**

Strain: *Listeria ivanovii* L133 Aerobic mesophilic flora: 45 000 CFU/ml

Contamination level	Level inoculation (CFU/25 g)	Reference method: ISO 11290-1/A1						Alternative method: TRANSIA® PLATE *Listeria*						
		Half Fraser (10 µl)		Fraser		Result	Number positive samples/Total	TRANSIA PLATE *Listeria*			Confirmation		Result	Number positive samples/Total
		O&A	Palcam	O&A	Palcam			O.D.	Cut-off	Result	Palcam	O&A		
1	0	∅	∅	∅	∅	-	0/6	0.104	0.261	-	/		-	0/6
		∅	∅	∅	∅	-		0.083	0.261	-	/		-	
		∅	∅	∅	∅	-		0.125	0.261	-	/		-	
		∅	∅	∅	∅	-		0.100	0.261	-	/		-	
		∅	∅	∅	∅	-		0.079	0.261	-	/		-	
		∅	∅	∅	∅	-		0.089	0.261	-	/		-	
2	0.59	∅	∅	∅	∅	-	1/6	0.051	0.229	-	/		-	1/6
		+LA	+LA	+MA	+MA	+		0.739	0.229	+	+HA	+MA	+	
		∅	∅	∅	∅	-		0.055	0.229	-	/		-	
		∅	∅	∅	∅	-		0.054	0.229	-	/		-	
		∅	∅	∅	∅	-		0.055	0.229	-	/		-	
		∅	∅	∅	∅	-		0.042	0.229	-	/		-	
3	0.73	+LA	+LA	+HA	+MA	+	4/6	1.261	0.229	+	+HA	+MA	+	3/6
		+LA	+LA	+MA	+MA	+		1.886	0.229	+	+HA	+MA	+	
		∅	∅	+HA	+MA	+		0.058	0.229	-	/	/	-	
		∅	∅	∅	∅	-		0.041	0.229	-	/	/	-	
		∅	∅	∅	∅	-		0.047	0.229	-	/	/	-	
		+LA	+LA	+MA	+LA	+		0.398	0.229	+	+HA	+MA	+	
4	0.75	+LA	+LA	+LA	+MA	+	6/6	2.977	0.261	+	+MA	+MA	+	6/6
		+LA	+LA	+MA	+MA	+		2.896	0.261	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.041	0.261	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		2.857	0.261	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.050	0.261	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		2.996	0.261	+	+MA	+MA	+	

Matrix: Smoked salmon **IPL (2007)**

Strain: *Listeria monocytogenes* 1/2a L5 Aerobic mesophilic flora: 100 CFU/g

Contamination level	Level inoculation (CFU/25 g)	Reference method: ISO 11290-1/A1						Alternative method: TRANSIA® PLATE *Listeria*						
		Half Fraser (10 µl)		Fraser		Result	Number positive samples/Total	TRANSIA PLATE *Listeria*			Confirmation		Final result	Number positive samples/Total
		O&A	Palcam	O&A	Palcam			O.D.	Cut-off	Result	Palcam	O&A		
1	0	∅	∅	∅	∅	-	0/6	0.080	0.250	-	/		-	0/6
		∅	∅	∅	∅	-		0.079	0.250	-	/		-	
		∅	∅	∅	∅	-		0.083	0.250	-	/		-	
		∅	∅	∅	∅	-		0.087	0.250	-	/		-	
		∅	∅	∅	∅	-		0.087	0.250	-	/		-	
		∅	∅	∅	∅	-		0.088	0.250	-	/		-	
2	0.56	∅	∅	∅	∅	-	2/6	0.075	0.250	-	/	/	-	2/6
		+MA	+MA	+MA	+MA	+		3.133	0.250	+	+HA	+MA	+	
		∅	∅	∅	∅	-		0.077	0.250	-	/	/	-	
		+MA	+MA	+MA	+MA	+		3.153	0.250	+	+MA	+MA	+	
		∅	∅	∅	∅	-		0.082	0.250	-	/	/	-	
		∅	∅	∅	∅	-		0.084	0.250	-	/	/	-	
3	0.92	+MA	+MA	+MA	+MA	+	4/6	3.121	0.219	+	+HA	+MA	+	4/6
		∅	∅	∅	∅	-		0.058	0.219	-	/	/	-	
		∅	∅	∅	∅	-		0.047	0.219	-	/	/	-	
		+MA	+MA	+MA	+MA	+		2.875	0.219	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		2.996	0.219	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		3.011	0.219	+	+MA	+MA	+	
4	1.12	+MA	+MA	+MA	+MA	+	6/6	3.099	0.250	+	+HA	+MA	+	6/6
		+MA	+MA	+MA	+MA	+		2.772	0.250	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		2.993	0.250	+	+HA	+MA	+	
		+MA	+MA	+MA	+MA	+		2.976	0.250	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		3.019	0.250	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		3.032	0.250	+	+MA	+MA	+	

Matrix: Vegetable mix **IPL (2007)**
Strain: *Listeria monocytogenes* 4b L58 Aerobic mesophilic flora: 11 600 000 CFU/g

Contamination level	Level inoculation (CFU/25 g)	Reference method: ISO 11290-1/A1						Alternative method: TRANSIA® PLATE *Listeria*						
		Half Fraser (10 µl)		Fraser		Result	Number positive samples/Total	TRANSIA PLATE *Listeria*			Confirmation		Final result	Number positive samples/Total
		O&A	Palcam	O&A	Palcam			O.D.	Cut-off	Result	Palcam	O&A		
1	0	∅	∅	-LE	-LE	-	0/6	0.104	0.285	-	/	/	-	0/6
		∅	∅	-LE	-LE	-		0.083	0.285	-	/	/	-	
		-LE	∅	-LE	-LE	-		0.125	0.285	-	/	/	-	
		-LE	∅	-LE	-LE	-		0.100	0.285	-	/	/	-	
		-LE	-LE	∅	-LE	-		0.079	0.285	-	∅	∅	-	
		∅	∅	-LE	-LE	-		0.089	0.285	-	/		-	
2	0.53	-LE	∅	∅	∅	-	1/6	0.087	0.285	-	∅	∅	-	1/6
		-LE	-LE	-LE	-LE	-		0.164	0.285	-	/	/	-	
		+LA	+LA	+MB	+MB	+		3.030	0.285	+	+MA	+MA	+	
		-LE	-LE	-LE	-LE	-		0.078	0.285	-	/	/	-	
		-LE	∅	-LE	-LE	-		0.104	0.285	-	/	/	-	
		∅	∅	∅	∅	-		0.091	0.285	-	/	/	-	
3	1.06	+LA	+LA	+MB	+MA	+	5/6	3.037	0.285	+	+MA	+LA	+	5/6
		+LA	+LA	+LA	+MA	+		2.932	0.285	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.008	0.285	+	+MA	+LA	+	
		-LE	∅	-LE	∅	-		0.075	0.285	-	/	/	-	
		+LA	+LA	+MA	+MA	+		3.030	0.285	+	+LA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.032	0.285	+	+LA	+MA	+	
4	2.12	-LE	∅	-LE	-LE	-	5/6	0.117	0.285	-	/	/	-	5/6
		+LA	+LA	+MA	+MA	+		3.033	0.285	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.029	0.285	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		2.937	0.285	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.001	0.285	+	+MA	+LA	+	
		+LA	+LA	+MA	+MA	+		3.014	0.285	+	+MA	+MA	+	
5	4.24	+LA	+LA	+MA	+MA	+	6/6	3.023	0.285	+	+MA	+MA	+	6/6
		+LA	+LA	+MA	+MA	+		3.013	0.285	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.002	0.285	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.015	0.285	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		3.013	0.285	+	+MA	+MA	+	
		+LA	+LA	+LA	+MA	+		3.013	0.285	+	+MA	+MA	+	

Process water **IPL (2007)**

Listeria innocua L144 3 CFU/ml

Contamination level	Level inoculation (CFU/25 g)	Reference method: ISO 11290-1/A1						Alternative method: TRANSIA® PLATE *Listeria*						
		Half Fraser (10 µl)		Fraser		Result	Number positive samples/Total	TRANSIA PLATE *Listeria*			Confirmation		Final result	Number positive samples/Total
		O&A	Palcam	O&A	Palcam			O.D.	Cut-off	Result	Palcam	O&A		
1	0.0	∅	∅	∅	∅	-	0/6	0.065	0.239	-	/	/	-	0/6
		∅	∅	∅	∅	-		0.065	0.239	-	/	/	-	
		∅	∅	∅	∅	-		0.074	0.239	-	/	/	-	
		∅	∅	∅	∅	-		0.074	0.239	-	/	/	-	
		∅	∅	∅	∅	-		0.073	0.239	-	/	/	-	
		∅	∅	∅	∅	-		0.077	0.239	-	/	/	-	
2*	0.4	∅	∅	∅	∅	-	3/6	0.065	0.239	-	/	/	-	3/6
		+LA	-LA	+MA	-MA	+		3.138	0.239	-	+MA	-MA	+	
		∅	∅	∅	∅	-		0.066	0.239	-	/	/	-	
		∅	∅	∅	∅	-		0.063	0.239	-	/	/	-	
		+LA	-LA	+MA	-MA	+		3.131	0.239	-	+HA	-MA	+	
		+LA	-LA	+MA	-MA	+		3.051	0.239	-	+HA	-MA	+	
4**	0.8	+LA	-LA	+MA	-MA	+	4/6	3.056	0.229	+	+HA	-MA	+	4/6
		+LA	-LA	+MA	-MA	+		3.134	0.229	+	+HA	-MA	+	
		+LA	-LA	+MA	-MA	+		3.168	0.229	+	+HA	-MA	+	
		∅	∅	∅	∅	-		0.062	0.229	-	/	/	-	
		∅	∅	∅	∅	-		0.052	0.229	-	/	/	-	
		+LA	-LA	+HA	-MA	+		3.215	0.229	+	+HA	-MA	+	
5	1.5	+LA	-LA	+MA	-LA	+	6/6	3.012	0.239	+	+HA	-MA	+	6/6
		+MA	-MA	+MA	-MA	+		2.890	0.239	+	+MA	-MA	+	
		+MA	-LA	+MA	-LA	+		2.976	0.239	+	+HA	-MA	+	
		+LA	-LA	+MA	-MA	+		2.924	0.239	+	+MA	-MA	+	
		+LA	-LA	+MA	-MA	+		2.987	0.239	+	+MA	-MA	+	
		+LA	-MA	+MA	-MA	+		3.138	0.239	+	+MA	-MA	+	

Appendix 6 - Inclusivity / exclusivity: raw data (IPL)

INCLUSIVITY						
Reference	Strain	Origin	Inoculum into 225mL 1/2 Fraser broth (cfu)	TRANSIA® PLATE *Listeria*		
				O.D.	Cut-off	Result
L64	*Listeria innocua*	"Epoisses" cheese	9,0	2 929	0,208	+
L1	*Listeria innocua 6a*	ATCC 33090	4,0	2 863	0,239	+
L2	*Listeria innocua*	Minced beef	6,8	2 978	0,208	+
L3	*Listeria innocua*	Cow liver	10,0	2 946	0,208	+
L66	*Listeria innocua*	Spinach	9,4	2 891	0,208	+
L72	*Listeria innocua*	"Boulettes d'Avesnes" cheese	34,0	3 202	0,257	+
L77	*Listeria innocua 6a*	Sausage	19,4	3 231	0,257	+
L76	*Listeria innocua 6b*	Minced beef	14,0	3 163	0,219	+
L108	*Listeria innocua*	"Gorgonzola" cheese	15,0	3 241	0,257	+
L142	*Listeria seeligeri*	Raw milk cheese	16,4	3 236	0,219	+
L84	*Listeria seeligeri*	Minced beef	12,0	3 187	0,219	+
L83	*Listeria seeligeri 1/2b*	Pork tongue	9,0	2 959	0,208	+
L115	*Listeria seeligeri*	Surface water (lake)	8,8	2 953	0,208	+
L146	*Listeria grayi*	Collection	10,0	2 897	0,239	+
L143	*Listeria grayi*	Frozen fries	6,4	3 001	0,239	+
L91	*Listeria welshimeri*	Sausage	24,0	3 172	0,257	+
L87	*Listeria welshimeri*	Minced beef	6,8	3 013	0,208	+
L99	*Listeria welshimeri*	Sausage	22	2 382	0,239	+
L100	*Listeria welshimeri*	Cocoa spread	17,2	3 201	0,219	+
L101	*Listeria welshimeri*	Cooked ham	19,0	3 248	0,219	+
L155	*Listeria welshimeri*	Salmon	8,7	3 092	0,208	+
L80	*Listeria ivanovii*	Collection	20,0	3 224	0,219	+
L179	*Listeria ivanovii*	Environmental sample	20,0	0,663	0,219	+
L151	*Listeria ivanovii*	Minced beef	18,6	1 151	0,219	+
L133	*Listeria ivanovii*	"Roquefort" cheese	7,0	3 075	0,208	+
L10	*Listeria monocytogenes* 1/2a	"Rillettes"	16,8	3 150	0,257	+
L12	*Listeria monocytogenes* 1/2a	Smoked salmon	18,4	3 180	0,257	+
L13	*Listeria monocytogenes* 1/2b	Pork hear	13	3 065	0,219	+
L14	*Listeria monocytogenes* 1/2c	Minced beef	22,8	3 223	0,257	+
L15	*Listeria monocytogenes* 1/2c	Beef	20,6	2 879	0,257	+

INCLUSIVITY						
Reference	**Strain**	**Origin**	**Inoculum into 225mL 1/2 Fraser broth (cfu)**	**TRANSIA® PLATE *Listeria***		
				O.D.	Cut-off	**Result**
L17	*Listeria monocytogenes* 1/2c	Pork belly	22	3 095	0,257	+
L18	*Listeria monocytogenes* 1/2c	"Munster" cheese	17,6	3 163	0,257	+
L20	*Listeria monocytogenes*	Salmon scraps	20,8	3 166	0,257	+
L32	*Listeria monocytogenes* 4b	"Munster" cheese	26	3 145	0,219	+
L38	*Listeria monocytogenes*	Raw milk "Coulommiers" cheese	14,2	3 186	0,219	+
L4	*Listeria monocytogenes* 1/2a	ATTCC 35152	24,4	3 237	0,257	+
L40	*Listeria monocytogenes* 1/2a	"Munster" cheese	22,6	3 147	0,332	+
L42	*Listeria monocytogenes* 1/2a	Chicken breast	28,6	3 231	0,257	+
L43	*Listeria monocytogenes* 1/2a	Minced beef	19,6	3 092	0,257	+
L44	*Listeria monocytogenes* 1/2a	Sausage	25	3 176	0,257	+
L45	*Listeria monocytogenes* 1/2a	Rabbit pâté	15,4	3 235	0,257	+
L47	*Listeria monocytogenes* 1/2a	Sauté potatoes	19,5	3 189	0,257	+
L48	*Listeria monocytogenes* 1/2b	Pork tongue	15,6	3 209	0,257	+
L49	*Listeria monocytogenes* 1/2b	Poultry liver pâté	16,4	3 183	0,332	+
L5	*Listeria monocytogenes* 1/2a	Sliced smoked salmon	21,8	3 240	0,257	+
L50	*Listeria monocytogenes* 1/2b	Black pudding	21	3 196	0,332	+
L52	*Listeria monocytogenes* 1/2b	SLCC 2755	21	3 192	0,257	+
L57	*Listeria monocytogenes* 4a	ATCC 19114	17,4	3 223	0,219	+
L60	*Listeria monocytogenes* 4d	ATCC	20	3 109	0,219	+
L7	*Listeria monocytogenes* 1/2a	"Munster" cheese	17,6	3 032	0,332	+

OD: Optical Density result at 450 nm

EXCLUSIVITY						
Reference	Strain	Origin	Inoculum into 225mL nutrient broth (cfu)	TRANSIA® PLATE Listeria		
				O.D.	Cut-off	Result
BA5	*Bacillus sphaericus*	Meat product	8,5E+05	0,156	0,332	-
BA2	*Bacillus cereus*	Beetroot	8,8E+05	0,159	0,332	-
BA4	*Bacillus stearothermophilus*	Dairy product	4,3E+05	0,160	0,332	-
BA 9	*Bacillus cereus*	Dehydrated mashed potatoes	2,5E+05	0,075	0,219	-
BA 14	*Bacillus cereus*	Egg	1,3E+05	0,051	0,208	-
BA 15	*Bacillus cereus*	Vanilla custard	1,8E+05	0,049	0,208	-
BA 19	*Bacillus cereus*	Environmental sample	2,1E+05	0,057	0,208	-
BA 21	*Bacillus cereus*	Tabbouleh (with poultry)	1,7E+05	0,059	0,208	-
15	*Brochotrix thermosphacta*	Minced beef	9,0E+04	0,159	0,332	-
Le1	*Rhodotorula rubra*	Pastry	1,4E+05	0,257	0,332	-
E1	*Enterococcus faecalis*	Egg product	1,6E+05	0,164	0,332	-
E2	*Enterococcus faecium*	Collection ATCC 3286	3,4E+05	0,231	0,332	-
L139	*Jonesia denitrificans*	Collection	7,7E+05	0,223	0,332	-
Lb1	*Lactobacillus acidophilus*	Dairy product	6,5E+04	0,079	0,219	-
Lb2	*Lactobacillus casei*	Dairy product	1,5E+04	0,058	0,208	-
41	*Lactobacillus fermentum*	ATCC 9338	5,2E+05	0,179	0,332	-
M1	*Micrococcus spp.*	Environmental sample	7,6E+05	0,162	0,332	-
32	*Rhodococcus equi*	Meat product	1,7E+05	0,160	0,332	-
E3	*Streptococcus bovis*	Collection	2,8E+05	0,165	0,332	-
E10	*Streptococcus bovis*	Collection	2,3E+05	0,050	0,208	-
ST3	*Staphylococcus epidermidis*	Yogurt	3,6E+05	0,165	0,332	-
ST26	*Staphylococcus intermedius*	Collection	1,2E+05	0,050	0,208	-
ST17	*Staphylococcus aureus*	Yogurt ice-cream	2,6E+05	0,159	0,208	-
E8	*Enterococcus durans*	Meat product	3,0E+05	0,048	0,208	-
E9	*Enterococcus faecium*	Tarama salata	3,0E+05	0,051	0,208	-
E14	*Streptococcus anginosus*	Collection	1,3E+05	0,070	0,208	-
E17	*Streptococcus equinus*	Collection	1,0E+05	0,059	0,208	-
38	*Corynebacterium variabilis*	ATCC 15753	1,8E+05	0,050	0,208	-
34	*Lactobacillus plantarum*	Dairy product	3,2E+05	0,171	0,332	-
35	*Lactobacillus paracasei*	Dairy product	5,0E+05	0,230	0,332	-

Appendix 7 – Inter-laboratory study: results obtained by the collaborative laboratories and the expert laboratory

Laboratory A

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,280	0,409	-	-	-	NA
4	-	-	-	-	-	0,133	0,409	-	-	-	NA
7	-	-	-	-	-	0,206	0,409	-	-	-	NA
10	-	-	-	-	-	0,229	0,409	-	-	-	NA
13	-	-	-	-	-	0,170	0,409	-	-	-	NA
16	-	-	-	-	-	0,342	0,409	-	-	-	NA
19	-	-	-	-	-	0,104	0,409	-	-	-	NA
22	-	-	-	-	-	0,109	0,409	-	-	-	NA
2	+	+	+	+	+	1 982	0,409	+	+	+	PA
5	+	+	+	+	+	1 907	0,409	+	+	+	PA
8	+	+	+	+	+	2 064	0,409	+	+	+	PA
11	+	+	+	+	+	1 954	0,409	+	+	+	PA
14	+	+	+	+	+	2 310	0,409	+	+	+	PA
17	+	+	+	+	+	2 708	0,409	+	+	+	PA
20	+	+	+	+	+	2 397	0,409	+	+	+	PA
23	+	+	+	+	+	3 108	0,409	+	+	+	PA
3	+	+	+	+	+	1 845	0,409	+	+	+	PA
6	+	+	+	+	+	2 174	0,409	+	+	+	PA
9	+	+	+	+	+	2 167	0,409	+	+	+	PA
12	+	+	+	+	+	2 208	0,409	+	+	+	PA
15	+	+	+	+	+	2 569	0,409	+	+	+	PA
18	+	+	+	+	+	2 849	0,409	+	+	+	PA
21	+	+	+	+	+	2 372	0,409	+	+	+	PA
24	+	+	+	+	+	2 350	0,409	+	+	+	PA

Total flora of milk (UFC/ml): > 30 000

Laboratory B

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,237	0,368	-	-	-	NA
4	-	-	-	-	-	0,127	0,368	-	-	-	NA
7	-	-	-	-	-	0,232	0,368	-	-	-	NA
10	-	-	-	-	-	0,223	0,368	-	-	-	NA
13	-	-	-	-	-	0,364	0,368	-	-	-	NA
16	-	-	-	-	-	0,300	0,368	-	-	-	NA
19	-	-	-	-	-	0,262	0,368	-	-	-	NA
22	-	-	-	-	-	0,165	0,368	-	-	-	NA
2	+	+	+	+	+	Over	0,368	+	+	+	PA
5	-	-	-	-	-	0,086	0,368	-	-	-	NA
8	+	+	+	+	+	Over	0,368	+	+	+	PA
11	-	-	-	-	-	0,244	0,368	-	-	-	NA
14	+	+	+	+	+	Over	0,368	+	+	+	PA
17	+	+	+	+	+	Over	0,368	+	+	+	PA
20	+	+	+	+	+	Over	0,368	+	+	+	PA
23	+	+	+	+	+	Over	0,368	+	+	+	PA
3	+	+	+	+	+	Over	0,368	+	+	+	PA
6	+	+	+	+	+	Over	0,368	+	+	+	PA
9	+	+	+	+	+	Over	0,368	+	+	+	PA
12	+	+	+	+	+	Over	0,368	+	+	+	PA
15	+	+	+	+	+	Over	0,368	+	+	+	PA
18	+	+	+	+	+	Over	0,368	+	+	+	PA
21	+	+	+	+	+	Over	0,368	+	+	+	PA
24	+	+	+	+	+	Over	0,368	+	+	+	PA

Total flora of milk (UFC/ml): 8 800 000

Laboratory D

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,080	0,252	-	-	-	NA
4	-	-	-	-	-	0,080	0,252	-	-	-	NA
7	-	-	-	-	-	0,077	0,252	-	-	-	NA
10	-	-	-	-	-	0,087	0,252	-	-	-	NA
13	-	-	-	-	-	0,096	0,252	-	-	-	NA
16	-	-	-	-	-	0,091	0,252	-	-	-	NA
19	-	-	-	-	-	0,091	0,252	-	-	-	NA
22	-	-	-	-	-	0,116	0,252	-	-	-	NA
2	+	+	+	+	+	3 144	0,252	+	+	+	PA
5	+	+	+	+	+	3 143	0,252	+	+	+	PA
8	+	+	+	+	+	3 125	0,252	+	+	+	PA
11	+	+	+	+	+	3 106	0,252	+	+	+	PA
14	+	+	+	+	+	2 877	0,252	+	+	+	PA
17	-	-	-	-	-	0,092	0,252	-	-	-	NA
20	+	+	+	+	+	3 154	0,252	+	+	+	PA
23	+	+	+	+	+	2 969	0,252	+	+	+	PA
3	+	+	+	+	+	3 152	0,252	+	+	+	PA
6	+	+	+	+	+	3 140	0,252	+	+	+	PA
9	+	+	+	+	+	3 135	0,252	+	+	+	PA
12	+	+	+	+	+	3 171	0,252	+	+	+	PA
15	+	+	+	+	+	3 120	0,252	+	+	+	PA
18	+	+	+	+	+	3 144	0,252	+	+	+	PA
21	+	+	+	+	+	3 028	0,252	+	+	+	PA
24	+	+	+	+	+	3 125	0,252	+	+	+	PA

Total flora of milk (UFC/ml): > 300 000

Laboratory E

Problem of receipt temperature

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,099	0,218	-	-	-	NA
4	-	-	-	-	-	0,105	0,218	-	-	-	NA
7	-	-	-	-	-	0,109	0,218	-	-	-	NA
10	-	-	-	-	-	0,105	0,218	-	-	-	NA
13	-	-	-	-	-	0,112	0,218	-	-	-	NA
16	-	-	-	-	-	0,109	0,218	-	-	-	NA
19	-	-	-	-	-	0,111	0,218	-	-	-	NA
22	-	-	-	-	-	0,098	0,218	-	-	-	NA
2	+	+	+	+	+	3 166	0,218	+	+	+	PA
5	+	+	+	+	+	3 181	0,218	+	+	+	PA
8	+	+	+	+	+	3 141	0,218	+	+	+	PA
11	+	+	+	+	+	3 157	0,218	+	+	+	PA
14	+	ND	+	+	+	3 129	0,218	+	+	+	PA
17	+	+	+	+	+	3 173	0,218	+	+	+	PA
20	+	+	+	+	+	3 168	0,218	+	+	+	PA
23	+	+	+	+	+	3 175	0,218	+	+	+	PA
3	+	+	+	+	+	3 157	0,218	+	+	+	PA
6	+	+	+	+	+	3 195	0,218	+	+	+	PA
9	+	+	+	+	+	3 173	0,218	+	+	+	PA
12	+	+	+	+	+	3 168	0,218	+	+	+	PA
15	+	+	+	+	+	3 175	0,218	+	+	+	PA
18	+	+	+	+	+	3 166	0,218	+	+	+	PA
21	+	+	+	+	+	3 150	0,218	+	+	+	PA
24	+	+	+	+	+	3 154	0,218	+	+	+	PA

Total flora of milk (UFC/ml): > 30 000

Laboratory F

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,086	0,263	-	-	-	NA
4	-	-	-	-	-	0,096	0,263	-	-	-	NA
7	-	-	-	-	-	0,097	0,263	-	-	-	NA
10	-	-	-	-	-	0,089	0,263	-	-	-	NA
13	-	-	-	-	-	0,106	0,263	-	-	-	NA
16	-	-	-	-	-	0,089	0,263	-	-	-	NA
19	-	-	-	-	-	0,099	0,263	-	-	-	NA
22	-	-	-	-	-	0,118	0,263	-	-	-	NA
2	+	+	+	+	+	3 235	0,263	+	+	+	PA
5	+	+	+	+	+	3 244	0,263	+	+	+	PA
8	+	+	+	+	+	3 234	0,263	+	+	+	PA
11	+	+	+	+	+	3 279	0,263	+	+	+	PA
14	+	+	+	+	+	2 995	0,263	+	+	+	PA
17	+	+	+	+	+	3 238	0,263	+	+	+	PA
20	+	+	+	+	+	3 232	0,263	+	+	+	PA
23	+	+	+	+	+	3 232	0,263	+	+	+	PA
3	+	+	+	+	+	3 239	0,263	+	+	+	PA
6	+	+	+	+	+	3 230	0,263	+	+	+	PA
9	+	+	+	+	+	3 238	0,263	+	+	+	PA
12	+	+	+	+	+	3 232	0,263	+	+	+	PA
15	+	+	+	+	+	3 232	0,263	+	+	+	PA
18	+	+	+	+	+	3 235	0,263	+	+	+	PA
21	+	+	+	+	+	3 106	0,263	+	+	+	PA
24	+	+	+	+	+	3 239	0,263	+	+	+	PA

Total flora of milk (UFC/ml): > 30 000

Laboratory G

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,086	0,260	-	-	-	NA
4	-	-	-	-	-	0,099	0,260	-	-	-	NA
7	-	-	-	-	-	0,086	0,260	-	-	-	NA
10	-	-	-	-	-	0,090	0,260	-	-	-	NA
13	-	-	-	-	-	0,098	0,260	-	-	-	NA
16	-	-	-	-	-	0,119	0,260	-	-	-	NA
19	-	-	-	-	-	0,085	0,260	-	-	-	NA
22	-	-	-	-	-	0,091	0,260	-	-	-	NA
2	+	+	+	+	+	3 174	0,260	+	+	+	PA
5	+	+	+	+	+	3 173	0,260	+	+	+	PA
8	+	+	+	+	+	3 025	0,260	+	+	+	PA
11	+	+	+	+	+	3 131	0,260	+	+	+	PA
14	-	-	-	-	-	0,087	0,260	-	-	-	NA
17	+	+	+	+	+	3 111	0,260	+	+	+	PA
20	+	+	+	+	+	3 127	0,260	+	+	+	PA
23	+	+	+	+	+	2 949	0,260	+	+	+	PA
3	+	+	+	+	+	2 964	0,260	+	+	+	PA
6	+	+	+	+	+	3 191	0,260	+	+	+	PA
9	+	+	+	+	+	2 918	0,260	+	+	+	PA
12	+	+	+	+	+	3 171	0,260	+	+	+	PA
15	+	+	+	+	+	2 987	0,260	+	+	+	PA
18	+	+	+	+	+	2 879	0,260	+	+	+	PA
21	+	+	+	+	+	2 880	0,260	+	+	+	PA
24	+	+	+	+	+	2 481	0,260	+	+	+	PA

Total flora of milk (UFC/ml): 8 200

Laboratory H

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,069	0,226	-	-	-	NA
4	-	-	-	-	-	0,063	0,226	-	-	-	NA
7	-	-	-	-	-	0,077	0,226	-	-	-	NA
10	-	-	-	-	-	0,063	0,226	-	-	-	NA
13	-	-	-	-	-	0,088	0,226	-	-	-	NA
16	-	-	-	-	-	0,060	0,226	-	-	-	NA
19	-	-	-	-	-	0,060	0,226	-	-	-	NA
22	-	-	-	-	-	0,071	0,226	-	-	-	NA
2	-	-	-	-	-	0,060	0,226	-	-	-	NA
5	+	+	+	+	+	3 420	0,226	+	+	+	PA
8	+	+	+	+	+	3 509	0,226	+	+	+	PA
11	-	-	-	-	-	0,061	0,226	-	-	-	NA
14	-	-	-	-	-	0,095	0,226	-	-	-	NA
17	+	+	+	+	+	3 509	0,226	+	+	+	PA
20	+	+	+	+	+	3 481	0,226	+	+	+	PA
23	+	+	+	+	+	3 509	0,226	+	+	+	PA
3	+	+	+	+	+	3 509	0,226	+	+	+	PA
6	+	+	+	+	+	3 509	0,226	+	+	+	PA
9	+	+	+	+	+	3 509	0,226	+	+	+	PA
12	+	+	+	+	+	3 509	0,226	+	+	+	PA
15	+	+	+	+	+	3 509	0,226	+	+	+	PA
18	+	+	+	+	+	3 509	0,226	+	+	+	PA
21	+	+	+	+	+	3 432	0,226	+	+	+	PA
24	+	+	+	+	+	3 509	0,226	+	+	+	PA

Total flora of milk (UFC/ml): > 30 000

Laboratory J

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,118	0,296	-	-	-	NA
4	-	-	-	-	-	0,135	0,296	-	-	-	NA
7	-	-	-	-	-	0,114	0,296	-	-	-	NA
10	-	-	-	-	-	0,147	0,296	-	-	-	NA
13	-	-	-	-	-	0,112	0,296	-	-	-	NA
16	-	-	-	-	-	0,154	0,296	-	-	-	NA
19	-	-	-	-	-	0,147	0,296	-	-	-	NA
22	-	-	-	-	-	0,133	0,296	-	-	-	NA
2	+	+	+	+	+	2 509	0,296	+	+	+	PA
5	-	-	-	-	-	0,114	0,296	-	-	-	NA
8	+	+	+	+	+	2 763	0,296	+	+	+	PA
11	+	+	+	+	+	2 746	0,296	+	+	+	PA
14	-	-	-	-	-	0,140	0,296	-	-	-	NA
17	+	+	+	+	+	2 829	0,296	+	+	+	PA
20	+	+	+	+	+	3 020	0,296	+	+	+	PA
23	-	-	+	-	-	0,134	0,296	-	-	-	NA
3	+	+	+	+	+	2 700	0,296	+	+	+	PA
6	+	+	+	+	+	3 074	0,296	+	+	+	PA
9	+	+	+	+	+	2 870	0,296	+	+	+	PA
12	+	+	+	+	+	3 049	0,296	+	+	+	PA
15	+	+	+	+	+	3 068	0,296	+	+	+	PA
18	+	+	+	+	+	2 693	0,296	+	+	+	PA
21	+	+	+	+	+	2 842	0,296	+	+	+	PA
24	+	+	+	+	+	2 932	0,296	+	+	+	PA

Total flora of milk (UFC/ml): > 30 000

Laboratory K
Delivery at D+2

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,069	0,243	-	-	-	NA
4	-	-	-	-	-	0,070	0,243	-	-	-	NA
7	-	-	-	-	-	0,076	0,243	-	-	-	NA
10	-	-	-	-	-	0,371	0,243	+	-	-	NA
13	-	-	-	-	-	0,074	0,243	-	-	-	NA
16	-	-	-	-	-	0,100	0,243	-	-	-	NA
19	-	-	-	-	-	0,073	0,243	-	-	-	NA
22	-	-	-	-	-	0,073	0,243	-	-	-	NA
2	-	-	-	-	-	0,075	0,243	-	-	-	NA
5	+	+	+	+	+	3 194	0,243	+	+	+	PA
8	+	+	+	+	+	3 190	0,243	+	+	+	PA
11	-	-	-	-	-	0,078	0,243	-	-	-	NA
14	+	+	+	+	+	2 868	0,243	+	+	+	PA
17	-	-	-	-	-	0,074	0,243	-	-	-	NA
20	+	+	+	+	+	3 195	0,243	+	+	+	PA
23	-	-	-	-	-	0,075	0,243	-	-	-	NA
3	+	+	+	+	+	3 187	0,243	+	+	+	PA
6	+	+	+	+	+	3 212	0,243	+	+	+	PA
9	+	+	+	+	+	3 170	0,243	+	+	+	PA
12	+	+	+	+	+	3 195	0,243	+	+	+	PA
15	+	+	+	+	+	3 207	0,243	+	+	+	PA
18	+	+	+	+	+	3 192	0,243	+	+	+	PA
21	+	+	+	+	+	3 142	0,243	+	+	+	PA
24	+	+	+	+	+	3 190	0,243	+	+	+	PA

Total flora of milk (UFC/ml): > 3 000 000

Laboratory L

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,111	0,350	-	-	-	NA
4	-	-	-	-	-	0,116	0,350	-	-	-	NA
7	-	-	-	-	-	0,220	0,350	-	-	-	NA
10	-	-	-	-	-	0,105	0,350	-	-	-	NA
13	-	-	-	-	-	0,299	0,350	-	-	-	NA
16	-	-	-	-	-	0,194	0,350	-	-	-	NA
19	-	-	-	-	-	0,096	0,350	-	-	-	NA
22	-	-	-	-	-	0,156	0,350	-	-	-	NA
2	+	+	+	+	+	4 142	0,350	+	+	+	PA
5	+	+	+	+	+	3 782	0,350	+	+	+	PA
8	+	+	+	+	+	4 146	0,350	+	+	+	PA
11	+	+	+	+	+	3 876	0,350	+	+	+	PA
14	+	+	+	+	+	3 663	0,350	+	+	+	PA
17	-	-	-	-	-	0,246	0,350	-	-	-	NA
20	+	+	+	+	+	4 010	0,350	+	+	+	PA
23	+	+	+	+	+	4 139	0,350	+	+	+	PA
3	+	+	+	+	+	4 031	0,350	+	+	+	PA
6	+	+	+	+	+	4 145	0,350	+	+	+	PA
9	+	+	+	+	+	4 151	0,350	+	+	+	PA
12	+	+	+	+	+	3 873	0,350	+	+	+	PA
15	+	+	+	+	+	4 142	0,350	+	+	+	PA
18	+	+	+	+	+	3 829	0,350	+	+	+	PA
21	+	+	+	+	+	4 146	0,350	+	+	+	PA
24	+	+	+	+	+	4 143	0,350	+	+	+	PA

Total flora of milk (UFC/ml): > 30 000

Laboratory M
Washing problems

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,666	0,301	+	-	-	NA
4	-	-	-	-	-	0,213	0,301	-	-	-	NA
7	-	-	-	-	-	0,932	0,301	+	-	-	NA
10	-	-	-	-	-	0,269	0,301	-	-	-	NA
13	-	-	-	-	-	0,220	0,301	-	-	-	NA
16	-	-	-	-	-	0,161	0,301	-	-	-	NA
19	-	-	-	-	-	0,141	0,301	-	-	-	NA
22	-	-	-	-	-	0,250	0,301	-	-	-	NA
2	+	+	+	+	+	Over	0,301	+	+	+	PA
5	+	+	+	+	+	Over	0,301	+	+	+	PA
8	+	+	+	+	+	Over	0,301	+	+	+	PA
11	+	+	+	+	+	Over	0,301	+	+	+	PA
14	+	+	+	+	+	Over	0,301	+	+	+	PA
17	-	-	-	-	-	0,177	0,301	-	-	-	NA
20	-	-	-	-	-	0,117	0,301	-	-	-	NA
23	+	+	+	+	+	Over	0,301	+	+	+	PA
3	+	+	+	+	+	Over	0,301	+	+	+	PA
6	+	+	+	+	+	Over	0,301	+	+	+	PA
9	+	+	+	+	+	Over	0,301	+	+	+	PA
12	+	+	+	+	+	Over	0,301	+	+	+	PA
15	+	+	+	+	+	Over	0,301	+	+	+	PA
18	+	+	+	+	+	Over	0,301	+	+	+	PA
21	+	+	+	+	+	Over	0,301	+	+	+	PA
24	+	+	+	+	+	Over	0,301	+	+	+	PA

Total flora of milk (UFC/ml): 5 800

Laboratory N
Delivery at D+2

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,069	0,248	-	-	-	NA
4	-	-	-	-	-	0,074	0,248	-	-	-	NA
7	-	-	-	-	-	0,077	0,248	-	-	-	NA
10	-	-	-	-	-	0,071	0,248	-	-	-	NA
13	-	-	-	-	-	0,068	0,248	-	-	-	NA
16	-	-	-	-	-	0,087	0,248	-	-	-	NA
19	-	-	-	-	-	0,078	0,248	-	-	-	NA
22	-	-	-	-	-	0,419	0,248	+	-	-	NA
2	+	+	+	+	+	3 002	0,248	+	+	+	PA
5	+	+	+	+	+	3 015	0,248	+	+	+	PA
8	+	+	+	+	+	2 901	0,248	+	+	+	PA
11	+	+	+	+	+	2 920	0,248	+	+	+	PA
14	+	+	+	+	+	2 983	0,248	+	+	+	PA
17	+	+	+	+	+	2 993	0,248	+	+	+	PA
20	+	+	+	+	+	2 917	0,248	+	+	+	PA
23	+	+	+	+	+	3 096	0,248	+	+	+	PA
3	+	+	+	+	+	3 000	0,248	+	+	+	PA
6	+	+	+	+	+	3 005	0,248	+	+	+	PA
9	+	+	+	+	+	2 918	0,248	+	+	+	PA
12	+	+	+	+	+	2 973	0,248	+	+	+	PA
15	+	+	+	+	+	2 990	0,248	+	+	+	PA
18	+	+	+	+	+	2 986	0,248	+	+	+	PA
21	+	+	+	+	+	2 867	0,248	+	+	+	PA
24	+	+	+	+	+	2 903	0,248	+	+	+	PA

Total flora of milk (UFC/ml): > 30 000

Laboratory O

Code sample	Reference method EN ISO 11290-1					TRANSIA® PLATE *Listeria* method					Agreement Alt/Ref
	Fraser 1/2		Fraser		Result	Test		Test result	Confirmation	Result	
	O&A	PALCAM	O&A	PALCAM		OD	Cut-off		COMPASS		
1	-	-	-	-	-	0,067	0,255	-	-	-	NA
4	-	-	-	-	-	0,079	0,255	-	-	-	NA
7	-	-	-	-	-	0,061	0,255	-	-	-	NA
10	-	-	-	-	-	0,071	0,255	-	-	-	NA
13	-	-	-	-	-	0,068	0,255	-	-	-	NA
16	-	-	-	-	-	0,067	0,255	-	-	-	NA
19	-	-	-	-	-	0,063	0,255	-	-	-	NA
22	-	-	-	-	-	0,074	0,255	-	-	-	NA
2	+	+	+	+	+	3 282	0,255	+	+	+	PA
5	+	+	+	+	+	4 139	0,255	+	+	+	PA
8	-	-	-	-	-	0,068	0,255	-	-	-	NA
11	+	+	+	+	+	3 476	0,255	+	+	+	PA
14	+	+	+	+	+	3 613	0,255	+	+	+	PA
17	+	+	+	+	+	3 264	0,255	+	+	+	PA
20	+	+	+	+	+	3 525	0,255	+	+	+	PA
23	+	+	+	+	+	3 816	0,255	+	+	+	PA
3	+	+	+	+	+	3 522	0,255	+	+	+	PA
6	+	+	+	+	+	3 606	0,255	+	+	+	PA
9	+	+	+	+	+	3 264	0,255	+	+	+	PA
12	+	+	+	+	+	3 349	0,255	+	+	+	PA
15	+	+	+	+	+	3 515	0,255	+	+	+	PA
18	+	+	+	+	+	3 282	0,255	+	+	+	PA
21	+	+	+	+	+	4 139	0,255	+	+	+	PA
24	+	+	+	+	+	3 872	0,255	+	+	+	PA

Total flora of milk (UFC/ml): 18 600 000