NF VALIDATION
Validation of alternative analysis methods
Application to the food industry

Summary report
according to the standard EN ISO 16140-2:2016

Qualitative method

VIDAS UP Listeria (VIDAS LPT – ref. 30126)
(certificate # BIO 12/33-05/12)
for the detection of *Listeria* spp
in human food products and in environmental samples

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This report contains 70 pages, including 41 pages of appendices.

The accreditation of the COFRAC (Section Laboratory) gives evidence of the expertise of the laboratory for the only tests covered by the accreditation that are specified by the symbol (■).

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Preamble

- **Protocols of validation:**

- **EN ISO 16140-1 and EN ISO 16140-2 (September 2016): Microbiology of the food chain — Method validation**
  Part 1: Vocabulary.
  Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method.

- **Requirements regarding comparison and interlaboratory studies for implementation of the standard EN ISO 16140-2 (version 7).**

- **Reference method:**

- **EN ISO 11290-1 (July 2017):** Microbiology of the food chain – Horizontal method for the detection and enumeration of *Listeria monocytogenes* and *Listeria* spp- Part 1: Detection method.

- **Application scope:**

- **All human food products** by a validation testing of a broad range of foods, including:
  - meat products,
  - dairy products,
  - seafood products,
  - vegetables,
  - composite foods,
- **Environmental samples.**

- **Certification body:**

- **AFNOR Certification** (https://nf-validation.afnor.org/).

Definitions

- **Method comparison study**

The method comparison study is the part of the validation process that is performed in the organizing laboratory. It consists of three parts namely the following:
- A comparative study of the results of the reference method to the results of the alternative method in (naturally and/or artificially) contaminated samples (so-called sensitivity study);
- A comparative study to determine the relative level of detection (RLOD) in artificially contaminated samples (so-called RLOD study);
- An inclusivity/exclusivity study of the alternative method.

- **Sensitivity study**

The sensitivity study aims to determine the difference in sensitivity between the reference and the alternative method.
The sensitivity is the ability of the reference method or alternative method to detect the analyte.

- **Relative level of detection study**

A comparative study is conducted to evaluate the level of detection (LOD) of the alternative method against the reference method. The evaluation is based on the calculation of the relative level of detection (RLOD).
The level of detection at 50% (LOD_{50}) is the measured analyte concentration, obtained by a given measurement procedure, for which the probability of detection is 50%.
The relative level of detection level of detection at P = 0,50 (LOD_{50}) of the alternative method divided by the level of detection at P = 0,50 (LOD_{50}) of the reference method.

- **Inclusivity and exclusivity study**

The inclusivity study is a study involving pure target strains to be detected or enumerated by the alternative method.
The exclusivity study is a study involving pure non-target strains, which can be potentially cross-reactive, but are not expected to be detected or enumerated by the alternative method.

- **Interlaboratory study**

The interlaboratory study is a study performed by multiple laboratories testing identical samples at the same time, the results of which are used to estimate alternative-method performance parameters.
The aim of the interlaboratory study is to determine the difference in sensitivity between the reference and the alternative method when tested by different collaborators using identical samples (reproducibility conditions).

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Appendix B: Protocol of the reference method
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Appendix D: Relative sensitivity study – Raw results
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Appendix F: Inclusivity and exclusivity study – Raw results
Appendix G: Interlaboratory study – Raw results

1. Introduction

The VIDAS UP *Listeria* method (VIDAS LPT) is validated by AFNOR Certification under the mark NF VALIDATION with the certification number BIO 12/33-05/12 according to the standard EN ISO 16140-2:2016. The method is intended for all human food products and environmental samples (except primary production samples) since its initial validation.

Table 1 summarizes the different steps of the validation that occurred since the initial validation.

Table 1: Steps of the validation AFNOR certification

Study	Date	Standards	Expert Laboratory	Observation
Initial validation	May 2012	ISO 16140/A1:2011 ISO 11290-1/A1	IPL Santé, Environnement durables Nord	/
First renewal	March 2016	ISO 16140/A1:2011 ISO 11290-1/A1	Institut Scientifique d'Hygiène et d'Analyse	No additional tests
Extension	Sept. 2016	NA	NA	Extension for the use of software 4.8
Extension	2018	NA	NA	Extension for the use of software 4.10
Second renewal study	April 2020	ISO 16140-2: 2016 ISO 11290-1:2017	Microsept	Additional tests to fulfill the requirements of the revised standard
Project of third renewal study	March 2024	ISO 16140-2: 2016 ISO 11290-1:2017	Microsept	No additional tests

This summary report introduces all the validation studies results for the NF VALIDATION certification of the VIDAS UP *Listeria* method (VIDAS LPT).

The results set out in this report were produced during validation tests carried out by IPL Santé, Environnement durables Nord and by the Institut Scientifique d'Hygiène et d'Analyse as part of validation studies, in accordance with prevailing requirements.

The remaining part of the results is constituted by the analyses performed by the laboratory Microsept as part of the requirements of the updated validation standard.

2. Protocols of the methods

2.1. Alternative method

2.1.1. Principle of the method

The VIDAS UP *Listeria* test is an enzyme-linked fluorescent assay (ELFA) using a novel recombinant phage protein-based technology for use with the automated VIDAS or mini-VIDAS instruments for the specific detection of *Listeria*.

The Solid Phase Receptacle (SPR®) serves as the solid phase as well as the pipetting device. The interior of the SPR® is coated with proteins specific for Listeria receptors adsorbed on its surface. Reagents for the assay are ready-to-use and pre-dispensed in the sealed reagent strips.
All of the assay steps are performed automatically by the instrument. The reaction medium is cycled in and out of the SPR® several times.
Part of the enrichment broth is dispensed into the reagent strip. The receptors present will bind to the proteins specific for Listeria receptors coating the interior of the SPR®. Unbound sample components are washed away.
Protein conjugated with alkaline phosphatase are then cycled in and out of the SPR® and will bind to any Listeria receptors which are themselves bound to the specific protein on the SPR® wall.
Further wash steps remove unbound conjugate.

During the final detection step, the substrate (4-Methylumbelliferyl phosphate) is cycled in and out of the SPR®; The conjugate enzyme catalyzes the hydrolysis of this substrate into a fluorescent product (4-Methylumbelliferone), the fluorescence of which is measured at 450 nm.

At the end of the assay, the results are analyzed automatically by the instrument and a test value is generated for each sample. This value is then compared to internal references (thresholds) and each result is interpreted (positive, negative), as shown in figure 1.

Figure 1: interpretation of the VIDAS LPT test

$Test\ value\ (TV) = {RFV_{sample}}/{RFV_{standard}}$	$TV < 0{,}05$: negative test $TV \geq 0{,}05$: positive test

2.1.2. Protocol of the method

The general protocol consists in an enrichment in LPT broth, incubated for 26 to 34 hours at 30±1°C (dilution of the test portion at 1:10th).

A specific protocol is available for surface samples. It applies for:
- surface samples prepared with a swab: knife blade, slicer, …
- surface samples prepared with a sponge or a wipe: table, work surface, storage tank…

This specific protocol consists in an enrichment in LPT broth, incubated for 22 to 30 hours at 30±1°C.
According to the sampling mode, the sample can be prepared as following:
- with swab: enrichment in 10 mL of LPT broth,
- with sponge: enrichment in 100 mL of LPT broth.

For the two protocols, after enrichment, a VIDAS LPT test is performed using a 2-3 mL of LPT broth, boiled for 5±1 minutes at 95-100°C. A 0.5 mL test sample of heated broth is used to perform the VIDAS test. Alternatively, the Heat&Go system can be used to boil the samples.

The workflow of the method is set out in Appendix A.

The positive results following the VIDAS LPT test are confirmed according to the following protocol:

- streaking of the non-heated enrichment broth on PALCAM or Oxford agar, or on a chromogenic agar that is part of an NF Validation certified method for the detection of *Listeria*,
- Incubate the agar according to the package insert, then perform one of the following three procedures:
    - Identify between one and five typical colonies using the conventional tests described in the methods standardized by the CEN or ISO (including the purification step),
    - The presence of typical Listeria colonies is sufficient to confirm the presence of *Listeria*.
    - Use an API *Listeria* strip to directly test isolated colonies (without a purification step).

The positive enrichment broths (LPT 26h or LPT 22h) can be stored for 72 hours at 2 – 8°C.

Comments about the confirmations:
In the event of a positive VIDAS LPT test and the absence of characteristic colonies on selective agar, the following supplementary confirmation option may be used:

- transfer 1 mL of unheated LPT broth into a 10 mL LPT broth tube,
- incubate for 22 to 26 hours at 30±1°C,
- isolate onto a selective agar, and completion of the tests described above.

2.1.3. Restrictions

There are no restrictions on use for the method VIDAS LPT.

2.2. Reference method

The standard EN ISO 11290-1/A1:2005 was used for the initial validation study and for the two following renewal studies.
This standard was updated in 2017. The main changes introduced in the ISO 11290-1:2017 are considered as major. The technical changes were assessed and were considered to have no significant effect on the method performance characteristics or test results. That's why the method described in the new standard EN ISO 11290-1:2017 "Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp – Part 1: detection method" was used as reference method for the supplementary tests performed by the Laboratory Microsept.

The workflow of the reference method is presented in Appendix B.

2.3. Study design

As there is no shared enrichment step for both the alternative and the reference methods, different test portions coming from the same batch or lot of products must be used for the two methods. The study thus provides unpaired data, and the expression "unpaired study" is used to describe the study design.

3. Methods comparison study

3.1. Sensitivity study

The study was conducted on a variety of samples and strains representative of food products. This is not an exhaustive list of the various matrices included in the application scope. For any remark on the alternative method, you can contact AFNOR Certification by connecting to the Internet page ***http://nf-validation.afnor.org/contact-2/***.

The purpose of this study is to compare the two methods – the reference method EN ISO 11290-1:2017 and the VIDAS UP *Listeria* method (VIDAS LPT) – on samples contaminated or not contaminated with *Listeria.*

3.1.1. Protocols applied during the validation study

- **Incubation times:**

The minimum incubation times were tested, namely:

- 26 hours for the enrichment in LPT broth for all human food products (general protocol),
- 22 hours for surface samples (specific protocol).

- **Confirmations:**

The positive results following the VIDAS LPT test were confirmed by isolating 10 µl of the unheated LPT enrichment broth on two selective Listeria agars (selective Listeria agar according to Ottaviani and Agosti and Palcam agar and performing the conventional tests described in the CEN or ISO standardized methods (including the purification step) or performing an identification strip test without purification (API *Listeria*).

A supplementary confirmation protocol in case on an unpaired study was also applied by subculturing 1 ml of the unheated LPT enrichment broth in a LPT broth tube, incubated for 22 to 26 hours at 30±1°C, before streaking on Palcam agar and selective agar according to Ottaviani and Agosti for negative and discordant results.

- **Cold storage of the enriched broths:**

The positive enrichment broths (LPT 26h or LPT 22h) were also stored for 72 hours at 5±3°C and then tested again using the alternative method and confirmed if positive, in order to document the impact of a cold storage.

3.1.2. Number and nature of the samples

The sensitivity study for all categories concerned 490 samples:

- 401 samples analyzed during the initial validation study,
- 89 samples analyzed during this second renewal study.

Samples analyzed by category and type are presented in table 2.

Table 2: Distribution of the samples per category and type (: by any method)*

Category		Type	Positive results*	Negative results	Total
Meat products ①	a	Raw products	14	7	21
	b	RTRH products and meat-based products	8	12	20
	c	Delicatessen	11	11	22
	Total		**33**	**30**	**63**
Dairy products ②	a	Cow milk cheese	13	10	23
	b	Goat or ewe raw milk cheese	11	11	22
	c	Other milk products	9	11	20
	Total		**33**	**32**	**65**
Seafood products ③	a	Raw products	12	8	20
	b	Smoked, marinated products	10	14	24
	c	Ready-to-eat and ready-to-reheat products	9	11	20
	Total		**31**	**33**	**64**
Vegetal products ④	a	Raw vegetal products	11	11	22
	b	Pre-cut fruits and vegetables	14	10	24
	c	Plant product based food	8	15	23
	Total		**33**	**36**	**69**
Composite foods ⑤	a	Ready-to-eat products	12	21	33
	b	Ready-to-reheat products	22	24	46
	c	Pastries and derivated, egg products	19	15	34
	Total		**53**	**60**	**113**
Environmental samples ⑥	a	Process waters (general protocol)	16	13	29
	b	Surface samples (specific protocol)	32	29	61
	c	Residues (general protocol)	16	10	26
	Total		**64**	**52**	**116**
All categories	**Total**		**247**	**243**	**490**

3.1.3. Artificial contamination

Artificial contamination was carried out using 36 different stressed strains in accordance with the requirements of the validation standard and of the AFNOR Certification Technical Board (see Appendix C). None of the strains were used more than 6 times to get a positive result.

Table 3 gives the distribution of the positive samples per level of contamination.

Table 3: distribution of the positive samples per level (cl: contamination level)

Positive samples	Naturally contaminated samples	Artificially contaminated samples						Total
		Spiking			Seeding			
		cl ≤ 5	5 < cl ≤ 10	10 < cl ≤ 30	cl ≤ 3	3 < cl ≤ 10	cl > 10	
247	139	3	7	12	73	13	0	108
%	56.3%	1.2%	2.8%	4.9%	29.6%	5.3%	0%	100%

247 samples gave a positive result by at least one of the methods and 56.3% of them were naturally contaminated.

The distribution of samples positive in *Listeria monocytogenes*, in *Listeria* non *monocytogenes* and in mixture *L. monocytogenes* + *Listeria* non *monocytogenes* is presented in table 4.

Table 4: distribution of the positive samples per strain

Category		Type	*L. monocy-togenes*	*Listeria* non *monocy-togenes*	Mixed
Meat products ①	a	Raw products	6	3	5
	b	RTRH products and meat-based products	2	2	1
	c	Delicatessen	6	4	4
	Total		**14**	**10**	**9**
Dairy products ②	a	Cow's milk cheeses	10	1	2
	b	Goat or ewe raw milk cheese	5	0	6
	c	Other milk products	3	0	6
	Total		**18**	**14**	**1**
Seafood products ③	a	Raw products	5	6	1
	b	Smoked, marinated products	3	0	7
	c	Ready-to-eat and ready-to-reheat products	2	1	6
	Total		**10**	**14**	**7**
Vegetal products ④	a	Raw vegetal products	5	2	4
	b	Pre-cut fruits and vegetables	5	3	6
	c	Plant product based food	2	2	4
	Total		**12**	**14**	**7**
Composite foods ⑤	a	Ready-to-eat products	3	0	9
	b	Ready-to-reheat products	6	3	13
	c	Pastries and derivated, egg products	13	0	6
	Total		**22**	**28**	**3**
Environmental samples ⑥	a	Process waters (general protocol)	5	0	11
	b	Surface samples (specific protocol)	21	6	5
	c	Residues (general protocol)	9	3	4
	Total		**35**	**20**	**9**
All categories	**Total**		**111**	**100**	**36**
	%		**44,9%**	**40,5%**	**14,6%**

3.1.4. Results

Raw data are shown in appendix D.

Table 5 shows the results of the sensitivity study for all categories.

Table 5: results of the sensitivity study for both methods (R+/-: reference method positive or negative, A+/-: alternative method positive or negative, PA: positive agreement, NA: negative agreement, ND: negative deviation, PD: positive deviation, PP: presumptive positive before confirmation)

Category	Response	R+	R-
Meat products ❶	A+	PA = 23	PD = 6
	A-	ND = 4 incl. 0 PPND	NA = 30 incl. 1 PPNA
Dairy products ❷	A+	PA = 23	PD = 5
	A-	ND = 5 incl. 0 PPND	NA = 32 incl. 0 PPNA
Seafood products ❸	A+	PA = 28	PD = 1
	A-	ND = 2 incl. 0 PPND	NA = 33 incl. 2 PPNA
Vegetal products ❹	A+	PA = 27	PD = 3
	A-	ND = 3 incl. 0 PPND	NA = 36 incl. 1 PPNA
Composite foods ❺	A+	PA = 41	PD = 6
	A-	ND = 6 incl. 0 PPND	NA = 60 incl. 0 PPNA
Environmental samples (general protocol) ❻	A+	PA = 28	PD = 1
	A-	ND = 3 incl. 0 PPND	NA = 33 incl. 0 PPNA
Environmental samples (specific protocol) ❼	A+	PA = 28	PD = 3
	A-	ND = 1 incl. 0 PPND	NA = 29 incl. 0 PPNA
Environmental samples (all protocols) ❽	A+	PA = 56	PD = 4
	A-	ND = 4 incl. 0 PPND	NA = 52 incl. 0 PPNA
All categories	A+	**PA = 198**	**PD = 25**
	A-	**ND = 24 incl. 0 PPND**	**NA = 243 incl. 4 PPNA**

3.1.5. Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (PFR)

The set of results obtained were used to calculate the relative trueness, the sensitivity and the false positive ratio for each of the categories and for all the categories, according to the formulas set out in the EN ISO 16140-2:2016 standard (table 6).

Table 6: values in % of sensitivity for the two methods, relative trueness and false positive ratio for the alternative method (SE_{alt}: sensitivity for the alternative method, SE_{ref}: sensitivity for the reference method, RT: relative trueness, FPR: false positive ratio for the alternative method)

Category	Type	PA	NA	ND	PD	N	Including PPND	Including PPNA	SE_{alt}	SE_{ref}	RT	FPR
Meat Products ❶	a	9	7	2	3	21	0	0	85,7%	78,6%	76,2%	0,0%
	b	6	12	0	2	20	0	1	100,0%	75,0%	90,0%	8,3%
	c	8	11	2	1	22	0	0	81,8%	90,9%	86,4%	0,0%
	Total	23	30	4	6	63	0	1	87,9%	81,8%	84,1%	3,3%
Dairy products ❷	a	11	10	0	2	23	0	0	100,0%	84,6%	91,3%	0,0%
	b	6	11	4	1	22	0	0	63,6%	90,9%	77,3%	0,0%
	c	6	11	1	2	20	0	0	88,9%	77,8%	85%	0,0%
	Total	23	31	5	5	64	0	0	84,8%	84,8%	84,6%	0,0%
Seafood products ❸	a	10	8	2	0	20	0	0	83,3%	100,0%	90%	0,0%
	b	10	14	0	0	24	0	2	100,0%	100,0%	100,0%	14,3%
	c	8	11	0	1	20	0	0	100,0%	88,9%	95%	0,0%
	Total	28	34	2	1	64	0	2	93,5%	96,8%	95,3%	6,5%
Vegetal products ❹	a	7	11	1	3	22	0	0	90,9%	72,7%	81,8%	0,0%
	b	13	10	1	0	24	0	0	92,9%	100,0%	95,8%	0,0%
	c	7	15	1	0	23	0	1	87,5%	100,0%	95,7%	6,7%
	Total	27	36	3	3	69	0	1	90,9%	90,9%	91,3%	2,8%
Composite foods ❺	a	9	21	1	2	33	0	0	91,7%	83,3%	90,9%	0,0%
	b	15	24	4	3	46	0	0	81,8%	86,4%	84,8%	0,0%
	c	17	15	1	1	34	0	0	94,7%	94,7%	94,1%	0,0%
	Total	41	60	6	6	113	0	0	88,7%	88,7%	89,4%	0,0%
Environmental samples - General protocol ❻	a	14	13	2	0	29	0	0	87,5%	100,0%	93,1%	0,0%
	c	14	10	1	1	26	0	0	93,8%	93,8%	92,3%	0,0%
	Total	28	23	3	1	55	0	0	90,6%	96,9%	92,7%	0,0%
Environmental samples - Specific protocol ❼	b	28	29	1	3	61	0	0	96,9%	90,6%	93,4%	0,0%
	Total	28	29	1	3	61	0	0	96,9%	90,6%	93,4%	0,0%
Environmental samples - All protocols ❽	a	14	13	2	0	29	0	0	87,5%	100,0%	93,1%	0,0%
	b	28	29	1	3	61	0	0	96,9%	90,6%	93,4%	0,0%
	c	14	10	1	1	26	0	0	93,8%	93,8%	92,3%	0,0%
	Total	56	52	4	4	116	0	0	93,8%	93,8%	93,1%	0,0%
All categories	**Total**	**198**	**243**	**24**	**25**	**490**	**0**	**4**	**90,3%**	**89,9%**	**90%**	**1,65%**

The results for all categories are summarized in the table 7 below.

Table 7: summary of the results for all categories

Parameter	Formula EN ISO 16140-2 :2016	Results for all categories
Sensitivity of the alternative method (SE_{alt})	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\ \%$	90,3 %
Sensitivity of the reference method (SE_{ref})	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)} \times 100\ \%$	89,9 %
Relative trueness (RT)	$RT = \frac{(PA + NA)}{N} \times 100\ \%$	90 %
False positive ratio (FPR)	$FPR = \frac{FP}{NA} \times 100\ \%$	1,65 %

3.1.6. Analysis of discordant results

Discordant results are examined according to the standard ISO 16140-2: 2016.
The negative deviations are given in table 8 and the positive deviations in table 9.

Twenty-four negative deviations were observed: 13 from naturally contaminated samples and 11 from artificially contaminated samples. Among these 24 samples, no typical colony was able to be recovered from the enriched LPT broths, except for sample R13.

However, it's important to note that typical colonies were recovered:

- After isolation of the LPT broth for 1 sample: R13,
- After storage of the broth at 2-8°C for 72 h for 3 samples: B5, C13 and D13,
- After a subculture in LX or LPT broth for 3 samples: L2, M1 and W26.

Finally, it seems that the threshold of the method was not reached in the LPT broth for 7 samples, distributed on all categories and on all types of products.

The remaining 17 negative deviations most probably come from the nature of the study design. In an unpaired study, because of the difference of sampling between both methods, and the use of naturally contaminated samples or samples contaminated at low levels, no cell of *Listeria* may have been present in the sampling of one of the two methods.

Twenty-five positive deviations were observed: 15 from naturally contaminated samples and 10 from artificially contaminated samples, that may also come from the unpaired study design.

The results obtained by the two confirmation protocols are the same.

Four samples analysed during the initial validation study (F4, G1, W4 and M10) gave a positive result with the VIDAS LPT test but could not confirmed by the test of the ISO method.

Table 8: summary of the negative deviations (NT: not tested)

Category	Sample number	Food item	Type	Inocula-tion level CFU/25g	Direct assay			Broth storage at 2-8°C			Additional confirmation ISO 16140-2 tests
					VIDAS test	Confirmation	Concordance	VIDAS test	Confirmation	Concordance	Confirmation
❶	J3	Frozen beef	a	/	-	-	**ND**	**-**	-	**ND**	-
	J7	Chicken filet	a	/	-	-	**ND**	**-**	-	**ND**	-
	J5	Sausage	c	/	-	-	**ND**	**-**	-	**ND**	-
	D2	White ham	c	/	-	-	**ND**	**-**	-	**ND**	-
❷	C13	Goat cheese	b	10,6	-	-	**ND (FN)**	**+**	*L. monocytogenes*	**PA**	NT
	1746539	Goat cheese	b	2,6	-	-	**ND**	**-**	-	**ND**	-
	1758381	Goat cheese	b	2,4	-	-	**ND**	**-**	-	**ND**	-
	1758382	Goat cheese Rocamadour	b	2,4	-	-	**ND**	**-**	-	**ND**	-
	1746543	Buttercream buchette	c	2,6	-	-	**ND**	**-**	-	**ND**	-
❸	W26	Seafood cocktail	a	/	-	-	**ND (FN)**	**+**	*L. monocytogenes*	**PA**	*L. monocytogenes*
	W18	Grey shrimps	a	6,0	-	-	**ND**	**-**	-	**ND**	NT
❹	D13	Salad mix	b	/	-	-	**ND (FN)**	**+**	*L. monocytogenes*	**PA**	NT
	M1	Tabbouleh peppers olives	c	/	-	-	**ND (FN)**	**-**	-	**ND (FN)**	*L. monocytogenes*
	1778841	Apple	a	1,8	-	-	**ND**	**-**	-	**ND**	-
❺	VP64	Tomato and herring potatoes	a	/	-	-	**ND**	**-**	-	**ND**	-
	VP18	Potatoes, egg and tortillas	b	0,8	-	-	**ND**	**-**	-	**ND**	-
	VP19	Bacon and cheese pie	b	0,8	-	-	**ND**	**-**	-	**ND**	-
	B5	Pizza ham mushrooms	b	/	-	-	**ND (FN)**	**+**	*L. welshimeri*	**PA**	/
	B9	Seafood paella	b	/	-	-	**ND**	**-**	-	**ND**	-
	B7	Coffee opera	c	/	-	-	**ND**	**-**	-	**ND**	/
❻ **GP**	VP83	Rinse water 1	a	1,2	-	-	**ND**	**-**	-	**ND**	-
	R13	Meat grinder residue	c	/	-	*L. welshimeri*	**ND (FN)**	**-**	*L. welshimeri*	**ND (FN)**	NT
	1770875	Fish industry wash water	a	2,6	-	-	**ND**	**-**	-	**ND**	-
❼ **SP**	L2	Blade of large knife	b	/	-	-	**ND (FN)**	**-**	-	**ND (FN)**	*L. monocytogenes*

Table 9: summary of the positive deviations (h: with halo; wo h: without halo)

Category	Sample number	Sample	Type	Inoculation level	Reference method ISO 11290-1						VIDAS LPT method				
					Half fraser		Fraser		Confirmation	Result	VIDAS test	Conf. O&A and PALCAM	Conf. ISO	Result	Concordance
					O&A	PALCAM	O&A	PALCAM							
❶	B6	Frozen ground beef	a	/	Ø	Ø	Ø	Ø	/	**A**	+	+MB	*L. welshimeri*	**P**	**PD**
	W10	Chicken filet	a	/	Ø	Ø	Ø	Ø	/	**A**	+	+LB	*L. monocytogenes* *L. welshimeri*	**P**	**PD**
	W11	Chicken breast	a	/	Ø	Ø	Ø	Ø	/	**A**	+	+MA	*L. monocytogenes*	**P**	**PD**
	M3	Sausage	c	/	Ø	Ø	Ø	Ø	/	**A**	+	+HA	*L. monocytogenes*	**P**	**PD**
	1746520	Hash Parmentier	b	/	Ø	EL	Ø	EL	/	**A**	+	AM (h)	*L. monocytogenes*	**P**	**PD**
	1746521	White sausage	b	/	EL	Ø	Ø	EL	/	**A**	+	AM (h)	*L. monocytogenes*	**P**	**PD**
❷	B15	Raw milk tomme	a	/	-LE	-LE	-LE	-LE	/	**A**	+	+MB	*L. monocytogenes*	**P**	**PD**
	H12	Raw milk tome d'Arbois	a	/	Ø	Ø	Ø	Ø	/	**A**	+	+MB	*L. innocua*	**P**	**PD**
	1746523	Cottage cheese	c	/	Ø	EL	Ø	EL	/	**A**	+	AL (h)	*L. monocytogenes*	**P**	**PD**
	1746526	Fresh cream	c	/	Ø	EM	EL	EL	/	**A**	+	AL (wo h)	*L. seeligeri*	**P**	**PD**
	1758380	Goat cheese	b	2,4	EL	EM	EM	EM	/	**A**	+	BM (wo h)	*L. innocua*	**P**	**PD**
❸	1758376	Shrimps, salmon, mussels and scallops	c	0,8	DL (wo h)	EM	EL	Ø	/	**A**	+	DM (wo h)	*L.welshimeri*	**P**	**PD**
❹	1746546	Parsley	a	1,6	EL	EL	EM	EM	/	**A**	+	AM (h)	*L. monocytogenes*	**P**	**PD**
	1746548	Spinach	a	1,6	EM	EM	EL	EL	/	**A**	+	BM (h)	*L. monocytogenes*	**P**	**PD**
	177843	Radish	a	1,8	EM	EM	Ø	EM	/	**A**	+	AM (h)	*L. innocua*	**P**	**PD**
❺	VP68	Salad chicken and vegetables	a	8	0Ø	0Ø	0Ø	0Ø	/	**A**	+	1L	*L. ivanovii*	**P**	**PD**
	H6	Tuna bagnat	a	/	-LE	-LE	-ME	-ME	/	**A**	+	+LC	*L. welshimeri*	**P**	**PD**
	VP12	Surimi torti	b	1	0Ø	0H	0H	0H	/	**A**	+	0M	*L. seeligeri*	**P**	**PD**
	VP32	Chickpeas and carrots	b	1,2	0L	0L	0Ø	0Ø	/	**A**	+	1L	*L. innocua*	**P**	**PD**
	VP24	Duck polenta and vegetables	b	1,8	0Ø	0L	0L	0L	/	**A**	+	2L	*L. monocytogenes*	**P**	**PD**
	VP20	Pattes d'ours	c	0,8	0Ø	0L	0L	0M	/	**A**	+	0L	*L. monocytogenes*	**P**	**PD**
❻ **GP**	A13	Meat grinder residue	c	/	Ø	Ø	Ø	Ø	/	**A**	+	+LA	*L. monocytogenes*	**P**	**PD**
❼ **SP**	L6	Slicer plate	b	/	-LE	-LE	-ME	-ME	/	**A**	+	+LD	*L. monocytogenes*	**P**	**PD**
	L7	Mixer blade	b	/	-ME	-ME	-ME	-ME	/	**A**	+	+MC	*L. monocytogenes*	**P**	**PD**
	L9	Cutting board	b	/	-ME	-ME	-ME	-ME	/	**A**	+	+HB	*L. monocytogenes*	**P**	**PD**

3.1.7. Calculation and interpretation of data

Table 10 shows the difference between negative deviations and positive deviations and the acceptability limits.

Table 10: acceptability limits

Category	Type	ND	PD	(ND-PD)	Acceptability limit (AL)	Observation
Meat products ❶	a	2	3	/	/	(ND-PD) ≤ AL:
	b	0	2			
	c	2	1			
	Total	4	6	-2	3	
Dairy products ❷	a	0	2	/	/	
	b	4	1			
	c	1	2			
	Total	5	5	0	3	
Seafood products ❸	a	2	0	/	/	
	b	0	0			
	c	0	1			
	Total	2	1	1	3	
Vegetal products ❹	a	1	3	/	/	
	b	1	0			
	c	1	0			
	Total	3	3	0	3	
Composites ❺	a	1	2	/	/	
	b	4	3			
	c	1	1			
	Total	6	6	0	3	
Environmental samples - GP ❻	a	2	0	/	/	
	c	1	1			
	Total	3	1	2	3	
Environmental samples – SP ❼	b	1	3	/	/	
	Total	1	3	-2	3	
Environmental samples – All GP+SP ❽	a	2	0	/	/	
	b	1	3			
	c	1	1			
	Total	4	4	0	3	
All categories	***Total***	**24**	**25**	**-1**	**6**	

The observed values (ND – PD) are below the acceptability limit for each category and for all categories. The alternative method produces results comparable to the reference method.

3.1.8. Enrichment broth storage at 2 – 8°C for 72 hours

A stability study of the enriched broths stored at 5±3°C for 72 hours was performed on all positive and discordant samples. After storage, the broths were reanalyzed and confirmed.

During the initial validation study, for three samples (C13, D13, and B5), the result moved from negative deviation to a positive agreement after storage at 2-8°C for 72h. For three other samples (B13, B10 and L20), the result moved from a negative agreement to a positive deviation after storage at 2-8°C for 72h. In addition, for sample W26, the VIDAS assay was negative after 26 hours, positive

after storage at 2-8°C for 72h but unconfirmed after isolation. However as the transfer in LPT broth allowed to recover a *Listeria* strain, the result can be considered as a positive agreement.
During the renewal validation study, only one change was observed concerning the sample 1746526 for which the result moved from a positive deviation to a negative agreement.

Table 11 shows the difference between negative deviations and positive deviations and the acceptability limits.

Table 11: acceptability limits

Category	Type	ND	PD	(ND-PD)	Acceptability limit (AL)	Observation
Meat products ❶	a	2	3	/	/	(ND-PD) ≤ AL:
	b	0	2			
	c	2	1			
	Total	4	6	-2	3	
Dairy products ❷	a	0	3	/	/	
	b	3	1			
	c	1	1			
	Total	4	5	-1	3	
Seafood products ❸	a	1	0	/	/	
	b	0	0			
	c	0	1			
	Total	1	1	0	3	
Vegetal products ❹	a	1	3	/	/	
	b	0	1			
	c	1	0			
	Total	2	4	-2	3	
Composites ❺	a	1	2	/	/	
	b	3	3			
	c	1	1			
	Total	5	6	-1	3	
Environmental samples - GP ❻	a	2	0	/	/	
	c	1	1			
	Total	3	1	2	3	
Environmental samples – SP ❼	b	1	4	/	/	
	Total	1	4	-3	3	
Environmental samples – All GP+SP ❽	a	2	0	/	/	
	b	1	4			
	c	1	1			
	Total	4	5	-1	3	
All categories	***Total***	**20**	**27**	**-7**	**6**	

The alternative method produces results comparable to the reference method after storage of the broths for 3 days at 5±3°C.

3.1.9. Conclusion of the sensitivity study

The statistical tests of the EN ISO 16140-2:2016 standard conclude that the alternative method produces comparable results to the reference method.

3.2. Relative detection level study

3.2.1. Matrices used

Various "food matrix-strain" pairs were studied in parallel using the reference method and the alternative method, for the studied categories (cf. table 12).

Table 12: matrix-strain pairs for each category

Category	Couple matrix strain	Origin of the strain	Step of the validation
❶	Rillettes / *L. monocytogenes* L10	Rillettes	Initial validation study according to ISO 16140:2003 standard
❷	Raw milk / *L. ivanovii* L236	Roquefort	
❸	Smoked salmon/ *L. monocytogenes 1/2a* L5	Smoked salmon	
❹	Reb cabbage / *L. welshimeri* L174	Spinach on branch	
❻	Surface samples / *L. innocua* L131	Cutting board	
❺	Tabbouleh / *L. welshimeri* LIS.6.24	Tabbouleh	Additional tests according to ISO 16140-2:2016

The total flora of the matrix was determined and is set out in the results tables in appendix E.

3.2.2. Contamination protocol

3.2.2.1. Initial validation study for categories1,2,3,4 and 6

One negative control and 3 to 4 level of contaminations were tested.
Six replicates for each level of contamination were inoculated and analyzed by the reference method and the alternative method.

Artificial contamination was carried out in accordance with the requirements of the ISO 16140:2003.

3.2.2.2. Additional test for the category 5

Three levels of contamination were prepared consisting of a negative control level, a low level, and a higher level.

The negative control level shall not produce positive results. Five replicates were tested for this level.
The low level shall be the theoretical detection level, it was contaminated at 0.8 CFU per test portion to obtain fractional recovery results. Twenty replicates were tested for this level.
The higher level shall be just above the theoretical detection level, it was contaminated at 3,8 CFU per test portion. Five replicates were tested for this level.

The tabbouleh was contaminated using the seeding protocol. Bulk contaminations were performed on the matrix for the different levels of contamination, then the matrix was stored at 5±3°C for two days before analysis. Samples were then analyzed by the reference and the alternative method.

3.2.3. Results

The detailed results tables are set out in Appendix E.

The RLOD is defined as the ratio of the LODs of the alternative method and the reference method: RLOD= LOD_{alt} / LOD_{ref}.

The RLODs calculations were performed according to the standard ISO 16140-2: 2016 using the Excel spreadsheet available for download at http://standards.iso.org/iso/16140, with unknown concentrations. Values of the RLODs are set out in table 13.

Table 13: RLODs values for all categories (RLOD: the estimated relative level of detection value, RLODU: the upper limit of the 95% confidence interval for RLOD, RLODL: the lower limit of the 95% confidence interval for RLOD, b=ln(RLOD): logarithm of the RLOD value, sd(b): standard deviation of b, z-Test statistic: absolute value of the test statistic of the z-Test with the null hypothesis H0: b=0, p-value: p-value of the z-Test)

Category	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value	Accep-tability limit
Meat products	**1,607**	0,620	4,162	0,474	0,476	0,996	0,319	**2,5**
Dairy products	**1,000**	0,435	2,298	0,000	0,416	0,000	1,000	
Seafood products	**0,602**	0,250	1,454	-0,507	0,441	1,150	1,750	
Vegetal products	**0,607**	0,223	1,655	-0,499	0,501	0,995	1,680	
Composite foods	**1,000**	0,466	2,145	0,000	0,382	0,000	1,000	
Environmental samples	**1,255**	0,427	3,686	0,227	0,539	0,421	0,673	
Combined	**0,927**	0,636	1,350	-0,076	0,188	0,406	1,315	

The LOD_{50} calculations according to Wilrich & Wilrich POD-LOD calculation program - version 11, are given in Table 14.

Table 14: LOD50% for the alternative and reference method

Matrix	Strain	LOD50% (CFU/25g) alternative method	LOD50% (CFU/25g) Reference method
Rillettes	*Listeria monocytogenes*	0,655	0,435
Raw milk	*Listeria ivanovii*	0,489	0,458
Smoked salmon	*Listeria monocytogenes*	0,470	0,659
Red cabage	*Listeria welshimeri*	0,441	0,753
Tabbouleh	*Listeria welshimeri*	0,521	0,521
Surface sample	*Listeria innocua*	0,565	0,481
Combined results		**0,521**	**0,537**

3.2.4. Interpretation and conclusion

The RLODs values are below the acceptability limit set at 2.5, meaning that, as stated in ISO 16140-2:2016, the maximum increase in LOD of the alternative versus the reference method is not considered as relevant in consideration of the fitness for purpose of the method.

In conclusion, alternative and reference methods show similar LODs values for the detection of *Listeria* spp in the categories tested.

3.3. Inclusivity and exclusivity study

The inclusivity and exclusivity of the method are defined by analyzing, respectively, 50 positive strains and 30 negative strains.

3.3.1. Test protocols

- **Protocol for inclusivity**

For each of the *Listeria* strains tested, a culture in TSBYE was performed.
The LPT broth was inoculated by this culture at around 10 cells per 225 ml, then the complete protocol of the method was applied: incubation at 30°C for 26 hours and realization of the VIDAS LPT test. In case of a negative result, the Listeria strain was tested again using a food matrix (skimmed milk) for the enrichment step.

- **Protocol for exclusivity**

The non-target strains were cultured in TSBYE. A non-selective broth was then inoculated at 10^5 cells per ml and incubated at 37°C for 24 hours prior realization of the VIDAS LPT test.
In case of discordant result, a new test was realized with the complete protocol of the alternative method and with the reference method.

3.3.2. Results

The results are set out in Appendix F.
The 50 *Listeria* strains tested were detected but for the 3 strains of *Listeria grayi* tested, retests were necessary to obtain a positive result.
All the 30 non-target strains tested were negative with the VIDAS LPT test.

3.3.3. Conclusion

The inclusivity and the exclusivity of the alternative method are satisfactory.

3.4. Practicability

1. Storage conditions, shelf-life and modalities of utilization after first use

The storage temperature of the VIDAS LPT kit is 2-8°C.

The kit expiration date is shown on the box label and on the various vials.

The kit components should be stored at 2-8°C. If stored as recommended (pouch correctly resealed with desiccant after use, etc.), all the components will remain stable until the expiration date indicated on the label.

2. Time-to-result

Negative results are obtained in two days.
Positive results are obtained in three to five days depending on the confirmation protocol.

3. Common step with the reference method

The alternative method has no common step with the reference method.

3.5. Conclusion

The comparative study of the methods was performed according to the EN ISO 16140-2:2016 standard.

- **Sensitivity study**

The performance of VIDAS LPT method was compared to that of the EN ISO 11290-1:2017 reference method by analyzing 490 samples divided into six product categories.
The observed values (ND – PD) were below or equal to the acceptability limit for each category and for all categories after the initial test and after three days of conservation at 5±3°C.
Statistically, the alternative method produces results comparable to that of the reference method.

- **Relative level of detection study**

The relative detection level of VIDAS LPT method and reference method was evaluated by artificially contaminating six different products.
The relative level of detection of the alternative method was between 0,602 and 1,607 cells per test portion.
The VIDAS LPT method and the reference method showed similar LODs values for the detection of *Listeria* spp in the categories tested.

- **Inclusivity and exclusivity study**

The specificity of the method is satisfactory, all Listeria strains were detected, and no cross-reaction was observed with non-target strains.

4. Interlaboratory study

4.1. Study organization

- **Number of participating laboratories**: seventeen collaborators received samples.

- **Matrix used:** a cottage cheese was used as matrix for the interlaboratory study.

- **Strain used:** the strain used for contamination was a strain of *Listeria monocytogenes*, isolated from a dairy product.

- **Number of samples per laboratory:** 24 samples per collaborator were prepared for the reference method and 24 samples for the alternative method, broken down into 3 levels, with 8 samples per level. One additional sample, not artificially contaminated, was provided to the collaborators for the enumeration of the microorganisms of the matrix.

4.2. Control of the experimental parameters

4.2.1. Contamination level

- **Before inoculation**

The uncontaminated cottage cheese was analyzed according to the EN ISO 11290-1 reference method, to ensure the absence *of Listeria monocytogenes* (5 test portions). None of the 25 g test samples tested contained *Listeria monocytogenes*.
The natural flora present in the matrix was determined to be $3{,}0.10^9$ CFU per g.

- **After artificial contamination**

The contamination rates obtained in the matrix are set out in the table below:

Table 15: theoretical and actual contamination levels

Level	Samples	Theoretical target level (CFU / 25 g)	Real level (CFU / 25 g)
***L_0*: Level 0**	1-2-3-4-5-6-7-8-41-42-43-44-45-46-47-48	0	0
***L_1*: Low level**	9-10-11-12-13-14-15-16-33-34-35-36-37-38-39-40	3	3,5
***L_2*: High level**	17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32	30	30,8

4.2.2. Stability of the samples

The follow-up of the contamination level in Listeria monocytogenes was realized 48 hours after shipping, in the cottage cheese, on samples at levels L_1 by a MPN method and on samples at level L_2 by an enumeration on Ottaviani and Agosti agar plates.

Results are shown in table 16.

Table 16: stability of the samples

Day	L_1 (low level)	L_2 (high level)
D0	3,0	28
D2	3,6	70

No evolution of the contamination level was observed.

4.2.3. Shipping conditions (temperature and state of the samples)

The temperatures of the samples at reception for all the collaborators are given in table 17.

Table 17: temperature and shipping conditions

Collaborator	Temperature at reception		Comments
	Determined by collaborator	Determined by the probe	
A	5,1°C	4,8°C	
B	2,5°C	1,7°C	
C	2,8°C	1,0°C	
D	1,5°C	1,5°C	
E	5,6°C	2,4°C	
F	1,5°C	2,1°C	
G	Not communicated	-1,4°C	
H	Not communicated	2,3°C	Analyses not realized
I	3,8°C	3,6°C	
J	5,6°C	2,1°C	
K	2,3°C	3,1°C	
L	3,9°C	4,2°C	
M	0°C	2,5°C	
N	6,0°C	5,0°C	
O	5,0°C	5,6°C	
P	4,3°C	4,6°C	
Q	Not communicated	12,5°C	Analyses not realized

The temperature curves obtained with the temperature logger demonstrated that the temperatures were between 0 and 6°C during transport and thus less than 8°C until the receipt of the samples in the various laboratories.

Only laboratory G had a negative package shipment temperature (-1.4°C). The temperature on receipt was not recorded. The laboratory did not report any anomalies (no frozen samples).
Among the 17 collaborators, 16 received the samples on the day following the shipping. One collaborator (Q) received its shipment on the following day (D2).

The analyses were not performed by two laboratories (H and Q). They were excluded from the interpretation of the results.

As a result of transport conditions, 15 laboratories carried out the tests.

4.3. Test results

The post-confirmation positive results obtained by the collaborators and by the expert laboratory are set out in the following tables. The results of the enumeration of the microorganisms of the matrix ranged between $3{,}0.10^4$ CFU/g and $8{,}0.10^8$ CFU/g.

4.3.1. Expert laboratory results

The results of the expert laboratory are summarized in table 18.

Table 18: positive results obtained by expert laboratory by both methods.

Contamination level	Alternative method	Reference method
L_0	0/8	0/8
L_1	4/8	6/8
L_2	6/8	7/8

The high number of fractional positive results at levels L_1 and L_2 with both methods may be due to the presence and the growth of high levels of background lactic flora, confirmed by the low value of pH of the samples (4,3).

4.3.2. Collaborators results

Results of collaborators are shown in Table 19 and in Appendix G.

Collaborator F was excluded from the interpretation of the results due to abnormal results with the reference method only (absence of detection at level L_2).

The results of 14 collaborators were thus gathered.

Table 19: Positive results obtained with the reference and the alternative methods

Collaborators	Reference method			Alternative method		
	L_0	L_1	L_2	L_0	L_1	L_2
Collaborator A	0 / 8	**0 / 8**	**7 / 8**	0 / 8	**1 / 8**	**7 / 8**
Collaborator B	0 / 8	**3 / 8**	**7 / 8**	0 / 8	**1 / 8**	8 / 8
Collaborator C	0 / 8	**2 / 8**	**6 / 8**	0 / 8	**7 / 8**	8 / 8
Collaborator D	0 / 8	**1 / 8**	8 / 8	0 / 8	8 / 8	8 / 8
Collaborator E	0 / 8	**2 / 8**	8 / 8	0 / 8	**4 / 8**	8 / 8
Collaborator G	0 / 8	**2 / 8**	8 / 8	0 / 8	**2 / 8**	8 / 8
Collaborator I	0 / 8	8 / 8	8 / 8	0 / 8	8 / 8	8 / 8
Collaborator J	0 / 8	**5 / 8**	8 / 8	0 / 8	**7 / 8**	8 / 8
Collaborator K	0 / 8	**1 / 8**	8 / 8	0 / 8	**0 / 8**	**7 / 8**
Collaborator L	0 / 8	8 / 8	8 / 8	0 / 8	8 / 8	8 / 8
Collaborator M	0 / 8	8 / 8	8 / 8	0 / 8	8 / 8	8 / 8
Collaborator N	0 / 8	8 / 8	8 / 8	0 / 8	8 / 8	8 / 8
Collaborator O	0 / 8	8 / 8	8 / 8	0 / 8	**2 / 8**	8 / 8
Collaborator P	0 / 8	8 / 8	8 / 8	0 / 8	8 / 8	8 / 8
Total	0 / 112	64/ 112	108/ 112	0 / 112	72/ 112	110/ 112

4.3.3. Conclusion

The uncontaminated samples (level L_0) were all found negative with both methods.

For the lowest level of contamination (level L_1), among the 112 samples tested, 72 were found positive with the alternative method and 64 with the reference method.

Among the 112 samples tested at the highest level of contamination (level L_2), 110 were found positive with the alternative method and 108 with the reference method.

For the alternative method, the same results were obtained before and after confirmation.

Since the enrichment broth is different between the two methods and the TVC is significant (up to 10^8 CFU/g), the most likely hypothesis to explain these results is that the growth of the strain was inhibited by the background flora and did not reach the level of detection of each method.

Finally, it is thus possible to interpret the results from 14 laboratories.

The results of the reference method and the alternative method are consistent for the 14 laboratories selected, including a lot of fractional positive results alt levels L_1 and L_2.

4.4. Calculations and interpretation

4.4.1. Calculation of the specificity

The percentage specificity (SP) of the reference method and the alternative method is calculated, using the data after confirmation, based on the results of level L_0 as follows:

- Specificity of the reference method: $SP_{ref} = \left[1 - \left(\frac{P_0}{N-}\right)\right] \times 100\%$
- Specificity of the alternative method: $SP_{alt} = \left[1 - \left(\frac{CP_0}{N-}\right)\right] \times 100\%$

where:

N- is the number of all L_0 tests,

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

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

The results are the following:

- SP_{ref} = 100%
- SP_{alt} = 100%

4.4.2. Summary of the results

A summary of results obtained at levels 1 (L_1) and 2 (L_2), for which fractional positive results were obtained, is set out in table 20.

*Table 20: tests results for the two methods at level L1+L2 (PA: positive agreement, NA: negative agreement, ND: negative deviation, PD: positive deviation, PP: presumed positive before confirmation, *: for the collaborator F only with the DLIS response)*

Level	Alternative method	Reference method		
		Reference method positive (R+)	Reference method negative (R-)	Total
$L_1 + L_2$	Alternative method positive (A+)	PA = 160	PD = 22	182
	Alternative method negative (A-)	ND = 12 including 0 PPND	NA = 30 including 0 PPNA	42
	Total	172	52	224

4.4.3. Calculation of the sensitivity of the methods, relative trueness and false positive ratio

The sensitivity of the two methods, the relative trueness and the false positive ratio parameters are calculated with the data of the table 20, according to the formulas below:

- Sensitivity for the alternative method: $SE_{alt} = \frac{(PA+PD)}{(PA+ND+PD)} \times 100\%$

- Sensitivity for the reference method: $SE_{ref} = \frac{(PA+ND)}{(PA+ND+PD)} \times 100\%$
- Relative trueness: $RT = \frac{(PA+NA)}{N} \times 100\%$
- False positive ratio for the alternative method: $FP = \frac{FP}{NA} \times 100\%$

where N is the total number of samples (NA + PA + PD + ND) and FP is false positive results.
The results are the following:

- SE_{alt} = 93,8%
- SE_{ref} = 88,7%
- RT = 84,8%
- FP = 0%

4.4.4. Determination of the acceptability limit and conclusion

The difference between (ND – PD) for the levels where fractional recovery was obtained (L_1 + L_2) is calculated. The observed value found for (ND – PD) shall not be higher than the acceptability limit (AL). The AL is defined as [$(ND - PD)_{max}$] and calculated per level where fractional recovery was obtained as described below using the following three parameters:

- $(p+)_{ref} = \frac{P_x}{N_x}$, where

Px = number of samples with a positive result obtained with the reference method at level x, (L_1 or L_2) for all laboratories;
Nx = number of samples tested at level x (L_1 or L_2) with the reference method by all laboratories.

- $(p+)_{alt} = \frac{CP_x}{N_x}$, where

CPx = number of samples with a confirmed positive result obtained with the alternative method at level x (L_1 or L_2) for all laboratories;
Nx = number of samples tested at level x (L_1 or L_2) with the alternative method by all laboratories.

- $(ND - PD)_{max} = \sqrt{3N_x \times ((p+)_{ref} + (p+)_{alt} - 2\big((p+)_{ref} \times (p+)_{alt}\big))}$, where

Nx = the total number of samples tested for level x (L1 or L2) by all laboratories.

The AL is not met when the observed value is higher than the A*L*. When the AL is not met, investigations should be made (e.g. root cause analysis) in order to provide an explanation of the observed results.

Based on the AL and the additional information, it is decided whether the alternative method is regarded as not fit for purpose. The reasons for acceptance of the alternative method in case the AL is not met shall be stated in the study report.

In this study, fractional positive results are observed at level L_1 and at level L_2. The different parameters obtained by the calculation are detailed in the table below:

Table 21: values obtained for the determination of the acceptability limit

Level	Parameter	Value
L1 + L2	$(p+)_{ref}$	0.77
	$(p+)_{alt}$	0.81
	Acceptability limit: AL = $(ND-PD)_{max}$	15
	Observed value: ND-PD	-10
L1	$(p+)_{ref}$	0.57
	$(p+)_{alt}$	0.64
	Acceptability limit: AL = $(ND-PD)_{max}$	12.7
	Observed value: ND-PD	-8
L2	$(p+)_{ref}$	0.96
	$(p+)_{alt}$	0.98
	Acceptability limit: AL = $(ND-PD)_{max}$	4.2
	Observed value: ND-PD	-2

The value (ND-PD) is inferior to the acceptability limit, so the requirements of the EN ISO 16140-2:2016 standard are fulfilled.

4.4.5. Evaluation of the $LOD_{50\%}$, $LOD_{95\%}$ and RLOD

The RLOD, $LOD_{50\%}$ and $LOD_{95\%}$ are calculated using the Excel spreadsheet called RLOD_inter-lab_study_16140-2_AnnexF_ver1_28_28-06-2017 available at http://standards.iso.org/iso/16140.

The values for each method are presented in Table 22.

Table 22: values of LOD50% and LOD95% for reference and alternative method and value of RLOD for the alternative method (CFU/25 g)

Method	$LOD_{50\%}$	$LOD_{95\%}$	RLOD
Reference	4,06 [3,17 ; 5,20]	17,54 [13,69 ; 22,48]	0,73 [0,55 ; 0,98]
Alternative	2,97 [2,31 ; 3,81]	12,82 [9,97 ; 16,47]	

4.5. Conclusion

The data and their interpretation meet the requirements of the standard EN ISO 16140-2:2016. The performance of the alternative method and the reference method can be considered as equivalent.

5. General conclusion

The data and the interpretation of the methods comparison study and of the interlaboratory study fulfill the requirements of the standard EN ISO 16140-2:2016. The VIDAS LPT method is considered as equivalent to the standard EN ISO 11290-1:2007.

Le Lion d'Angers, April 09, 2024.

Guillaume MESNARD
Deputy technical manager

François Le Nestour
Head of the Microbiology Department

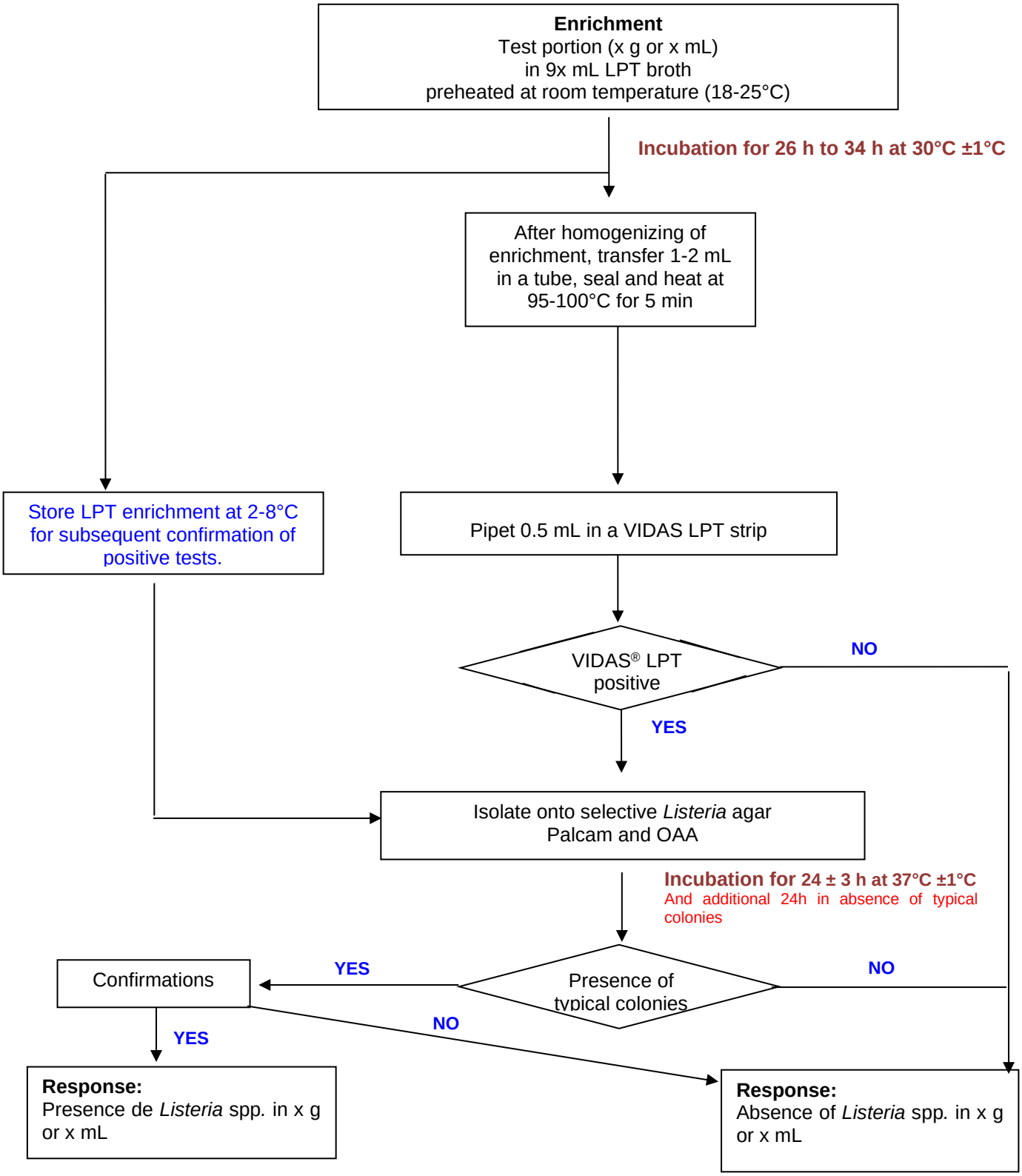
APPENDICES

Appendix A

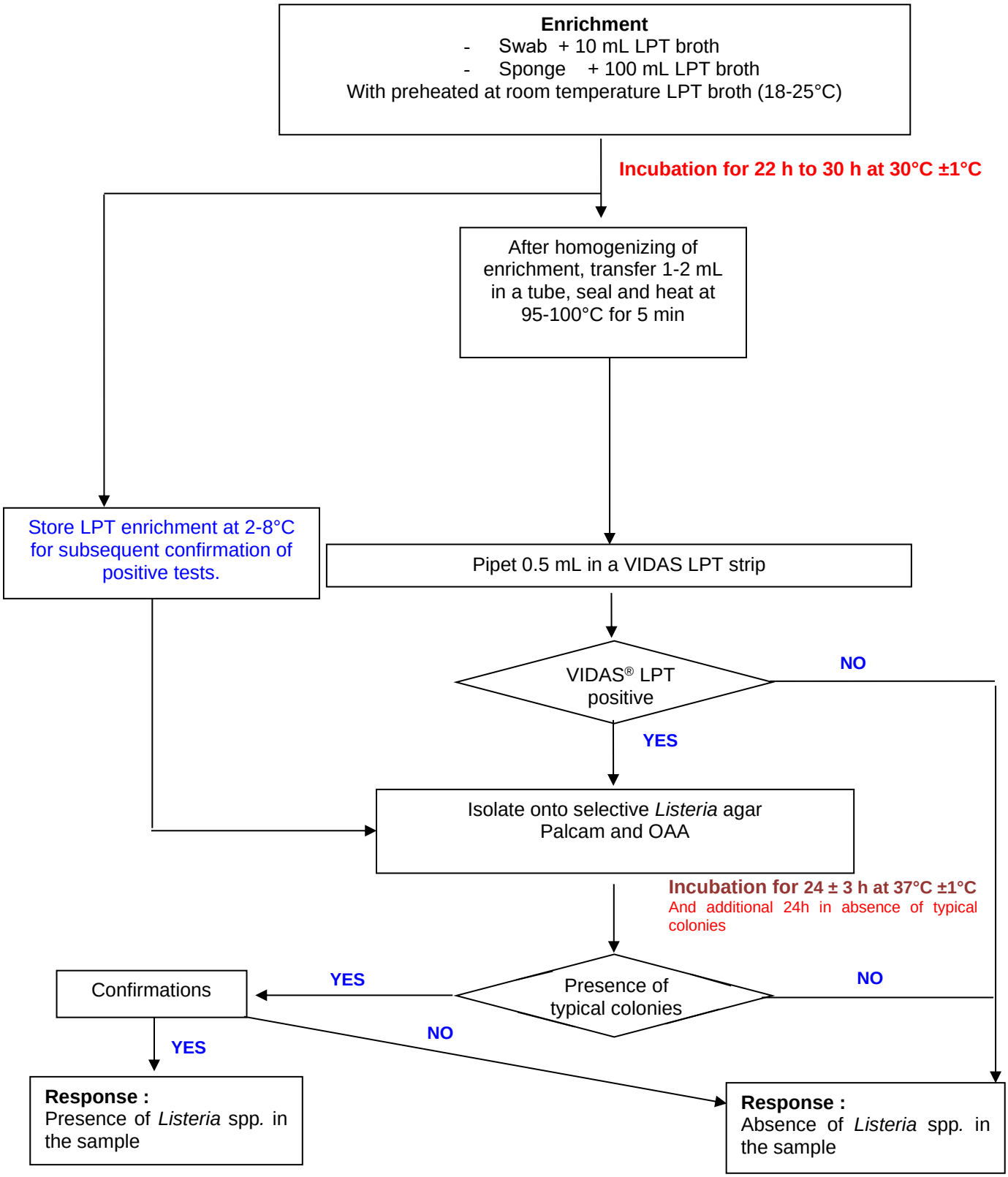
Protocols of

the alternative method

VIDAS® UP *Listeria* (VIDAS LPT) METHOD
General protocol

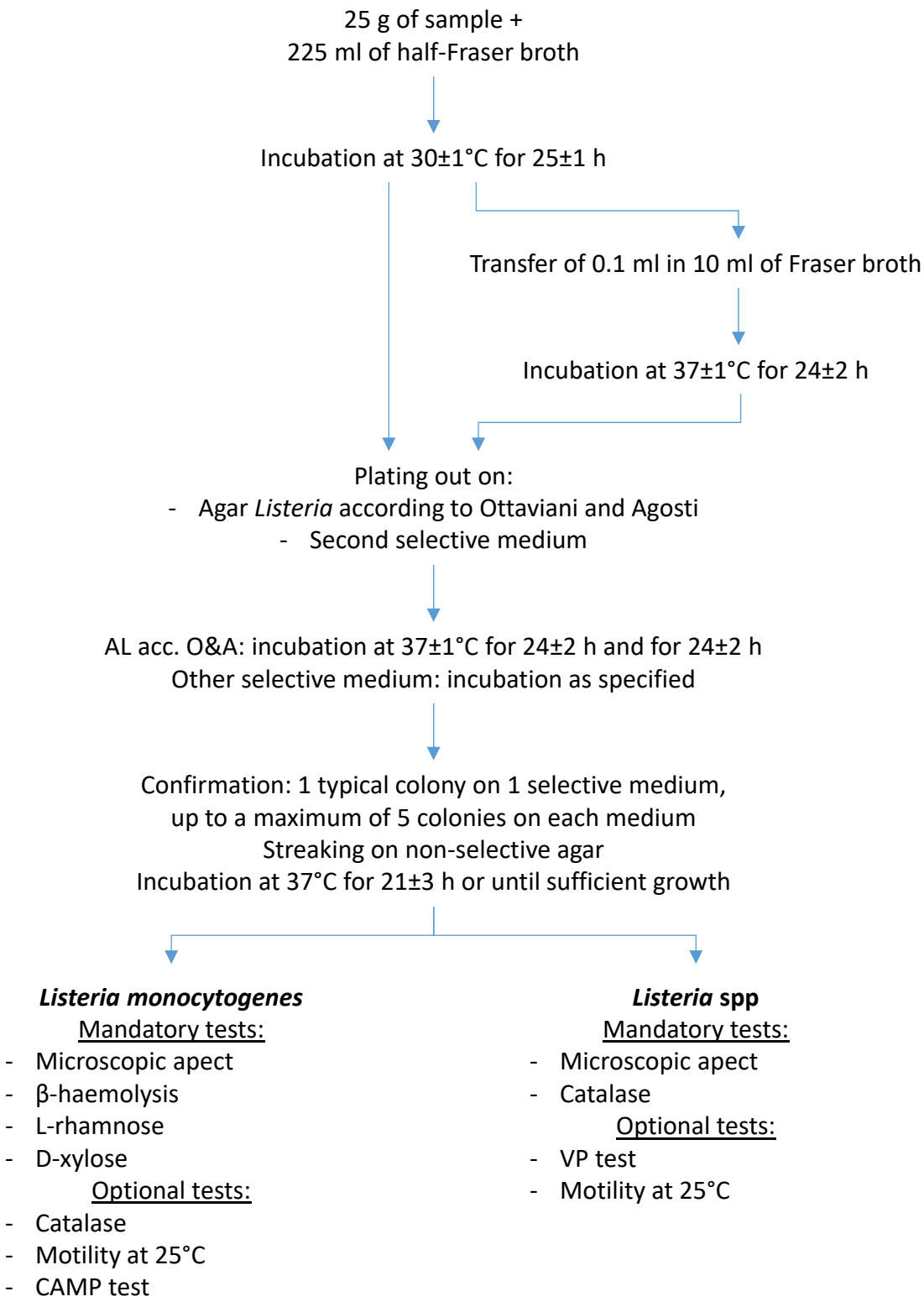


VIDAS® UP *Listeria* (VIDAS® LPT) METHOD
Specific protocole for surface samples



APPENDIX B
EN ISO 11290-1:2017

Diagram of the procedure as described in the standard



APPENDIX C - Artificial contaminations

Samples		Strains							
N°	Product	Code	Strain	Origin	Type of stress	Applied stress	Delta log	Level (CFU/test portion)	Result
A1	Brie de Meaux raw milk	L7	*Listeria monocytogenes ½ a*	Munster crust	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,52	0,6	-
A2	Tomme de Savoie	L7	*Listeria monocytogenes ½ a*	Munster crust	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,52	0,8	-
A3	Morbier with raw milk	L7	*Listeria monocytogenes ½ a*	Munster crust	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,52	0,4	-
A4	Coulommiers with raw milk	L7	*Listeria monocytogenes ½ a*	Munster crust	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,52	1	-
A9	Smoked salmon pizza	L12	*Listeria monocytogenes ½ a*	Smoked salmon	Spiking	45 min étuve 55°C puis 30 min à -80°C	1,46	20,7	-
C20	Raw milk	L11	*Listeria monocytogenes ½ a*	Munster crust	Spiking	46 min étuve 55°C puis 30 min à -80°C	0,99	26,5	-
C13	Raw goat milk cheese	L11	*Listeria monocytogenes ½ a*	Munster crust	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,99	10,6	+
W23	Bretonne poellee	L112	*Listeria innocua*	Fries	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,35	14,0	+
W24	Sliced carrots	L112	*Listeria innocua*	Fries	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,35	7,0	+
H3	Norway smoked salmon	L113	*Listeria innocua*	Smoked halibut	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,57	7,3	+
H4	Norway smoked salmon	L113	*Listeria innocua*	Smoked halibut	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,57	5,8	+
H14	Norway smoked salmon	L113	*Listeria innocua*	Smoked halibut	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,57	4,4	+
H15	Norway smoked salmon	L113	*Listeria innocua*	Smoked halibut	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,57	2,9	+
W15	Crab surimi crumbs	L144	*Listeria innocua 6b*	Trash surface	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,93	8,0	+
W16	Shrimp terrine	L144	*Listeria innocua 6b*	Trash surface	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,93	4,0	+
W18	Grey shrimps	L144	*Listeria innocua 6b*	Trash surface	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,93	6,0	+
W20	Breaded fish with cheese	L144	*Listeria innocua 6b*	Trash surface	Spiking	45 min étuve 55°C puis 30 min à -80°C	0,93	12,0	+
R9	Seafood pasta	L155	*Listeria welshimeri*	Salmon fillet	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,53	10,4	+
R12	Mackerel fillet	L155	*Listeria welshimeri*	Salmon fillet	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,53	20,8	+
R19	Potable water	L164	*Listeria ivanovii ssp londoniensis*	9101013 Biom, Sol	Spiking	45 min étuve 55°C puis 30 min à -80°C	1,31	9,7	+
R5	Vegetable gardener	L174	*Listeria welshimeri*	Spinach on branch	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,68	8,8	+
R6	Zucchini	L174	*Listeria welshimeri*	Spinach on branch	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,68	17,6	+
R22	Ckicken cutting waste	L164	*Listeria ivanovii ssp londoniensis*	9101013 Biom, Sol	Spiking	45 min étuve 55°C puis 30 min à -80°C	1,31	29,0	-
R24	Turkey waste	L175	*Listeria innocua*	Environment water	Spiking	45 min étuve 55°C puis 30 min à -80°C	1,2	12,5	+
R25	Calf cutting waste	L164	*Listeria ivanovii ssp londoniensis*	9101013 Biom, Sol	Spiking	45 min étuve 55°C puis 30 min à -80°C	1,31	19,4	-
W33	Frozen water	L175	*Listeria innocua*	Environment water	Spiking	45 min étuve 55°C puis 30 min à -80°C	1,08	11,7	+
C17	Fish fillet with hollandaise sauce	L20	*Listeria monocytogenes ½*	Smoked salmon	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	2,04	13,2	+
C18	Puffy smoked	L20	*Listeria monocytogenes ½*	Smoked salmon	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	2,04	33,0	-
R20	New water	L217	*Listeria monocytogenes 4b*	Environment (wast filter)	Spiking	45 min étuve 55°C puis 30 min à -80°C	1,53	13,0	+
C15	Scallop shell with bechamel sauce	L20	*Listeria monocytogenes ½*	Smoked salmon	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	2,04	19,8	-
G3	Salmon shell	L155	*Listeria welshimeri*	Salmon fillet	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,30	0,3	-
G4	Surimi shell	L155	*Listeria welshimeri*	Salmon fillet	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,30	0,2	-
G5	Scallops with leek	L155	*Listeria welshimeri*	Salmon fillet	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,30	0,4	-
G6	Salmon shell	L155	*Listeria welshimeri*	Salmon fillet	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,30	0,2	-
R11	Fish terrine	L155	*Listeria welshimeri*	Salmon fillet	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,53	15,6	-
I13	Pasteurized goat milk cheese	L64	*Listeria innocua*	Epoisses	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,65	10,8	+
R4	Gratted carrots	L66	*Listeria innocua*	Spinach	Spiking	4 jours +4°C avec 15% NaCl puis 30 min à -80°C	0,32	11,0	+
VP6	Quiche lorraine	LIS.5.11	*L. seeligeri*	Chicken sandwich with crudeness	Seeding	48h at 5 ± 3 °C	/	0,8	-
VP7	Chicken kebab	LIS.5.11	*L. seeligeri*	Chicken sandwich with crudeness	Seeding	48h at 5 ± 3 °C	/	0,8	-
VP8	3 cheese pizza	LIS.5.11	*L. seeligeri*	Chicken sandwich with crudeness	Seeding	48h at 5 ± 3 °C	/	0,8	-
VP9	Chive of endive with ham	LIS.5.11	*L. seeligeri*	Chicken sandwich with crudeness	Seeding	48h at 5 ± 3 °C	/	0,8	-
VP10	Apple tart	LIS.5.12	*L. seeligeri*	Chicken burger	Seeding	48h at 5 ± 3 °C	/	1,0	-
VP11	Sandwich tomato, green salad, chicken	LIS.5.12	*L. seeligeri*	Chicken burger	Seeding	48h at 5 ± 3 °C	/	1,0	-
VP12	Surimi torti	LIS.5.12	*L. seeligeri*	Chicken burger	Seeding	48h at 5 ± 3 °C	/	1,0	+
VP13	Moussaka	LIS.5.12	*L. seeligeri*	Chicken burger	Seeding	48h at 5 ± 3 °C	/	1,0	-
VP14	Fruit tart	LIS.6.24	*Listeria welshimeri*	Tabbouleh	Seeding	48h at 5 ± 3 °C	/	3,8	+
VP15	Cooked potatoes sald and Strasbourg sausage	LIS.6.24	*Listeria welshimeri*	Tabbouleh	Seeding	48h at 5 ± 3 °C	/	3,8	+
VP16	Caramelized chicken with rice and vegetables	LIS.2.7	*L. innocua*	Sandwich with chicken and bacon	Seeding	48h at 5 ± 3 °C	/	8,6	+

APPENDIX C - Artificial contaminations

Samples		Strains							
N°	Product	Code	Strain	Origin	Type of stress	Applied stress	Delta log	Level (CFU/test portion)	Result
VP17	Caramel pork and rice oinion sauce	LIS.2.7	*L. innocua*	Sandwich with chicken and bacon	Seeding	48h at 5 ± 3 °C	/	8,6	+
VP18	Tortilla with potatoes, onions, egge	LIS.4.6	*L. monocytogenes 1/2a*	Ham and emmental sandwich	Seeding	48h at 5 ± 3 °C	/	0,8	+
VP19	Pie with cotted cheese and smoked bacon	LIS.4.6	*L. monocytogenes 1/2a*	Ham and emmental sandwich	Seeding	48h at 5 ± 3 °C	/	0,8	+
VP20	Bear paws	LIS.4.6	*L. monocytogenes 1/2a*	Ham and emmental sandwich	Seeding	48h at 5 ± 3 °C	/	0,8	+
VP21	Flan	LIS.4.4	*L. monocytogenes 1/2a*	Skewer of goat cheese and zucchini	Seeding	48h at 5 ± 3 °C	/	1,8	+
VP22	ParisBrest	LIS.4.4	*L. monocytogenes 1/2a*	Skewer of goat cheese and zucchini	Seeding	48h at 5 ± 3 °C	/	1,8	+
VP23	Poultry pasta with tomato and basil sauce	LIS.4.4	*L. monocytogenes 1/2a*	Skewer of goat cheese and zucchini	Seeding	48h at 5 ± 3 °C	/	1,8	+
VP24	Polenta duck confit and vegetables	LIS.4.4	*L. monocytogenes 1/2a*	Skewer of goat cheese and zucchini	Seeding	48h at 5 ± 3 °C	/	1,8	+
VP29	Carbonara tagliatelle	LIS.2.7	*L. innocua*	Sandwich with chicken and bacon	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP30	Pizza 4 cheese	LIS.2.7	*L. innocua*	Sandwich with chicken and bacon	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP31	Pizza ham and mushrooms	LIS.2.7	*L. innocua*	Sandwich with chicken and bacon	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP32	Falafels, chickpeas and carrots	LIS.2.7	*L. innocua*	Sandwich with chicken and bacon	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP33	Chicken and emmental croissant	LIS.4.5	*L. monocytogenes 1/2a*	Ham and crudeness	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP34	Surimi and pinapple salad	LIS.4.5	*L. monocytogenes 1/2a*	Ham and crudeness	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP35	Bouche à la reine	LIS.4.5	*L. monocytogenes 1/2a*	Ham and crudeness	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP68	Chicken salad and raw vegetables	LIS.3.13	*L. ivanovii*	Raw lamb meat	Seeding	48h at 5 ± 3 °C	/	8,0	+
VP69	Potato salad sausage	LIS.3.13	*L. ivanovii*	Raw lamb meat	Seeding	48h at 5 ± 3 °C	/	8,0	+
VP70	Farmes cheese parmesan	LIS.3.13	*L. ivanovii*	Raw lamb meat	Seeding	48h at 5 ± 3 °C	/	8,0	+
VP71	Dry sausage sandwich	LIS.6.24	*Listeria welshimeri*	Tabbouleh	Seeding	48h at 5 ± 3 °C	/	5,0	-
VP72	Lyon rosette sandwich	LIS.6.24	*Listeria welshimeri*	Tabbouleh	Seeding	48h at 5 ± 3 °C	/	5,0	+
VP73	Red beets	LIS.6.24	*Listeria welshimeri*	Tabbouleh	Seeding	48h at 5 ± 3 °C	/	5,0	+
VP74	Rum baba whipped cream	LIS.6.25	*Listeria welshimeri*	Coconut pearl	Seeding	48h at 5 ± 3 °C	/	3,4	+
VP75	Butter cream and vanilla buchette	LIS.6.25	*Listeria welshimeri*	Coconut pearl	Seeding	48h at 5 ± 3 °C	/	3,4	+
VP76	Butter cream and coffe buchette	LIS.6.25	*Listeria welshimeri*	Coconut pearl	Seeding	48h at 5 ± 3 °C	/	3,4	+
VP77	Cream cone pastry and vanilla sugar	LIS.6.25	*Listeria welshimeri*	Coconut pearl	Seeding	48h at 5 ± 3 °C	/	3,4	+
VP82	Washing station water 1	LIS.2.11	*L. innocua*	Raw cow milk filter	Seeding	48h at 5 ± 3 °C	/	1,2	-
VP83	Rinsing water 1	LIS.2.11	*L. innocua*	Raw cow milk filter	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP85	Rinsing water 3	LIS.4.16	*L. monocytogenes 1/2a*	Surface control sewer	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP84	Rinsing water 2	LIS.2.11	*L. innocua*	Raw cow milk filter	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP86	Washing station water 2	LIS.4.16	*L. monocytogenes 1/2a*	Surface control sewer	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP87	Swab 1	LIS.4.16	*L. monocytogenes 1/2a*	Surface control sewer	Seeding	48h at 5 ± 3 °C	/	1,2	+
VP88	Swab 2	LIS.5.3	*Listeria seligeri*	Goat milk filter	Seeding	48h at 5 ± 3 °C	/	1,4	+
VP89	Sponge 1	LIS.5.3	*Listeria seeligeri*	Goat milk filter	Seeding	48h at 5 ± 3 °C	/	1,4	+
1746540	Goat cheese	HBP652	*Listeria monocytogenes 4b*	Raw goat milk cheese	Seeding	72h at 5 ± 3 °C	/	2,6	-
1758380	Goat cheese	BLV059	*Listeria innocua*	Pasteurized milk Gorgonzola AOP	Seeding	72h at 5 ± 3 °C	/	2,4	-
1746539	Raw goat milk cheese	HBP652	*Listeria monocytogenes 4b*	Raw goat milk cheese	Seeding	72h at 5 ± 3 °C	/	2,6	+
1746541	Goat cheese	HBP652	*Listeria monocytogenes 4b*	Raw goat milk cheese	Seeding	72h at 5 ± 3 °C	/	2,6	+
1746543	Butter cream buchette	HBP652	*Listeria monocytogenes 4b*	Raw goat milk cheese	Seeding	72h at 5 ± 3 °C	/	2,6	+
1746544	Quiche lorraine	HBP652	*Listeria monocytogenes 4b*	Raw goat milk cheese	Seeding	72h at 5 ± 3 °C	/	2,6	+
1746542	Flan zucchini parmesan emmental	HBP652	*Listeria monocytogenes 4b*	Raw goat milk cheese	Seeding	72h at 5 ± 3 °C	/	2,6	-
1758378	Roquefort (Ewe cheese)	BLV059	*Listeria innocua*	Pasteurized milk Gorgonzola AOP	Seeding	72h at 5 ± 3 °C	/	2,4	+
1758379	Kukulu (Ewe cheese)	BLV059	*Listeria innocua*	Pasteurized milk Gorgonzola AOP	Seeding	72h at 5 ± 3 °C	/	2,4	+
1758380	Fresh goat cheese	BLV059	*Listeria innocua*	Pasteurized milk Gorgonzola AOP	Seeding	72h at 5 ± 3 °C	/	2,4	+
1758381	Clocher de mon village (Goat cheese)	BLV059	*Listeria innocua*	Pasteurized milk Gorgonzola AOP	Seeding	72h at 5 ± 3 °C	/	2,4	+
1758382	Rocamadour (goat cheese)	BLV059	*Listeria innocua*	Pasteurized milk Gorgonzola AOP	Seeding	72h at 5 ± 3 °C	/	2,4	+
1758383	Chocolat eclair	BLV059	*Listeria innocua*	Pasteurized milk Gorgonzola AOP	Seeding	72h at 5 ± 3 °C	/	2,4	+
1758396	Cheese souffle	QHW317	*Listeria innocua*	Pasteurized milk Gorgonzola	Seeding	72h at 5 ± 3 °C	/	2,6	+
1758397	Custard	QHW317	*Listeria innocua*	Pasteurized milk Gorgonzola	Seeding	72h at 5 ± 3 °C	/	2,6	+

APPENDIX C - Artificial contaminations

Samples		Strains							
N°	Product	Code	Strain	Origin	Type of stress	Applied stress	Delta log	Level (CFU/test portion)	Result
1758398	Panna cotta	QHW317	*Listeria innocua*	Pasteurized milk Gorgonzola	Seeding	72h at 5 ± 3 °C	/	2,6	+
1758399	Tomato mozzarella cake	QHW317	*Listeria innocua*	Pasteurized milk Gorgonzola	Seeding	72h at 5 ± 3 °C	/	2,6	+
1758455	Ewe cheese	JAR249	*Listeria monocytogenes 1/2b*	Pasteurized milk cheese	Seeding	72h at 5 ± 3 °C	/	2,8	+
1758456	Goat cheese	JAR249	*Listeria monocytogenes 1/2b*	Pasteurized milk cheese	Seeding	72h at 5 ± 3 °C	/	2,8	+
1758372	Smoked trout	AJP106	*Listeria welshimeri*	Salmon steak	Seeding	72h at 5 ± 3 °C	/	0,8	+
1758373	Smoked pollack	AJP106	*Listeria welshimeri*	Salmon steak	Seeding	72h at 5 ± 3 °C	/	0,8	+
1758374	Smoked ell	AJP106	*Listeria welshimeri*	Salmon steak	Seeding	72h at 5 ± 3 °C	/	0,8	+
1758375	Cold salmon shell	AJP106	*Listeria welshimeri*	Salmon steak	Seeding	72h at 5 ± 3 °C	/	0,8	+
1758376	Shrimp, St Jacques, salmon and mussel	AJP106	*Listeria welshimeri*	Salmon steak	Seeding	72h at 5 ± 3 °C	/	0,8	+
1758377	St Jacques cassolette with vegetables	AJP106	*Listeria welshimeri*	Salmon steak	Seeding	72h at 5 ± 3 °C	/	0,8	+
1746486	Gratted carrots	RCJ280	*Listeria monocytogenes 4b*	Black white flour	Seeding	72h at 5 ± 3 °C	/	1,6	-
1746545	Leek	RCJ280	*Listeria monocytogenes 4b*	Black white flour	Seeding	72h at 5 ± 3 °C	/	1,6	+
1746546	Parsley	RCJ280	*Listeria monocytogenes 4b*	Black white flour	Seeding	72h at 5 ± 3 °C	/	1,6	+
1746547	Salad	RCJ280	*Listeria monocytogenes 4b*	Black white flour	Seeding	72h at 5 ± 3 °C	/	1,6	+
1746548	Spinach	RCJ280	*Listeria monocytogenes 4b*	Black white flour	Seeding	72h at 5 ± 3 °C	/	1,6	+
1746549	Tomato	RCJ280	*Listeria monocytogenes 4b*	Black white flour	Seeding	72h at 5 ± 3 °C	/	1,6	+
1770830	Rinsing water egg products	PSX189	*Listeria welshimeri*	Butcher's table cloth	Seeding	72h at 5 ± 3 °C	/	0,8	+
1770831	Pasteurizing rinse water	PSX189	*Listeria welshimeri*	Butcher's table cloth	Seeding	72h at 5 ± 3 °C	/	0,8	+
1770832	Waste water tank 1	PSX189	*Listeria welshimeri*	Butcher's table cloth	Seeding	72h at 5 ± 3 °C	/	0,8	+
1770833	Waste water tank 2	PSX189	*Listeria welshimeri*	Butcher's table cloth	Seeding	72h at 5 ± 3 °C	/	0,8	+
1770834	Waste water tank 3	PSX189	*Listeria welshimeri*	Butcher's table cloth	Seeding	72h at 5 ± 3 °C	/	0,8	+
1770835	Water process animal feed industry	PSX189	*Listeria welshimeri*	Butcher's table cloth	Seeding	72h at 5 ± 3 °C	/	0,8	+
1770836	Poultry offal residues	RAX819	*Listeria monocytogenes 3a*	Butcher siphon sponge	Seeding	72h at 5 ± 3 °C	/	2,4	+
1770837	Poultry skins residues	RAX819	*Listeria monocytogenes 3a*	Butcher siphon sponge	Seeding	72h at 5 ± 3 °C	/	2,4	+
1770838	Poultry viscous residues	RAX819	*Listeria monocytogenes 3a*	Butcher siphon sponge	Seeding	72h at 5 ± 3 °C	/	2,4	+
1770839	Egg product sweeping residues	RAX819	*Listeria monocytogenes 3a*	Butcher siphon sponge	Seeding	72h at 5 ± 3 °C	/	2,4	+
1770874	Cheese waste residues	RAX819	*Listeria monocytogenes 3a*	Butcher siphon sponge	Seeding	72h at 5 ± 3 °C	/	2,4	+
1770873	Egg product vaccum residues	RAX819	*Listeria monocytogenes 3a*	Butcher siphon sponge	Seeding	72h at 5 ± 3 °C	/	2,4	-
1770875	Fish industry wash water	LCM223	*Listeria monocytogenes 1/2a*	Cold cabinet swab	Seeding	72h at 5 ± 3 °C	/	2,6	+
1770876	Process water ice tide	LCM223	*Listeria monocytogenes 1/2a*	Cold cabinet swab	Seeding	72h at 5 ± 3 °C	/	2,6	+
1770877	Food industry siphon water	LCM223	*Listeria monocytogenes 1/2a*	Cold cabinet swab	Seeding	72h at 5 ± 3 °C	/	2,6	+
1770878	Butchery residues	LCM223	*Listeria monocytogenes 1/2a*	Cold cabinet swab	Seeding	72h at 5 ± 3 °C	/	2,6	+
1778805	Duck residues	HDL996	*Listeria welshimeri*	Wiping cloth n°1	Seeding	72h at 5 ± 3 °C	/	1,4	+
1778806	Chicken residues	HDL996	*Listeria welshimeri*	Wiping cloth n°1	Seeding	72h at 5 ± 3 °C	/	1,4	+
1778804	Food industry process water	HDL996	*Listeria welshimeri*	Wiping cloth n°1	Seeding	72h at 5 ± 3 °C	/	1,4	+
1778809	Poultry climping room	HDL996	*Listeria welshimeri*	Wiping cloth n°1	Seeding	72h at 5 ± 3 °C	/	1,4	+
1778810	Poultry plumage room	HDL996	*Listeria welshimeri*	Wiping cloth n°1	Seeding	72h at 5 ± 3 °C	/	1,4	+
1778811	Room tears off poultry head	HDL996	*Listeria welshimeri*	Wiping cloth n°1	Seeding	72h at 5 ± 3 °C	/	1,4	+
1778840	Radish	CGZ344	*Listeria innocua*	Pizza ham and mushrooms	Seeding	72h at 5 ± 3 °C	/	1,8	+
1778841	Apple	CGZ344	*Listeria innocua*	Pizza ham and mushrooms	Seeding	72h at 5 ± 3 °C	/	1,8	+
1778842	Endive	CGZ344	*Listeria innocua*	Pizza ham and mushrooms	Seeding	72h at 5 ± 3 °C	/	1,8	+
1778843	Radish	CGZ344	*Listeria innocua*	Pizza ham and mushrooms	Seeding	72h at 5 ± 3 °C	/	1,8	+

APPENDIX D

SENSITIVITY RAW RESULTS

GENERAL PROTOCOL

Caption:

Results

RFV : Relative Fluorescence Value
VT : Valeur du test
+ : positive result
- : negative result

2012 and 2020 studies (all categories)

Bacterial burden

Ø: no culture
L = low
M = moderate
H = high

Distribution of the flora

A = pure culture of suspect colonies
B = mixture with a majority of suspect colonies
C = mixture with a minority of suspect colonies
D = mixture with rare suspect colonies
E = absence of suspect colonies
(x): x colonies characteristic of Listeria if x ≤ 5

2016 study (only in composite foods category)

0 / 1 / 2 / 3 / 4 : level of typical flora, from absence to high
Ø / L / M / H : level of annex flora, from absence to high
I : result after re-isolation
(XXX) : number of typical colonies
L.m : Listeria monocytogenes
L.w : Listeria welshimeri
L.in: Listeria inocua
L.iv: Listeria ivanovii
L.se: Listeria seeligeri
L.g: Listeria grayi

Meat products

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)							Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.				LPT Tube 22h				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	a	J2	Bovine tartar	/	/	/	Ø	Ø	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	4	0,00	-	/	/	/	A	NA
2012	a	M4	Frozen ground beef	/	/	/	-LE	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	5	0,00	-	/	/	/	A	NA
2012	a	W29	Rib of beef	/	/	/	+LB	Ø	-LE	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	A	NA
2012	a	W34	Ground beef	/	/	/	-LE	-LE	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	A	NA
2020	a	1746517	Turkey escalope	/	/	/	EM	EL	Ø	EL	/	A	-3	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1746518	Beef	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1746519	Pork chop	/	/	/	Ø	EL	Ø	EL	/	A	-2	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2012	a	J3	Frozen beef	/	nc	/	+LA	+MA	+MA	+HA	*L. innocua*	P	4	0,00	-	/	/	/	A	ND	Ø	Ø	-	ND	5	0,00	-	-LE	-LE	/	A	ND
2012	a	J7	Chicken filet	/	nc	/	+LB	+LA	+MA	+MA	*L. welshimeri*	P	5	0,00	-	/	/	/	A	ND	Ø	Ø	-	ND	5	0,00	-	-LE	-LE	/	A	ND
2012	a	C4	Minced horse meat	/	nc	/	+LA	+LA	+LA	+MA	*L. monocytogenes*	P	11351	3,70	+	+MB	+MA	*L. monocytogenes*	P	PA	/	/	/	/	10442	3,41	+	+MA	+MA	*L. monocytogenes*	P	PA
2012	a	E10	Ground beef	/	nc	/	+LA	+LA	+MA	+MA	*L. monocytogenes*	P	6967	2,27	+	+HB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	7867	2,57	+	+HB	+HB	*L. monocytogenes*	P	PA
2012	a	E11	Ground beef	/	nc	/	+LA	+LA	+MA	+MA	*L. monocytogenes*	P	7407	2,41	+	+MA	+HA	*L. monocytogenes*	P	PA	/	/	/	/	7913	2,58	+	+HA	+MB	*L. monocytogenes*	P	PA
2012	a	I4	Chicken breast	/	nc	/	+LA	+LB	+LB	+MB	*L. innocua*	P	5203	1,74	+	+LA	+LA	*L. innocua*	P	PA	/	/	/	/	9413	3,15	+	+MA	+MA	*L. innocua*	P	PA
2012	a	M6	Chicken breast	/	nc	/	+MB*	+LB*	+MB*	+MB*	*L. monocytogenes* *L. welshimeri*	P	7715	2,44	+	+MB*	+HB*	*L. monocytogenes* *L. welshimeri*	P	PA	/	/	/	/	9221	2,92	+	+HB	+MB*	*L. monocytogenes* *L. welshimeri*	P	PA
2012	a	N12	Ground beef	/	nc	/	+LB*	+LB*	+MB*	+HB	*L. monocytogenes* *L. welshimeri*	P	8149	2,58	+	+MB*	+HB	*L. monocytogenes* *L. welshimeri*	P	PA	/	/	/	/	8463	2,68	+	+HB	+MB*	*L. monocytogenes* *L. welshimeri*	P	PA
2012	a	W12	Ground beef steak	/	nc	/	+LA	+LA	+MA	+MB	*L. monocytogenes*	P	11933	4,50	+	+MA	+MA	*L. monocytogenes*	P	PA	/	/	/	/	8058	3,04	+	+MA	+MA	*L. monocytogenes*	P	PA
2012	a	W27	Minced horse meat	/	nc	/	+LB	+LA	+LB	+LA	*L. monocytogenes*	P	7049	2,66	+	+MB	+HA	*L. monocytogenes*	P	PA	/	/	/	/	8420	3,17	+	+MA	+MB	*L. monocytogenes*	P	PA
2012	a	W30	Beef colar	/	nc	/	+MA	+LA	+MA	+MA	*L. welshimeri*	P	8673	3,27	+	+MA	+MB	*L. welshimeri*	P	PA	/	/	/	/	8969	3,38	+	+MB	+MA	*L. welshimeri*	P	PA
2012	a	B6	Frozen ground beef	/	nc	/	Ø	Ø	Ø	Ø	/	A	4887	1,59	+	+MA	+MB	*L. welshimeri*	P	PD	/	/	/	/	9423	3,07	+	+MA	+MB*	*L. welshimeri*	P	PD
2012	a	W10	Chicken filet	/	nc	/	Ø	Ø	Ø	Ø	/	A	320	0,12	+	+LB*	+LB	*L. monocytogenes* *L. welshimeri*	P	PD	/	/	/	/	2829	1,06	+	+LB*	+LB*	*L. monocytogenes* *L. welshimeri*	P	PD
2012	a	W11	Chicken breast	/	nc	/	Ø	Ø	Ø	Ø	/	A	8563	3,23	+	+LB	+MA	*L. monocytogenes*	P	PD	/	/	/	/	11450	4,32	+	+MB	+MB	*L. monocytogenes*	P	PD
2012	b	B4	Escalope of duck foie gras	/	/	/	Ø	-LE	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	b	D12	Marinated chicken	/	/	/	Ø	Ø	Ø	Ø	/	A	9	0,00	-	/	/	/	A	NA	/	/	/	/	12	0,00	-	/	/	/	A	NA
2012	b	I5	Marinated thaï chicken	/	/	/	Ø	Ø	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	P2	Black pudding	/	/	/	Ø	Ø	-LE	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	b	U16	Marinated chicken	/	/	/	Ø	Ø	-LE	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	D5	Olive pate	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	D7	Liver pate	/	/	/	Ø	Ø	Ø	Ø	/	A	11	0,00	-	/	/	/	A	NA	/	/	/	/	9	0,00	-	/	/	/	A	NA
2012	b	D8	Cooked pork roast	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	b	I11	Snout and raw vegetables	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	M7	Basque chicken	/	/	/	Ø	-LE	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	M5	Smoked duck bacon	/	/	/	-ME	Ø	-ME	-ME	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	b	F4	Roast cockerel	/	/	/	Ø	Ø	Ø	Ø	/	A	2025	0,66	+	Ø	Ø	Tube LPT: OAAØ-PALØ Tube LX: OAAØ-PALØ	A (FP)	NA (PP)	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	A10	Pork crepinettes	/	nc	/	+LB*	+MC*	+MB*	+MB*	*L. monocytogenes* *L. welshimeri*	P	9429	3,08	+	+MB*	+MC*	*L. monocytogenes* *L. welshimeri*	P	PA	/	/	/	/	9112	2,97	+	+MB*	+MB*	*L. monocytogenes* *L. welshimeri*	P	PA
2012	b	J6	Beef meat ball	/	nc	/	+MB*	+MB*	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	8112	2,72	+	+HB*	+HB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	9101	3,05	+	+HB	+HB	*L. monocytogenes* *L. innocua*	P	PA
2012	b	C1	Meat for couscous	/	nc	/	+LB	+LA	+MA	+MA	*L. welshimeri*	P	7985	2,6	+	+MB	+MB	*L. welshimeri*	P	PA	/	/	/	/	8201	2,67	+	+MB	+MB	*L. welshimeri*	P	PA
2012	b	C3	Roast pork	/	nc	/	+LA	+LA	+MA	+MA	*L. monocytogenes*	P	8613	2,81	+	+MA	+MA	*L. monocytogenes*	P	PA	/	/	/	/	8206	2,68	+	+MA	+MA	*L. monocytogenes*	P	PA
2012	b	P3	Twerp	/	nc	/	+MB	+MB	+MA	+HB	*L. monocytogenes*	P	7602	2,6	+	+MB	+HA	*L. monocytogenes*	P	PA	/	/	/	/	8449	2,89	+	+HA	+MA	*L. monocytogenes*	P	PA
2020	b	1746522	Black pudding	/	nc	/	AL halo +	AM	AM halo +	AM	Camp test: *L. mono* Hémolyse: + API List*: L. mono*	P	8012	2.66	+	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8014	2,66	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	b	1746520	Hash à la Parmentier	/	nc	/	Ø	EL	Ø	EL	/	A	8055	2.67	+	AM halo +	AM	*L. monocytogenes*	P	PD	AM halo +	AM	P	PD	8025	2,66	+	AM halo +	AM	*L. monocytogenes*	P	PD
2020	b	1746521	White sausage	/	nc	/	Ø	Ø	Ø	EL	/	A	9926	3.29	+	AM halo +	AM	*L. monocytogenes*	P	PD	AM halo +	AM	P	PD	8115	2,69	+	AM halo +	AM	*L. monocytogenes*	P	PD
2012	c	B1	Dry ham	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	D6	Smoked bacon	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	J9	Smoked bacon	/	/	/	Ø	-LE	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA

Meat products

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)							Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.				LPT Tube 22h				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	c	D3	Sausage	/	/	/	-LE	-LE	-LE	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	c	D4	Merguez	/	/	/	-ME	-ME	-ME	-ME	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	c	D9	Sausage of Toulouse	/	/	/	-LE	-LE	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	7	0,00	-	/	/	/	A	NA
2012	c	E12	Smoked sausage	/	/	/	-LE	-LE	-ME	-ME	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	c	P1	Pork sausage	/	/	/	-ME	-LE	-LE	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	c	U11	Diced ham	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	U12	Smoked and minced ham	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	U14	Mortadella	/	/	/	-ME	-ME	-ME	-ME	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	J5	Sausage	/	nc	/	+LA	+LA	+MA	+MA	*L. innocua*	P	5	0,00	-	/	/	/	A	ND	-LE	Ø	-	ND	5	0,00	-	-LE	-LE	/	A	ND
2012	c	D2	Ham	/	nc	/	+LA	+LA	+MA	+MA	*L. monocytogenes*	P	5	0,00	-	/	/	/	A	ND	-LE	-LE	-	ND	5	0,00	-	Ø	-LE	/	A	ND
2012	c	J8	Organic sausage	/	nc	/	+LB	+LB	+MB	+MB	*L. welshimeri*	P	4599	1,54	+	+MB	+MA	*L. welshimeri*	P	PA	/	/	/	/	7739	2,59	+	+MB	+MB	*L. welshimeri*	P	PA
2012	c	B3	Merguez	/	nc	/	+LA	+LA	+MA	+MA	*L. innocua*	P	688	0,22	+	+LA	+LB	*L. innocua*	P	PA	/	/	/	/	1033	0,33	+	+LB	+LB	*L. innocua*	P	PA
2012	c	G15	Pork sausage	/	nc	/	+LB	+LB	+MB	+MB	*L. innocua*	P	7832	2,62	+	+MB	+HB	*L. innocua*	P	PA	/	/	/	/	7817	2,62	+	+HB	+MB	*L. innocua*	P	PA
2012	c	H5	Merguez	/	nc	/	+LB*	+LB*	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	9048	3,03	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	9492	3,18	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	c	J4	Sausage	/	nc	/	+LB*	+MB*	+MB*	+MC*	*L. monocytogenes* *L. welshimeri*	P	8139	2,73	+	+MB*	+MB*	*L. monocytogenes* *L. welshimeri*	P	PA	/	/	/	/	9058	3,04	+	+MB*	+MB*	*L. monocytogenes* *L. welshimeri*	P	PA
2012	c	P4	Sausage	/	nc	/	+MB*	+MB	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	11018	3,77	+	+MB	+LB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	11640	3,99	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	c	D1	Ham	/	nc	/	+LA	+LA	+MA	+HA	*L. monocytogenes*	P	226	0,07	+	+LC(2)	+LA(2)	*L. monocytogenes*	P	PA	/	/	/	/	644	0,21	+	+LA(3)	+LC	*L. monocytogenes*	P	PA
2012	c	H7	Smoked duck bacon	/	nc	/	+LB(4)	+LB(5)	+MB	+HB	*L. monocytogenes*	P	1397	0,46	+	+LB*	+LB	*L. monocytogenes* *L. welshimeri*	P	PA	/	/	/	/	11509	3,86	+	+LB*	+LB*	*L. monocytogenes* *L. welshimeri*	P	PA
2012	c	M3	Sausage	/	nc	/	Ø	Ø	Ø	Ø	/	A	6965	2,21	+	+HB	+HA	*L. monocytogenes*	P	PD	/	/	/	/	8423	2,67	+	+HA	+MB	*L. monocytogenes*	P	PD

Dairy products

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	a	A1	Brie de Meaux raw milk	L. mono	Spiking	0,6	-LE	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	a	A2	Tomme de Savoie	L. mono	Spiking	0,8	-LE	Ø	-LE	Ø	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	a	A3	Morbier with raw milk	L. mono	Spiking	0,4	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	a	A4	Coulommiers with raw milk	L. mono	Spiking	1	-LE	Ø	Ø	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	7	0,00	-	/	/	/	A	NA
2012	a	B11	Carré du Vinage	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	a	B12	Raclette with raw milk	/	/	/	-LE	-ME	-ME	-ME	/	A	10	0,00	-	/	/	/	A	NA	/	/	/	/	7	0,00	-	/	/	/	A	NA
2012	a	B13	Tomme de Cambrai with raw milk	/	/	/	-LE	Ø	Ø	Ø	/	A	15	0,00	-	/	/	/	A	NA	/	/	/	/	207	0,06	+	+HD(1)	+LA	*L. monocytogenes*	P	PD
2012	a	B19	Blue cheese	/	/	/	Ø	Ø	Ø	Ø	/	A	6	0,00	-	Ø	Ø	/	A	NA	/	/	/	/	5	0,00	-	Ø	Ø	/	A	NA
2012	a	F12	Coulommiers with raw milk	/	/	/	-LE	-LE	-ME	-ME	/	A	19	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	a	H13	Le Boulonnais with raw milk	/	/	/	Ø	-LE	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	9	0,00	-	/	/	/	A	NA
2012	a	A11	Neufchâtel with raw milk	/	nc	/	+LB	+MC	+MA	+MC	*L. monocytogenes*	P	8129	2,65	+	+HA	+HA	*L. monocytogenes*	P	PA	/	/	/	/	6848	2,23	+	+HB	+HB	*L. monocytogenes*	P	PA
2012	a	B17	Maroilles with raw milk	/	nc	/	+MB	+MB	+MB*	+HB*	*L. monocytogenes* *L. innocua*	P	10369	3,38	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8136	2,65	+	+MC*	+MB	*L. monocytogenes* *L. innocua*	P	PA
2012	a	C8	Maroilles with raw milk	/	nc	/	+LA	+MA	+MB	+MB	*L. monocytogenes*	P	8771	2,86	+	+MB	+LA	*L. monocytogenes*	P	PA	/	/	/	/	7686	2,51	+	+MB	+MA	*L. monocytogenes*	P	PA
2012	a	C9	Tomme with raw milk	/	nc	/	+MA	+MB	+MB	+MB	*L. monocytogenes*	P	3081	1,00	+	+MB	+LC	*L. monocytogenes*	P	PA	/	/	/	/	11803	3,85	+	+MB	+LB	*L. monocytogenes*	P	PA
2012	a	C10	Vinageois with raw milk	/	nc	/	+MA	+MA	+MB	+HB	*L. monocytogenes*	P	12196	3,98	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	9305	3,03	+	+MB	+MA	*L. monocytogenes*	P	PA
2012	a	E5	Reblochon with raw milk	/	nc	/	+MB	+MB	+MB	+MB	*L. ivanovii*	P	8473	2,76	+	+MB	+MB	*L. ivanovii*	P	PA	/	/	/	/	8464	2,76	+	+HB	+HB	*L. ivanovii*	P	PA
2012	a	F5	Reblochon with raw milk	/	nc	/	+LB	+MB	+MB	+MB	*L. monocytogenes*	P	11884	3,88	+	+MB	+MA	*L. monocytogenes*	P	PA	/	/	/	/	12467	4,07	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	a	F9	Provolone	/	nc	/	+MA	+MB	+MA	+MB	*L. monocytogenes*	P	10919	3,56	+	+LB	+LB	*L. monocytogenes*	P	PA	/	/	/	/	7778	2,54	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	a	H11	"Le ch'ti" raw milk cheese	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	8185	2,74	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	7877	2,64	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	a	I6	Reblochon with raw milk	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	11980	4,02	+	+MB	+LB	*L. monocytogenes*	P	PA	/	/	/	/	9354	3,13	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	a	I7	"62" with raw milk	/	nc	/	+MB	+MB	+MB	+HB	*L. monocytogenes*	P	8676	2,91	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8267	2,77	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	a	B15	Tomme with raw milk	/	nc	/	-LE	-LE	-LE	-LE	/	A	11357	3,71	+	+MB	+MB	*L. monocytogenes*	P	PD	/	/	/	/	8532	2,78	+	+MB	+MB	*L. monocytogenes*	P	PD
2012	a	H12	Tomme d'Arbois with raw milk	/	nc	/	Ø	Ø	Ø	Ø	/	A	9366	3,14	+	+MB	+MB	*L. innocua*	P	PD	/	/	/	/	9147	3,07	+	+MB	+MB	*L. innocua*	P	PD
2012	b	B14	Goat cheese with raw milk	/	/	/	-LE	-LE	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	N13	Goat cheese Valençay	/	/	/	Ø	Ø	-LE	Ø	/	A	3	0,00	-	-LE	-LE	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	Q7	Goat cheese Valençay	/	/	/	-LE	Ø	-ME	Ø	/	A	0	0,00	-	/	/	/	A	NA	/	/	/	/	-1	0,00	-	/	/	/	A	NA
2012	b	Q8	Raw milk goat cheese	/	/	/	-LE	-LE	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	-1	0,00	-	/	/	/	A	NA
2012	b	Q9	Selles sur Cher with raw milk	/	/	/	-LE	Ø	-ME	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	b	Q10	Pasteurized milk goat cheese	/	/	/	-LE	-LE	Ø	-LE	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	0	0,00	-	/	/	/	A	NA
2012	b	Q11	Goat cheese	/	/	/	-LE	Ø	Ø	Ø	/	A	2	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	b	Q12	Goat cheese	/	/	/	-ME	Ø	Ø	Ø	/	A	0	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	b	Q13	Selles sur Cher with raw milk	/	/	/	-LE	-LE	Ø	-LE	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	b	Q14	Goat cheese	/	/	/	-LE	Ø	Ø	Ø	/	A	1	0,00	-	/	/	/	A	NA	/	/	/	/	0	0,00	-	/	/	/	A	NA
2020	b	1746540	Goat cheese	L. mono HBP652	Seeding	2,6	Ø	EL	EL	EL	/	A	20	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/		A	NA
2012	b	C13	Selles sur Cher with raw milk	L. mono	Spiking	10,6	+LA(1)	+LB(2)	+MA	+HB	*L. monocytogenes*	P	42	0,01	-	/	/	/	A	ND					579	0,18	+	+LB	+LA	*L. monocytogenes*	P	PA
2020	b	1746539	Goat cheese	L. mono HBP652	Seeding	2,6	AL halo +	AL	AL halo +	AL	Camp test: *L. mono* Hémolyse: + API List: *L. mono*	P	-5	-0.00	-	Ø	Ø	/	A	ND	Ø	Ø	A	ND	-4	0,00	-	/	/	/	A	ND
2020	b	1758381	Goat cheese	L.innocua BLV059	Seeding	2,4	AL halo -	BL halo -	AM halo -	AM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	P	-1	-0,00	-	Ø	EL	/	A	ND	Ø	EL	A	ND	1	0,00	-	/	/	/	A	ND
2020	b	1758382	Goat cheese Rocmadour	L.innocua BLV059	Seeding	2,4	BL halo -	BL halo -	AM halo -	AM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	P	-1	-0,00	-	Ø	EL	/	A	ND	Ø	EL	A	ND	-1	-0,00	-	/	/	/	A	ND
2012	b	I13	Pasteurized milk goat cheese	L. innocua	Spiking	10,8	+MA	+MB	+MA	+HB	*L. innocua*	P	7964	2,67	+	+MB	+MC	*L. innocua*	P	PA					7505	2,51	+	+MB	+MC	*L. innocua*	P	PA
2020	b	1746541	Goat cheese	L. mono HBP652	Seeding	2,6	AL halo +	BL	AM halo +	AM	Camp test: *L. mono* Hémolyse: + API List: *L. mono*	P	3008	1,00	+	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	11436	3,80	+			*L. monocytogenes*	P	PA
2020	b	1758378	Roquefort	L.innocua BLV059	Seeding	2,4	BM halo -	EM	BM halo -	BM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	P	5336	1,75	+	BM halo -	BM	*L. innocua*	P	PA	AM halo -	AM	P	PA	10202	3,36	+	BM halo -	BM	*L. innocua*	P	PA
2020	b	1758379	Ewe cheese	L.innocua BLV059	Seeding	2,4	BM halo -	BM halo -	AM halo -	AM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	P	1251	0,41	+	BM halo -	EM	*L. innocua*	P	PA	AM halo -	AM	P	PA	4575	1,5	+	BM halo -	BM	*L. innocua*	P	PA
2020	b	1758455	Ewe cheese	L. mono JAR249	Seeding	2,8	AM	AM	AM	AM	Camp test: *L. mono* Hémolyse: + API List: *L. mono*	P	9869	3,25	+	CM halo +	CM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8606	2,83	+	BM halo +	BM	*L. monocytogenes*	P	PA
2020	b	1758456	Goat cheese	L. mono JAR249	Seeding	2,8	BM	BM	AM	AM	Camp test: *L. mono* Hémolyse: + API List: *L. mono*	P	9422	3,12	+	BM halo +	BM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8525	2,72	+	BM halo +	BM	*L. monocytogenes*	P	PA
2020	b	1758380	Goat cheese	L.innocua BLV059	Seeding	2,4	EL	EM	EM	EM	/	A	8670	2,85	+	BM halo -	BM	*L. innocua*	P	PD	BM halo -	BM	P	PD	8725	2,87	+	BM halo -	BM	*L. innocua*	P	PD
2012	c	B20	Raw milk	/	/	/	Ø	Ø	-LE	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	C20	Raw milk	L. mono	Spiking	26,5	Ø	Ø	Ø	Ø	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2020	c	1746524	White cheese with fruit	/	/	/	Ø	EL	Ø	EL	/	A	-2	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	c	1746525	Milk rice	/	/	/	Ø	EM	Ø	EL	/	A	-3	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	c	1746527	Natural yogurt	/	/	/	Ø	EL	Ø	Ø	/	A	-2	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA

Dairy products

2020	c	1746528	Whipped cream macaroon	/	/	/	EL	EM	EM	EL	/	**A**	3	-0.00	-	Ø	Ø	/	**A**	**NA**	Ø	Ø	**A**	**NA**	/	/	/	/	/	/	**A**	**NA**
2020	c	1746542	Flan zucchini parmesan emmental	L. mono HBP652	Seeding	2,6	EL	EL	EM	EM	/	**A**	-5	-0.00	-	Ø	Ø	/	**A**	**NA**	Ø	Ø	**A**	**NA**	/	/	/	/	/	/	**A**	**NA**
2020	c	1758400	Gratin dauphinois	/	/	/	EL	EL	Ø	Ø	/	**A**	-4	-0,00	-	Ø	Ø	/	**A**	**NA**	Ø	Ø	**A**	**NA**	/	/	/	/	/	/	**A**	**NA**
2020	c	1758401	Butter	/	/	/	EL	EL	EL	EL	/	**A**	-3	-0,00	-	Ø	Ø	/	**A**	**NA**	Ø	Ø	**A**	**NA**	/	/	/	/	/	/	**A**	**NA**
2020	c	1758457	Flan	/	/	/	EL	EL	EL	EL	/	**A**	-4	-0,00	-	Ø	Ø	/	**A**	**NA**	Ø	Ø	**A**	**NA**	-4	-0,00	-	/	/	/	**A**	**NA**
2020	c	1746543	Buttercream buchette	L. mono HBP652	Seeding	2,6	BM halo +	CM	AM halo +	AM	Camp test: *L. mono* Hémolyse: + API List: *L. mono*	**P**	-4	-0.00	-	Ø	Ø	/	**A**	**ND**	Ø	Ø	**A**	**ND**	-4	0,00	-	/	/	/	**A**	**ND**
2020	c	1746544	Quiche lorraine	L. mono HBP652	Seeding	2,6	AM halo +	AM	AH halo +	AH	Camp test: *L. mono* Hémolyse: + API List: *L. mono*	**P**	9408	3,12	+	AM halo +	AM	*L. monocytogenes*	**P**	**PA**	AM halo +	AM	**P**	**PA**	8671	2,88	+			*L. monocytogenes*	**P**	**PA**
2020	c	1758283	Chocolate eclair	L.innocua BLV059	Seeding	2,4	AM halo -	BM halo -	BM halo -	BM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	**P**	8810	2,90	+	BM halo -	EM	*L. innocua*	**P**	**PA**	AM halo -	AM	**P**	**PA**	8105	2,66	+	BM halo -	BM	*L. innocua*	**P**	**PA**
2020	c	1758396	Cheese souffle	L.innocua QHW317	Seeding	2,6	AM halo -	AM halo -	AM halo -	AM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	**P**	9362	3,08	+	AH halo -	AH	*L. innocua*	**P**	**PA**	AM halo -	AM	**P**	**PA**	8818	2,92	+	AH halo -	AH	*L. innocua*	**P**	**PA**
2020	c	1758397	Custar	L.innocua QHW317	Seeding	2,6	AM halo -	AM halo -	AM halo -	AM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	**P**	9202	3,03	+	AH halo -	AH	*L. innocua*	**P**	**PA**	AM halo -	AM	**P**	**PA**	9054	3,00	+	AH halo -	AH	*L. innocua*	**P**	**PA**
2020	c	1758398	Panna cotta	L.innocua QHW317	Seeding	2,6	AM halo -	AM halo -	AM halo -	AM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	**P**	10675	3,51	+	AH halo -	AH	*L. innocua*	**P**	**PA**	AM halo -	AM	**P**	**PA**	8932	2,95	+	AH halo -	AH	*L. innocua*	**P**	**PA**
2020	c	1758399	Tomato mozzarella cake	L.innocua QHW317	Seeding	2,6	AM halo -	AM halo -	AM halo -	AM halo -	Camp test: *L. innocua* Hémolyse:- API List: *L. innocua*	**P**	8156	2,68	+	AH halo -	AH	*L. innocua*	**P**	**PA**	AM halo -	AM	**P**	**PA**	8991	2,98	+	BM halo -	BM	*L. innocua*	**P**	**PA**
2020	c	1746523	Cottage cheese	/	nc	/	Ø	EL	Ø	EL	/	**A**	208	0.06	+	AL halo +	EL	*L. monocytogenes*	**P**	**PD**	AM halo +	AM	**P**	**PD**	1688	0,56	+	AM halo +	AM	*L. monocytogenes*	**P**	**PD**
2020	c	1746526	Fresh cream	/	nc	/	Ø	EM	EL	EL	/	**A**	1110	0.36	+	AL halo -	EL	*L. seeligeri*	**P**	**PD**	AL halo -	AL	**P**	**PD**	**-2**	0,00	-	/	/	*L. seeligeri*	**A**	**NA**
2020	c	1770829	Pastry cream	/	/	/	Ø	Ø	Ø	Ø	/	**A**	-4	-0.00	-	Ø	Ø	/	**A**	**NA**	Ø	Ø	**A**	**NA**	-4	-0,00	-	/	/	/	**A**	**NA**

Seafood products

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	a	A6	Seafood	L. mono	Spiking	27,6	Ø	Ø	Ø	Ø	/	A						/	A	NA	/	/	/	/	4	0	-	/	/	/	A	NA
2012	a	E15	Shrimps	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	181	0,05	+	-ME	-ME	Tube LPT: OAA:-LE / PAL:-ME Tube LX: OAA:-LE / PAL:-LE	A (FP)	NA (PP)
2012	a	J14	Salmon fillet	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	a	M14	Langoustines	/	/	/	Ø	Ø	-LE	-LE	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	a	P9	Fish skewer	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	a	P11	Giant shrimps	/	/	/	-LE	Ø	-LE	Ø	/	A	-1	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	a	W2	Herring fillet	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	W26	Seafood cocktail	/	nc	/	+LC(3)	Ø	+LA	+LB	*L. monocytogenes*	P	3	0,00	-	/	/	/	A	ND	LC+	LB+ (1)	L, mono	PA	1392	0,52	+	-ME	Ø	Tube LPT: OAA: +LC / PAL: +LB(1) Tube LX: OAA:-LE / PAL: Ø	A	PA
2012	a	W18	Grey shrimps	L. innocua	Spiking	6	+MB	+MA	+MB	+MB	*L. innocua*	P	13	0,00	-	/	/	/	A	ND	LE-	Ø	/	ND	-2	0	-	-LE	Ø	/	A	ND
2012	a	E13	Pangasus fillet	/	nc	/	+MA	+HA	+MB*	+HB*	*L. monocytogenes* *L. innocua*	P	7777	2,54	+	+MB	+HB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	7446	2,43	+	+MB*	+MB	*L. monocytogenes* *L. innocua*	P	PA
2012	a	E14	Pangasus fillet	/	nc	/	+MA	+MA	+MA	+MA	*L. monocytogenes*	P	7980	2,60	+	+MB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	7645	2,49	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	a	G10	Pangasus fillet	/	nc	/	+MB*	+MB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	8984	3,01	+	+MB*	+MB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8417	2,82	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	a	J13	White fish fillet	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes* *L. innocua*	P	6959	2,33	+	+MB	+HB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	7531	2,52	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	a	P7	Cod fillet	/	nc	/	+MB*	+MB*	+MB*	+MB	*L. monocytogenes* *L. innocua*	P	8112	2,78	+	+HB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8602	2,95	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA
2012	a	P8	Pangasus fillet	/	nc	/	+MB	+MB*	+MB	+MB*	*L. monocytogenes* *L. innocua*	P	8958	3,07	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	9391	3,22	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	a	P10	Pangas fillet	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	7672	2,63	+	+MB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	6535	2,24	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	a	W5	Pangas fillet	/	nc	/	+MA	+MA	+MA	+MA	*L. monocytogenes*	P	8628	3,25	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8056	3,04	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	a	W7	Langoustines	/	nc	/	+LB*	+MB*	+LB*	+MB*	*L. monocytogenes* *L. seeligeri*	P	9541	3,60	+	+MB	+MB	*L. monocytogenes* *L. seeligeri*	P	PA	/	/	/	/	8246	3,11	+	+MB*	+MB*	*L. monocytogenes* *L. seeligeri*	P	PA
2012	a	W28	Pangasus fillet	/	nc	/	+MB	+MB	+LB	+MB	*L. monocytogenes*	P	7398	2,79	+	+MB	+HA	*L. monocytogenes*	P	PA	/	/	/	/	8700	3,28	+	+MB	+HB	*L. monocytogenes*	P	PA
2020	a	1778876	Sardine fillet	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	Ø	Ø	A	NA	3	0,00	-	/	/	/	A	NA
2012	b	A8	Smoked salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	Ø	Ø	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	b	C18	Puffy smoked	L. mono	Spiking	33	Ø	Ø	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	31	0,01	-	/	/	/	A	NA
2012	b	C19	Haddock	/	/	/	Ø	-ME	-LE	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	7	0,00	-	/	/	/	A	NA
2012	b	G2	Broken smoked salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	11	0,00	-	/	/	/	A	NA	/	/	/	/	21	0,00	-	/	/	/	A	NA
2012	b	H9	Smoked trout	/	/	/	Ø	Ø	-LE	Ø	/	A	19	0,00	-	/	/	/	A	NA	/	/	/	/	16	0,00	-	/	/	/	A	NA
2012	b	H10	Smoked salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	8	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	M13	Haddock fillet	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	M15	Broken salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	P5	Smoked haddock fillet	/	/	/	-ME	-LE	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	b	P6	Diced smoked salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	b	W1	Diced smoked salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	1	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	W3	Broken smoked salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	G1	Smoked trout of Pyrénées	/	/	/	Ø	Ø	-ME	Ø	/	A	451	0,15	+	Ø	Ø	/	A (FP)	NA (PP)	/	/	/	/	14	0,00	-	Ø	Ø	/	A	NA
2012	b	W4	Scotland smoked salmon	/	/	/	Ø	Ø	Ø	Ø	/	A	218	0,08	+	-LE	Ø	/	A (FP)	NA (PP)	/	/	/	/	-2	0,00	-	Ø	Ø	/	A	NA
2012	b	G9	Scotland smoked salmon	/	nc	/	+MA	+MA	+MA	+HA	*L. monocytogenes*	P	8870	2,97	+	+MB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	7778	2,61	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	b	H15	Norway smoked salmon	L. innocua	Spiking	2,9	+LA	+LA	+MA	+HA	*L. innocua*	P	11906	3,99	+	+MB	+MB	*L. innocua*	P	PA	/	/	/	/	8347	2,80	+	+MB	+MB	*L. innocua*	P	PA
2012	b	H14	Norway smoked salmon	L. innocua	Spiking	4,4	+LA	+LA	+MA	+MA	*L. innocua*	P	5651	1,89	+	+MA	+MA	*L. innocua*	P	PA	/	/	/	/	7628	2,56	+	+MA	+MA	*L. innocua*	P	PA
2012	b	H4	Norway smoked salmon	L. innocua	Spiking	5,8	+MD	+MD	+MB	+HB	*L. innocua*	P	7842	2,63	+	+MB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	8333	2,79	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	b	H3	Norway smoked salmon	L. innocua	Spiking	7,3	+MA	+MA	+MA	+MA	*L. monocytogenes*	P	7969	2,67	+	+HA	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8213	2,75	+	+HA	+HB	*L. monocytogenes*	P	PA
2012	b	R12	Smoked mackerel fillet	L. welshi.	Spiking	20,8	+MA	+MA	+MA	+HA	*L. welshimeri*	P	6736	2,31	+	+MB	+MB	*L. welshimeri*	P	PA	/	/	/	/	8463	2,90	+	+MB	+MB	*L. welshimeri*	P	PA
2020	b	1746537	Smoked salmon	/	nc	/	AM halo +	EM	AM halo +	AM	Camp test: *L. mono* Hémolyse: + API List: *L. mono*	P	9340	3.10	+	AM halo +	EM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	10104	3,31	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	b	1758372	Smoked trout	L. welshimeri AJP106	Seeding	0,8	AL halo -	AL	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	7997	2,65	+	CM halo -	CM	*L.welshimeri*	P	PA	BM halo -	BM	P	PA	10132	3,33	+	AM halo -	AM	*L.welshimeri*	P	PA
2020	b	1758373	Smoked pollack	L. welshimeri AJP106	Seeding	0,8	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	10570	3,51	+	AM halo -	BM	*L.welshimeri*	P	PA	AM halo -	AM	P	PA	9311	3,06	+	AM halo -	AM	*L.welshimeri*	P	PA
2020	b	1758374	Smoked ell	L. welshimeri AJP106	Seeding	0,8	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	8923	2,96	+	AM halo -	AM	*L.welshimeri*	P	PA	AM halo -	AM	P	PA	9096	2,99	+	AM halo -	AM	*L.welshimeri*	P	PA
2012	c	W6	Marinated herring fillet	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	C7	Cooked whelks	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	c	C15	Scallop shell with bechamel sauce	L. mono	Spiking	19,8	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	D10	Herring salad	/	/	/	Ø	Ø	Ø	Ø	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	c	G3	Salmon shell	L. welshimeri	Spiking	0,3	Ø	Ø	Ø	Ø	/	A	7	0,00	-	/	/	/	A	NA	/	/	/	/	11	0,00	-	/	/	/	A	NA
2012	c	G4	Surimi shell	L. welshimeri	Spiking	0,24	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA

Seafood products

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	c	G5	Scallops with leek	L. welshimeri	Spiking	0,4	Ø	Ø	Ø	Ø	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	13	0,00	-	/	/	/	A	NA
2012	c	G6	Salmon shell	L. welshimeri	Spiking	0,16	Ø	Ø	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	c	I9	Cooked whelks	/	/	/	-LE	Ø	-LE	-LE	/	A	40	0,01	-	/	/	/	A	NA	/	/	/	/	33	0,01	-	/	/	/	A	NA
2012	c	R11	Fish terrine	L. welshimeri	Spiking	15,6	Ø	Ø	Ø	Ø	/	A	1	0,00	-	/	/	/	A	NA	/	/	/	/	-2	0,00	-	/	/	/	A	NA
2012	c	I1	Breaded hake fillet	/	nc	/	+MB*	+MB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	7799	2,61	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8771	2,94	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	c	M11	Scallop shell with bechamel sauce	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	8915	2,83	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8485	2,69	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	c	W16	Shrimp terrine	L. innocua	Spiking	4	+MA	+MA	+MA	+MA	*L. innocua*	P	8146	3,07	+	+MB	+MA	*L. innocua*	P	PA	/	/	/	/	8087	3,05	+	+MA	+MA	*L. innocua*	P	PA
2012	c	W15	Crab surimi crumbs	L. innocua	Spiking	8	+MA	+MB	+MA	+MB	*L. innocua*	P	7863	2,96	+	+MA	+HA	*L. innocua*	P	PA	/	/	/	/	8144	3,07	+	+MA	+HA	*L. innocua*	P	PA
2012	c	W20	Breaded fish with cheese	L. innocua	Spiking	12	+LA	+LA	+MA	+MA	*L. innocua*	P	8395	3,17	+	+MB	+HA	*L. innocua*	P	PA	/	/	/	/	7844	2,96	+	+HA	+HA	*L. innocua*	P	PA
2012	c	C17	Fish fillet with hollandaise sauce	L. mono	Spiking	13,2	+LA	+LB	+MB	+MB	*L. monocytogenes*	P	4151	1,35	+	+LA	+LA	*L. monocytogenes*	P	PA	/	/	/	/	11475	3,74	+	+MA	+MA	*L. monocytogenes*	P	PA
2020	c	1758375	Cold salmon shell	L. welshimeri AJP106	Seeding	0,8	BM halo -	BM	BM halo -	BM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	9480	3,15	+	BM halo -	EM	*L.welshimeri*	P	PA	AM halo -	AM	P	PA	10945	3,60	+	BM halo -	BM	*L.welshimeri*	P	PA
2020	c	1758377	St Jacques cassolette with vegetables	L. welshimeri AJP106	Seeding	0,8	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	12848	4,27	+	BM halo -	BM	*L.welshimeri*	P	PA	AM halo -	AM	P	PA	9502	3,12	+	BM halo -	BM	*L.welshimeri*	P	PA
2020	c	1778877	Salmon and artichok	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	Ø	Ø	A	NA	-2	0,00	-	/	/	/	A	NA
2020	c	1758376	Shrimp, St Jacques, salmon and mussel	L. welshimeri AJP106	Seeding	0,8	DL halo -	EM	Ø	Ø	/	A	429	0,14	+	DM halo -	DM	*L.welshimeri*	P	PD	AM halo -	AM	P	PD	1912	0,62	+	DM halo -	DM	*L.welshimeri*	P	PD

Vegetal products

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	a	C11	Frozen onions	/	/	/	Ø	-LE	-LE	-LE	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	a	P15	Frozen sliced leek	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	-3	0,00	-	/	/	/	A	NA
2012	a	X13	Spinach in branch	/	/	/	-LE	Ø	-LE	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	B18	Small peas	/	/	/	Ø	Ø	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2020	a	1746529	Tomato	/	/	/	EL	EM	EL	EL	/	A	-5	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1746530	Zucchini	/	/	/	EM	EM	EL	EM	/	A	-3	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1746531	Pepper	/	/	/	EL	EM	EL	EL	/	A	-3	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1746532	Gratted carrots	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1746486	Gratted carrots	L. mono RCJ280	Seeding	1,6	Ø	Ø	Ø	Ø	/	A	-4	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1758394	Green salad	/	/	/	EM	EL	EL	EL	/	A	2	0,00	-	EL	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1758395	Pear	/	/	/	Ø	EL	EL	EM	/	A	-4	-0,00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	a	1778841	Apple	L. inno CGZ344	Seeding	1,8	AM halo -	BM	AM halo -	BM	Camp test: - Hémolyse: - API List: *L. innocua*	P	-5	-0,00	-	Ø	Ø	/	A	ND	Ø	Ø	A	ND	-4	-0,00	-	Ø	Ø	/	A	ND
2012	a	W9	Chopped spinach	/	nc	/	+MB*	+MB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	8047	3,03	+	+MB	+MA	*L. monocytogenes*	P	PA	/	/	/	/	8691	3,28	+	+MB	+MA	*L. monocytogenes*	P	PA
2012	a	P13	Potato	/	nc	/	+MB*	+HB*	+MB*	+HB*	*L. monocytogenes* *L. innocua*	P	8080	2,77	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	7153	2,45	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2020	a	1746545	Leek	L. mono RCJ280	Seeding	1,6	AM halo +	AM	AH halo +	AH	Camp test:+ Hémolyse:+ API List: *L. mono*	P	10730	3,56	+	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	9164	3,04	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	a	1746547	Salad	L. mono RCJ280	Seeding	1,6	CH halo +	EH	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	11170	3,71	+	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8116	2,69	+	BM halo +	BM	*L. monocytogenes*	P	PA
2020	a	1746549	Tomato	L. mono RCJ280	Seeding	1,6	BH halo +	BH	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	8054	2,67	+	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8043	2,67	+	AM halo +	BM	*L. monocytogenes*	P	PA
2020	a	1778840	Radish	L. inno CGZ344	Seeding	1,8	CL halo -	CL	BM halo -	BM	Camp test: - Hémolyse: - API List: *L. innocua*	P	8127	2,70	+	BM halo -	BM	*L. innocua*	P	PA	AM halo -	AM	P	PA	8871	2,94	+	AM halo -	AM	*L. innocua*	P	PA
2020	a	1778842	Endive	L. inno CGZ344	Seeding	1,8	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L. innocua*	P	8289	2,75	+	AM halo -	BM	*L. innocua*	P	PA	AH halo -	AH	P	PA	8901	2,95	+	AH halo -	AH	*L. innocua*	P	PA
2020	a	1746546	Parsley	L. mono RCJ280	Seeding	1,6	EL	EL	EM	EM	/	A	11147	3,70	+	AM halo +	AM	*L. monocytogenes*	P	PD	AM halo +	AM	P	PD	9216	3,06	+	AM halo +	BM	*L. monocytogenes*	P	PD
2020	a	1746548	Spinach	L. mono RCJ280	Seeding	1,6	EM	EM	EL	EL	/	A	2007	0,66	+	BM halo +	BM	*L. monocytogenes*	P	PD	BM halo +	BM	P	PD	5981	1,98	+	BM halo +	BM	*L. monocytogenes*	P	PD
2020	a	1778843	Radish	L. inno CGZ344	Seeding	1,8	EM	EM	Ø	EM	/	A	8565	2,84	+	AM halo -	BM	*L. innocua*	P	PD	AM halo -	BM	P	PD	9018	2,99	+	AH halo -	AH	*L. innocua*	P	PD
2012	b	B10	Potatoes	/	/	/	-ME	Ø	Ø	Ø	/	A	129	0,04	-	/	/	/	A	NA	/	/	/	/	781	0,25	+	+LB(1)	Ø	*L. grayi*	P	PD
2012	b	X9	frozen pre-fried onions	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	A14	Cauliflower (4th range)	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	B8	Brocoli (4th range)	/	/	/	-LE	-LE	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	H1	Gratted carrots	/	/	/	Ø	Ø	Ø	Ø	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	X11	Gratted carrots	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2020	b	1746533	Frozen fried	/	/	/	Ø	EM	Ø	EL	/	A	2	0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	b	1746536	Sliced pineapple	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	-0.00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	b	1758392	Sliced butternut	/	/	/	Ø	EM	EL	EL	/	A	-3	-0,00	-	EL	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2020	b	1758393	Mixed vegetables	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	-0,00	-	Ø	Ø	/	A	NA	Ø	Ø	A	NA	/	/	/	/	/	/	A	NA
2012	b	D13	Mixed salad	/	nc	/	+LB	+LB	+MA	+MA	*L. monocytogenes*	P	12	0,00	-	/	/	/	A	ND	/	/	/	/	5536	1,8	+	+LC(4)	+LB(3)	*L. monocytogenes*	P	PA
2012	b	R4	Gratted carrots (4th range)	L. innocua	Spiking	11	+LA	+MA	+MA	+HA	*L. innocua*	P	5208	1,78	+	+LB	+LB	*L. innocua*	P	PA	/	/	/	/	10313	3,53	+	+LA	+MA	*L. innocua*	P	PA
2012	b	C5	Potatoes	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes* *L. seeligeri*	P	8345	2,72	+	+MB*	+MB	*L. monocytogenes* *L. seeligeri*	P	PA	/	/	/	/	8590	2,8	+	+HA	+MA	*L. monocytogenes* *L. seeligeri*	P	PA
2012	b	C6	Frozen fries	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	8406	2,74	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8672	2,83	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	D15	Fries	/	nc	/	+MA	+MA	+MA	+HA	*L. monocytogenes*	P	8156	2,66	+	+MA	+HA	*L. monocytogenes*	P	PA	/	/	/	/	7738	2,52	+	+HB	+HB	*L. monocytogenes*	P	PA
2012	b	E8	Frozen fries	/	nc	/	+MA	+MB	+MA	+HB	*L. monocytogenes*	P	6667	2,17	+	+MB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	7881	2,51	+	+MB	+MC	*L. monocytogenes*	P	PA
2012	b	F10	Frozen french fries	/	nc	/	+MA	+MB	+MB	+MB	*L. monocytogenes*	P	8444	2,75	+	+HB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	7933	2,59	+	+HB	+HB	*L. monocytogenes*	P	PA
2012	b	F11	Fries potatoes	/	nc	/	+MB	+LB	+MB	+MB	*L. innocua*	P	8682	2,83	+	+MB	+MA	*L. monocytogenes*	P	PA	/	/	/	/	8007	2,61	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	I3	Frozen french fries	/	nc	/	+LB*	+LB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	9766	3,27	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8712	2,92	+	+HB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	b	M2	Frozen fries potatoes	/	nc	/	+MB*	+MB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	6602	2,09	+	+HA	+HB	*L. monocytogenes*	P	PA	/	/	/	/	8678	2,75	+	+MB*	+HC	*L. monocytogenes*	P	PA
2012	b	W13	Frozen fries	/	nc	/	+LA	+LB(2)	+LB	-ME	*L. grayi*	P	8106	3,06	+	+MC	-ME	*L. grayi*	P	PA	/	/	/	/	11509	4,34	+	+MC	-LE	*L. grayi*	P	PA
2012	b	N1	Lettuce heart	/	nc	/	+LA	+MA	+LA	+MA	*L. innocua*	P	8288	2,63	+	+MB	+MA	*L. innocua*	P	PA	/	/	/	/	8494	2,69	+	+MB	+MB	*L. innocua*	P	PA

Vegetal products

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2020	b	1746534	Pan of vegetables	/	nc	/	BL halo -	EL	EM	EM	Camp test: - Hémolyse: - API List: *L. grayi*	P	178	0.05	+	AM halo -	EM	*L. grayi*	P	PA	AM halo -	AM	P	PA	1175	0,39	+	AL halo -	AL	*L. grayi*	P	PA
2020	b	1746535	Pan of vegetables	/	nc	/	BM halo -	BM	BM halo -	BM	Camp test: - Hémolyse: - API List: *L. innocua*	P	7877	2.61	+	AM halo -	EM	*L. innocua*	P	PA	AM halo -	AM	P	PA	9535	3,17	+	AM halo -	AM	*L. innocua*	P	PA
2012	c	P14	Fresh fruit salad	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	-3	0,00	-	/	/	/	A	NA
2012	c	S3	Pan vegetables	/	/	/	Ø	Ø	-LE	-LE	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	-3	0,00	-	/	/	/	A	NA
2012	c	W25	Mixed salad	/	/	/	-ME	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	-	/	/	/	A	NA
2012	c	E6	Wheat and pepper salad	/	/	/	-LE	-LE	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	71	0,02	-	/	/	/	A	NA
2012	c	E7	Vegetables and rice	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	c	G7	3 colors rice and sun vegetables	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	H2	Gratted carrots vinaigrette	/	/	/	-LE	-LE	-LE	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	I10	Artichok and macedonian	/	/	/	Ø	-LE	-LE	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	c	M8	Potato, pepper and olive salad	/	/	/	-LE	-LE	-LE	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	W8	Wheat salad with pepper	/	/	/	-LE	Ø	-LE	-LE	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	-	/	/	/	A	NA
2012	c	W14	Peppermint tabbouleh	/	/	/	-LE	-LE	Ø	Ø	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	-	/	/	/	A	NA
2012	c	X8	Gratted carrots vinaigrette	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	-	/	/	/	A	NA
2012	c	X10	Steamed lentils	/	/	/	Ø	Ø	-LE	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	-	/	/	/	A	NA
2012	c	X12	Vegetables	/	/	/	Ø	Ø	-LE	-ME	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	-	/	/	/	A	NA
2012	c	M10	Rice and ratatouille	/	/	/	Ø	-LE	-LE	-ME	/	A	462	0,14	-	-LE	-ME	/	A (FP)	NA (PP)	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	c	M1	Tabbouleh with olive peppers	/	nc	/	+MA	+LA	+MA	+MA	*L. monocytogenes*	P	5	0,00	-	-LE	-LE	/	A	ND	+MB*	+LB*	A	ND	7	0,00	-	-ME	-LE	/	A	ND
2012	c	W24	Carrot steam slat	L. innocua	Spiking	7	+MA	+MA	+MA	+MA	*L. innocua*	P	9185	3,46	+	+MA	+MA	*L. innocua*	P	PA	/	/	/	/	8757	3,3	+	+MA	+HA	*L. innocua*	P	PA
2012	c	R5	Vegetables	L. welshimeri	Spiking	8,8	+MA	+MA	+MA	+HA	*L. welshimeri*	P	8729	2,99	+	+MB	+MC	*L. welshimeri*	P	PA	/	/	/	/	8835	3,03	+	+MB	+MB	*L. welshimeri*	P	PA
2012	c	W23	Brittany fried	L. innocua	Spiking	14	+LA	+LA	+MB	+HA	*L. innocua*	P	8946	3,37	+	+MB	+LB	*L. innocua*	P	PA	/	/	/	/	8503	3,21	+	+MB	+MB	*L. innocua*	P	PA
2012	c	R6	Steam zucchini	L. welshimeri	Spiking	17,6	+LA	+MA	+LA	+MA	*L. welshimeri*	P	9342	3,2	+	+HA	+HA	*L. welshimeri*	P	PA	/	/	/	/	8798	3,01	+	+MA	+HA	*L. welshimeri*	P	PA
2012	c	G11	Tabbouleh	/	nc	/	+MB	+MB	+MB	+HB	*L. monocytogenes* *L. innocua*	P	6508	2,18	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8123	2,72	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA
2012	c	J11	Lentils	/	nc	/	+MB	+MB	+MB*	+HB*	*L. monocytogenes* *L. innocua*	P	6574	2,2	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8032	2,69	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	c	J12	Tomato and cucumber salad	/	nc	/	+MA	+MB	+MB	+MB	*L. monocytogenes*	P	6844	2,29	+	+MB	+MA	*L. monocytogenes*	P	PA	/	/	/	/	7868	2,64	+	+MB	+MA	*L. monocytogenes*	P	PA

** Listeria monocytogenes*

Composite foods

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2016	a	VP11	Sandwich tomato, green salad, chicken	LIS.5.12	Seeding	1	0Ø	0Ø	0M	0L	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	1,00	-	0Ø	/	/	A	NA
2016	a	VP71	Dry sausage sandwich	LIS.6.24	Seeding	5,0	0L	0Ø	0Ø	0Ø	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2012	a	H8	Pasta salad peppers and tomatoes	/	/	/	Ø	Ø	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	a	I8	Pasta salad, gourmet peas, bamboo and tomatoes	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	a	M12	Pasta salad	/	/	/	-LE	-LE	-LE	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	a	G13	Piperigate goat cheese and aragula	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	a	I2	Salad rice and surimi	/	/	/	Ø	Ø	-LE	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	a	G8	Salmon and mozzarella pasta salad	/	/	/	Ø	-LE	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	a	G12	Shrimp, pasta and gourmet pea salad	/	/	/	Ø	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2016	a	VP1	Salad Piémontaise	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0M	0M	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	a	VP2	Sandwich tuna and vegetables	/	/	/	0L	0M	0H	0H	/	A	/	0,00	-	0H	0H	/	A	NA	-	-	-	NA	/	0,00	-	0H	/	/	A	NA
2016	a	VP3	White cabbage, carrots and onion in sauce	/	/	/	0Ø	0Ø	0L	0H	/	A	/	0,00	-	0H	0M	/	A	NA	-	-	-	NA	/	0,00	-	0M	/	/	A	NA
2016	a	VP4	Ham sandwich	/	/	/	0Ø	0L	0L	0M	/	A	/	0,00	-	0M	0M	/	A	NA	-	-	-	NA	/	0,00	-	0M	/	/	A	NA
2016	a	VP5	Lebanese tabbouleh	/	/	/	0M	0M	0M	0H	/	A	/	0,00	-	0H	0H	/	A	NA	-	-	-	NA	/	0,00	-	0M	/	/	A	NA
2016	a	VP45	Caesar chicken wrap, slad, parmesan	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0M	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	a	VP46	Kebab chicken sandwich, raw food	/	/	/	0L	0M	0Ø	0Ø	/	A	/	0,00	-	0M	0M	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	a	VP52	Croissant chicken and emmental	/	/	/	0Ø	0Ø	0M	0L	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0M	/	/	A	NA
2016	a	VP53	Surimi and pineapple salad	/	/	/	0Ø	0Ø	0L	0M	/	A	/	0,00	-	0M	0L	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	a	VP61	Potato salad, carrots, tomato, herring	/	/	/	0Ø	0Ø	0Ø	0L	/	A	/	0,00	-	0L	0L	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	a	VP62	Potato salad, carrots, tomato, herring	/	/	/	0Ø	0Ø	0Ø	0L	/	A	/	0,00	-	0L	0L	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	a	VP63	Potato salad, carrots, tomato, herring	/	/	/	0Ø	0Ø	0M	0M	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	a	VP33	Croissant chicken and emmental	LIS.4.5	Seeding	1,2	1h+Ø	1L	2h+Ø	3Ø	*+ (L.m)*	P	/	2,41	+	1L	1h+Ø	*+ (L.m)*	P	PA	+	+	*+ (L.m)*	PA	/	2,76	+	1h+L	/	*L. monocytogenes*	P	PA
2016	a	VP34	Surimi and pineapple salad	LIS.4.5	Seeding	1,2	2h+Ø	1L	2h+Ø	2Ø	*+ (L.m)*	P	/	3,33	+	1M	2h+Ø	*+ (L.m)*	P	PA	+	+	*+ (L.m)*	PA	/	3,21	+	2h+Ø	/	*L. monocytogenes*	P	PA
2016	a	VP15	Potato salad and Strasbourg sausage	LIS.6.24	Seeding	3,8	1h-Ø	0Ø	2h-Ø	2Ø	*+ (L.w)*	P	/	3,36	+	1L	2h-Ø	*+ (L.w)*	P	PA	+	+	*+ (L.w)*	PA	/	3,37	+	2h-Ø	/	*L. welshimeri*	P	PA
2016	a	VP72	Rosette sandwich from Lyon	LIS.6.24	Seeding	5	1h-Ø	1L	2h-Ø	2Ø	*+ (L.w)*	P	/	1,24	+	1L	1h-Ø	*+ (L.w)*	P	PA	+	+	*+ (L.w)*	PA	/	0,77	+	1h-Ø	/	*L. welshimeri*	P	PA
2016	a	VP73	Red beets	LIS.6.24	Seeding	5	1h-L	1L	1h-Ø	1Ø	*+ (L.w)*	P	/	4,54	+	1L	1h-Ø	*+ (L.w)*	P	PA	+	+	*+ (L.w)*	PA	/	3,17	+	2h-Ø	/	*L. welshimeri*	P	PA
2016	a	VP68	Chicken salad, raw vegetables	LIS.3.13	Seeding	8	0Ø	0Ø	0Ø	0Ø	/	A	/	0,06	+	1L	1h+Ø	*+ (L.iv)*	P	PD	+	+	*+ (L.iv)*	PD	/	0,08	+	2h+Ø	/	*L. ivanovii*	P	PD
2016	a	VP69	Potato salad, sausage	LIS.3.13	Seeding	8	(1)h+Ø	(1)L	2h+Ø	2Ø	*+ (L.iv)*	P	/	2,94	+	1L	1h+L	*+ (L.iv)*	P	PA	+	+	*+ (L.iv)*	PA	/	3,48	+	1h+Ø	/	*L. ivanovii*	P	PA
2012	a	R9	Pasta salad with seafood	L. welshi.	Spiking	10,4	+LA	+MA	+MB	+MB	*L. welshimeri*	P	8063	2,76	+	+MB	+MB	*L. welshimeri*	P	PA	/	/	/	PA	8357	2,86	+	+MA	+MB	*L. welshimeri*	P	PA
2012	a	H6	Tuna bagnat	/	nc	/	-LE	-LE	-ME	-ME	/	A	585	0,19	+	+LC	+LC	*L. welshimeri*	P	PD	/	/	/	PD	2125	0,71	+	+LC	+LC	*L. welshimeri*	P	PD
2016	a	VP64	Potato salad, carrots, tomato, herring	/	nc	/	1h+Ø	1Ø	2h+Ø	2h+Ø	*+ (L.m)*	P	/	0,00	-	0L	0L	/	A	ND	-	-	-	ND	/	0,00	-	0L	/	-	A	ND
2016	a	VP26	Caesar chicken wrap, slad, parmesan	/	nc	/	1h-Ø	1Ø	2h-Ø	2Ø	*+ (L.w)*	P	/	0,49	+	2L	2h+Ø	*+ (L.m)*	P	PA	+	+	*+ (L.m)*	PA	/	2,66	+	2h+L	/	*L. monocytogenes*	P	PA
2016	a	VP27	Kebab chicken sandwich, raw vegetables	/	nc	/	2h-L	1L	0L	0H	*+ (L.g)*	P	/	3,13	+	2L	2h+Ø	*+ (L.m)*	P	PA	+	+	*+ (L.m)*	PA	/	3,19	+	2h+L	/	*L. monocytogenes*	P	PA
2016	b	VP6	Quiche Lorraine	LIS.5.11	Seeding	0,8	0Ø	0Ø	0L	0M	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP7	Chicken kebab	LIS.5.11	Seeding	0,8	0Ø	0Ø	0L	0M	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP8	3 chesse pizza	LIS.5.11	Seeding	0,8	0Ø	0Ø	0M	0M	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	b	VP9	Chive of endive with ham	LIS.5.11	Seeding	0,8	0Ø	0Ø	0M	0M	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	b	VP13	Moussaka	LIS.5.12	Seeding	1	0Ø	0Ø	0L	0M	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2012	b	A9	Smoked salmon pizza	L. mono	Spiking	20,7	Ø	Ø	Ø	Ø	/	A	23	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	b	G14	Serpentinis with basil and olive sauce	/	/	/	Ø	Ø	Ø	Ø	/	A	7	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	b	M9	Fried noodles	/	/	/	Ø	Ø	-ME	-ME	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	b	12	Fried vegetables noodles	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	b	C2	Endive terrine	/	/	/	-LE	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	b	E9	Ham and mushrooms for pizza	/	/	/	Ø	Ø	Ø	Ø	/	A	81	0,02	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2012	b	F7	Ham pizza	/	/	/	Ø	-LE	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	/	/
2016	b	VP36	Caramelized chicken and rice with vegetables	/	/	/	0L	0L	0L	0L	/	A	/	0,00	-	0L	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP37	Caramel pork and rice, onion sauce	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	b	VP38	Tortilla with onions, potato and egg	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0Ø	0L	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	b	VP39	Pie cottage cheese, smoked bacon	/	/	/	0L	0L	0M	0L	/	A	/	0,00	-	0M	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP42	Poultry pasta with tomato and basil sauce	/	/	/	0Ø	0L	0L	0M	/	A	/	0,00	-	0M	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP44	Polenta duck confit and vegetables	/	/	/	0Ø	0L	0Ø	0Ø	/	A	/	0,00	-	0M	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP47	Mini involtini pork	/	/	/	0L	0M	0Ø	0Ø	/	A	/	0,00	-	0L	0L	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	b	VP48	Carbonara tagliatelle	/	/	/	0Ø	0L	0L	0L	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	b	VP49	4 cheese pizza	/	/	/	0L	0Ø	0Ø	0Ø	/	A	/	0,00	-	0M	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP50	Ham and mushrooms pizza	/	/	/	0Ø	0L	0L	0H	/	A	/	0,00	-	0L	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP51	Falafels, pear and carrots	/	/	/	0Ø	0Ø	0L	0L	/	A	/	0,00	-	0M	0L	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	b	VP54	Bouchée à la reine	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	b	VP18	Tortilla with onions, potato and egg	LIS.4.6	Seeding	0,8	1h+Ø	2Ø	2h+Ø	2Ø	*+ (L.m)*	P	/	0,00	-	0L	0L	/	A	ND	-	-	-	ND	/	0,00	-	0Ø	/	/	A	ND
2016	b	VP19	Pie cottage cheese, smoked bacon	LIS.4.6	Seeding	0,8	1h+Ø	1M	2h+Ø	2L	*+ (L.m)*	P	/	0,00	-	0M	0L	/	A	ND	/	/	/	ND	/	0,00	-	0L	/	/	A	ND
2016	b	VP12	Surimi torti	LIS.5.12	Seeding	1	0Ø	0H	0H	0H	/	A	/	1,38	+	0M	1h-H	*+ (L.se)*	P	PD	+	+	/	PD	/	0,12	+	1h-H	/	+	P	PD
2016	b	VP32	Falafels, pear and carrots	LIS.2.7	Seeding	1,2	0L	0L	0Ø	0Ø	/	A	/	3,20	+	1L	2h-Ø	*+ (L.in)*	P	PD	+	+	*+ (L.in)*	PD	/	3,01	+	2h-L	/	*L. innocua*	P	PD
2016	b	VP29	Carbonara tagliatelle	LIS.2.7	Seeding	1,2	2h-Ø	2Ø	2h-Ø	2Ø	*+ (L.in)*	P	/	3,31	+	2L	2h-Ø	*+ (L.in)*	P	PA	+	+	*+ (L.in)*	PA	/	3,34	+	2h-Ø	/	*L. innocua*	P	PA
2016	b	VP30	4 cheese pizza	LIS.2.7	Seeding	1,2	1h-L	1L	2h-Ø	2M	*+ (L.in)*	P	/	3,33	+	2L	2h-Ø	*+ (L.in)*	P	PA	+	+	*+ (L.in)*	PA	/	4,78	+	2h-L	/	*L. innocua*	P	PA
2016	b	VP31	Ham and mushrooms pizza	LIS.2.7	Seeding	1,2	1h-Ø	1Ø	2h-Ø	2Ø	*+ (L.in)*	P	/	3,69	+	1L	1h-L	*+ (L.in)*	P	PA	+	+	*+ (L.in)*	PA	/	4,63	+	1h-L	/	*L. innocua*	P	PA
2016	b	VP35	Bouchée à la reine	LIS.4.5	Seeding	1,2	1h+Ø	1Ø	2h+Ø	2Ø	*+ (L.m)*	P	/	4,78	+	1Ø	1h+Ø	*+ (L.m)*	P	PA	+	+	*+ (L.m)*	PA	/	4,78	+	1h+L	/	*L. monocytogenes*	P	PA

Composite foods

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2016	b	VP24	Polenta duck confit and vegetables	LIS.4.4	Seeding	1,8	0Ø	0L	0L	0L	/	A	/	2,99	+	2L	3h+Ø	+ (L.m)	P	PD	+	+	+ (L.m)	PD	/	3,00	+	2h+Ø	/	L. monocytogenes	P	PD
2016	b	VP23	Poultry pasta with tomato and basil sauce	LIS.4.4	Seeding	1,8	1h+Ø	1L	2h+Ø	1M	+ (L.m)	P	/	3,01	+	2L	2h+L	+ (L.m)	P	PA	+	+	+ (L.m)	PA	/	2,98	+	2h+Ø	/	L. monocytogenes	P	PA
2016	b	VP70	Tomato, parmesan farfalle	LIS.3.13	Seeding	8,0	1h+L	1L	2h+Ø	2L	+ (L.iv)	P	/	0,00	-	1L	1h+Ø	+ (L.iv)	P	PA	+	+	+ (L.iv)	PA	/	0,01	-	1h+Ø	/	L. ivanovii	P	PA
2016	b	VP16	Caramelized chicken and rice with vegetables	LIS.2.7	Seeding	8,6	2h-Ø	2Ø	2h-Ø	2Ø	+ (L.in)	P	/	3,28	+	2Ø	2h-Ø	+ (L.in)	P	PA	+	+	+ (L.in)	PA	/	3,32	+	2h-Ø	/	L. innocua	P	PA
2016	b	VP17	Caramel pork and rice, onion sauce	LIS.2.7	Seeding	8,6	2h-Ø	2Ø	2h-Ø	2Ø	+ (L.in)	P	/	2,94	+	2Ø	2h-Ø	+ (L.in)	P	PA	+	+	+ (L.in)	PA	/	3,01	+	2h-Ø	/	L. innocua	P	PA
2012	b	B5	Ham and mushrooms pizza	/	nc	/	+LA	+LB	+MA	+MB	L. welshimeri	P	18	0,00	-	/	/	/	A	ND	/	/	/	ND	356	0,11	+	+LA	+LB	L. welshimeri	P	PA
2012	b	B9	Seafood paella	/	nc	/	+LA	+LA	+MA	+MA	L. welshimeri	P	3	0,00	-	/	/	/	A	ND	Ø	Ø	Ø	ND	4	0,00	-	Ø	Ø	/	A	ND
2012	b	F2	Raw ham pizza	/	nc	/	+LA	+MB	+MA	+MB	L. welshimeri	P	6079	1,98	+	+LB	+LB	L. welshimeri	P	PA	/	/	/	PA	8702	2,84	+	+LB(2)	+LC	L. welshimeri	P	PA
2012	b	J1	Rotal pizza	/	nc	/	+LB*	+LB*	+MB*	+HC	L. monocytogenes L. welshimeri	P	352	0,11	+	+LB*	+MC*	L. monocytogenes L. welshimeri	P	PA	/	/	/	PA	1721	0,57	+	+MB*	+MB*	L. monocytogenes L. welshimeri	P	PA
2012	b	D14	Cheese pizza	/	nc	/	+MA	+MA	+MA	+HB	L. monocytogenes	P	8807	2,87	+	+MB	+MD*	L. monocytogenes L. welshimeri	P	PA	/	/	/	PA	7526	2,45	+	+MB	+MD*	L. monocytogenes L. welshimeri	P	PA
2012	b	E4	Cheese pizza	/	nc	/	+LA	+LB	+MB	+MB	L. welshimeri	P	9479	3,09	+	+MB	+MB	L. welshimeri	P	PA	/	/	/	PA	8335	2,72	+	+MA	+MB	L. welshimeri	P	PA
2012	b	F3	Cheese pizza	/	nc	/	+MC	+MC	+MB	+MC	L. welshimeri	P	1385	0,45	+	+LB	+LB	L. welshimeri	P	PA	/	/	/	PA	7978	2,60	+	+LB	+LB	L. welshimeri	P	PA
2012	b	F8	Cheese pizza	/	nc	/	+MA	+MA	+MB	+MB	L. welshimeri	P	7754	2,53	+	+MD*	+MD*	L. monocytogenes L. welshimeri	P	PA	/	/	/	PA	7632	2,49	+	+MB*	+MD*	L. monocytogenes L. welshimeri	P	PA
2016	b	VP28	Mini involtini pork	/	nc	/	2h+L	1L	2h+L	2Ø	+ (L.m)	P	/	3,26	+	2L	2h+Ø	+ (L.m)	P	PA	/	/	/	PA	/	3,22	+	2h+M		L. monocytogenes	P	PA
2016	c	VP10	Apple tart	LIS.5.12	Seeding	1,0	0Ø	0Ø	0L	0L	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	/	/	/	NA	/	0,00	-	0Ø	/	/	A	NA
2012	c	B16	Apple tart	/	/	/	Ø	-LE	-LE	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	NA	4	0,00	-	/	/	/	A	NA
2012	c	Q1	Forêt noire	/	/	/	-ME	-LE	-ME	-ME	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	NA	-2	0,00	-	/	/	/	A	NA
2012	c	Q2	Strawberry cake	/	/	/	Ø	-LE	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	NA	0	0,00	-	/	/	/	A	NA
2012	c	Q3	Strawberry melba	/	/	/	Ø	Ø	-LE	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	NA	-3	0,00	-	/	/	/	A	NA
2012	c	Q4	Pastry cabbage with cream	/	/	/	-LE	Ø	-ME	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	NA	0	0,00	-	/	/	/	A	NA
2012	c	Q5	Religious chocolate	/	/	/	-LE	Ø	-ME	-LE	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	NA	-3	0,00	-	/	/	/	A	NA
2012	c	Q6	Tropezienne	/	/	/	-ME	-ME	-ME	-ME	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	NA	-2	0,00	-	/	/	/	A	NA
2016	c	VP40	Bear paws	/	/	/	0Ø	0L	0Ø	0M	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	c	VP41	Flan	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0L	0L	/	A	NA	-	-	-	NA	/	0,00	-	0L	/	/	A	NA
2016	c	VP43	Paris Brest	/	/	/	0L	0L	0L	0M	/	A	/	0,00	-	0L	0L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	c	VP78	Rum baba, whipped cream	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0L	(1)h-L	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	c	VP79	Vanilla milk semolina	/	/	/	0Ø	0Ø	0L	0L	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	c	VP80	Custard	/	/	/	0Ø	0Ø	0Ø	0Ø	/	A	/	0,00	-	0Ø	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	c	VP81	Pastry cream cone and vanilla sugar	/	/	/	0Ø	0L	(1)h-Ø	0M	/	A	/	0,00	-	0L	0Ø	/	A	NA	-	-	-	NA	/	0,00	-	0Ø	/	/	A	NA
2016	c	VP20	Bear paws	LIS.4.6	Seeding	0,8	0Ø	0L	0L	0M	/	A	/	2,81	+	0L	1h+Ø	+ (L.m)	P	PD	+	+	+ (L.m)	PD	/	3,01	+	2h+Ø	/	L. monocytogenes	P	PD
2016	c	VP21	Flan	LIS.4.4	Seeding	1,8	2h+Ø	2Ø	2h+Ø	2Ø	+ (L.m)	P	/	2,78	+	2Ø	2h+Ø	+ (L.m)	P	PA	+	+	+ (L.m)	PA	/	2,91	+	2h+Ø	/	L. monocytogenes	P	PA
2016	c	VP22	Paris Brest	LIS.4.4	Seeding	1,8	2h+Ø	2Ø	1h+Ø	2Ø	+ (L.m)	P	/	2,97	+	2M	3h+Ø	+ (L.m)	P	PA	+	+	+ (L.m)	PA	/	3,08	+	2h+Ø	/	L. monocytogenes	P	PA
2016	c	VP74	Rum baba, whipped cream	LIS.6.25	Seeding	3,4	1h-Ø	1Ø	1h-Ø	1Ø	+ (L.w)	P	/	2,68	+	2Ø	1h-Ø	+ (L.w)	P	PA	+	+	+ (L.w)	PA	/	2,74	+	2h-Ø	/	L. welshimeri	P	PA
2016	c	VP75	Butter cream and vanilla buchette	LIS.6.25	Seeding	3,4	1h-Ø	1L	2h-Ø	2Ø	+ (L.w)	P	/	2,32	+	1Ø	1h-Ø	+ (L.w)	P	PA	+	+	+ (L.w)	PA	/	3,09	+	2h-Ø	/	L. welshimeri	P	PA
2016	c	VP76	Butter cream and coffee buchette	LIS.6.25	Seeding	3,4	1h-Ø	1L	2h-Ø	2Ø	+ (L.w)	P	/	0,44	+	1L	1h-Ø	+ (L.w)	P	PA	+	+	+ (L.w)	PA	/	3,75	+	2h-Ø	/	L. welshimeri	P	PA
2016	c	VP77	Pastry cream cone and vanilla sugar	LIS.6.25	Seeding	3,4	1h-Ø	1Ø	2h-Ø	2Ø	+ (L.w)	P	/	4,61	+	1L	2h-Ø	+ (L.w)	P	PA	+	+	+ (L.w)	PA	/	3,08	+	2h-Ø	/	L. welshimeri	P	PA
2016	c	VP14	Apple tart	LIS.6.24	Seeding	3,8	2h-Ø	1Ø	2h-Ø	1M	+ (L.w)	P	/	2,68	+	1L	2h-Ø	+ (L.w)	P	PA	+	+	+ (L.w)	PA	/	0,84	+	2h-Ø	/	L. welshimeri	P	PA
2012	c	B7	Opera cafe	/	nc	/	+ME	-LE	+MA	+MB	L. monocytogenes	P	9	0,00	-	/	/	/	A	ND	/	/	/	ND	25	0,00	-	-LE	-LE	/	A	ND
2012	c	D11	Strawberry duo cup	/	nc	/	+MA	+MB	+MA	+HB	L. monocytogenes	P	8114	2,65	+	+MB	+HB	L. monocytogenes	P	PA	/	/	/	PA	8104	2,64	+	+MB	+HA	L. monocytogenes	P	PA
2012	c	E1	Chantilly chocolate profiterole	/	nc	/	+MA	+MA	+MA	+MA	L. monocytogenes	P	8494	2,77	+	+MA	+MA	L. monocytogenes	P	PA	/	/	/	PA	8027	2,62	+	+MA	+HB	L. monocytogenes	P	PA
2012	c	E2	Individual Versaillais	/	nc	/	+MC	+MD	+MB	+MB	L. monocytogenes	P	9052	2,95	+	+MB	+MB	L. monocytogenes	P	PA	/	/	/	PA	8111	2,64	+	+MB	+MB	L. monocytogenes	P	PA
2012	c	E3	Strawberry duo cup	/	nc	/	+MB	+MB	+MA	+MB	L. monocytogenes	P	8697	2,84	+	+MB	+MA	L. monocytogenes	P	PA	/	/	/	PA	8348	2,72	+	+MB	+MA	L. monocytogenes	P	PA
2012	c	F1	Individual Versaillais	/	nc	/	+MB	+LB	+MB	+MB	L. innocua	P	11595	3,78	+	+MB	+MB	L. innocua	P	PA	/	/	/	PA	8393	2,74	+	+MB	+HB	L. innocua	P	PA
2012	c	F6	Versaillais	/	nc	/	+MA	+MB	+MB	+HC	L. monocytogenes	P	9587	3,13	+	+MB	+MB	L. monocytogenes	P	PA	/	/	/	PA	9144	2,98	+	+HB	+HB	L. monocytogenes	P	PA
2016	c	VP25	Eclair coffee	/	nc	/	2h+Ø	1L	2h+Ø	3Ø	+ (L.m)	P	/	4,05	+	1M	2h+Ø	+ (L.m)	P	PA	/	/	/	PA	/	4,34	+	1h+Ø	/	L. monocytogenes	P	PA
2016	c	VP65	Coconut pearl	/	nc	/	2h+Ø	2Ø	2h+Ø	2h+Ø	+ (L.m)	P	/	3,21	+	2Ø	2h+L	+ (L.m)	P	PA	/	/	/	PA	/	3,19	+	2h+L	/	L. monocytogenes L. welshimeri	P	PA
2016	c	VP66	Coconut pearl	/	nc	/	2h+Ø	2Ø	2h+Ø	2Ø	+ (L.m)	P	/	3,18	+	2Ø	2h+Ø	+ (L.m)	P	PA	/	/	/	PA	/	3,17	+	2h+Ø	/	L. monocytogenes L. welshimeri	P	PA
2016	c	VP67	Coconut pearl	/	nc	/	2h+Ø	2Ø	2h+Ø	2M	+ (L.m)	P	/	3,06	+	2Ø	2h+Ø	+ (L.m)	P	PA	/	/	/	PA	/	3,02	+	2h+Ø	/	L. monocytogenes L. welshimeri	P	PA

Environmental samples - General protocol

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	a	R15	Stagnant water dirty tank	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	40	0,01	-	/	/	/	A	NA
2012	a	X1	Process water	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	X2	Laboratory water	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	X3	New water	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	X4	Frozen water	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	X5	Potable water	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	X6	New water	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	X7	Frozen water	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	Y1	Process water	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	Y2	Frozen water	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	a	Y3	New water	/	/	/	Ø	Ø	-LE	-LE	/	A	-5	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2016	a	VP82	Washing station water 1	LIS.2.11	Seeding	1,2	Ø	Ø	Ø	Ø	/	A	/	0,00	-	/	/	/	A	NA	-	-	-	NA	/	/	/	/	/	/	A	NA
2016	a	VP85	Rinsing water 3	LIS.4.16	Seeding	1,2	Ø	Ø	Ø	Ø	/	A	/	0,00	-	/	/	/	A	NA	-	-	-	NA	/	/	/	/	/	/	A	NA
2016	a	VP83	Rinsing water 1	LIS.2.11	Seeding	1,2	1h-Ø	1Ø	3h-Ø	4Ø	*L. innocua*	P	/	0,00	-			/	A	ND	-	-	-	ND	/	0,00	-	/	/	/	A	ND
2020	a	1770875	Fish industry wash water	L.mono LCM223	Seeding	2,6	AM halo +	AM	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	-4	-0,00	NEGATIF	EL	EL	/	A	ND	Ø	EL	A	ND	-2	-0,00	-	/	/	/	A	ND
2016	a	VP84	Rinsing water 2	LIS.2.11	Seeding	1,2	1h-Ø	1Ø	3h-Ø	4Ø	*L. innocua*	P	/	3,17	+	+	+	*L. innocua*	P	PA	/	/	/	/	/	3,32	+	+	+	*L. innocua*	P	PA
2016	a	VP86	Washing station water 2	LIS.4.16	Seeding	1,2	1h+Ø	1Ø	3h+Ø	4Ø	*L. monocytogenes*	P	/	3,49	+	+	+	*L. monocytogenes*	P	PA	/	/	/	/	/	3,38	+	+	+	*L. monocytogenes*	P	PA
2012	a	R19	Potable water	L. ivanovii	Spiking	9,7	+LA	+LA	+MA	+HA	*L. ivanovii*	P	1524	0,52	+	+LA	+MA	*L. ivanovii*	P	PA	/	/	/	/	8478	2,9	+	+MA	+MA	*L. ivanovii*	P	PA
2012	a	W33	Frozen water	L. innocua	Spiking	11,7	+MA	+MA	+MA	+MB	*L. innocua*	P	8390	3,16	+	+MA	+MA	*L. innocua*	P	PA	/	/	/	/	6742	2,54	+	+MA	+MA	*L. innocua*	P	PA
2012	a	R20	New water	L. mono	Spiking	13	+LA	+MA	+MA	+MA	*L. monocytogenes*	P	8068	2,76	+	+MA	+MA	*L. monocytogenes*	P	PA	/	/	/	/	8300	2,84	+	+MA	+MA	*L. monocytogenes*	P	PA
2020	a	1770830	Rinsing water egg products	L.welshimeri PSX189	Seeding	0,8	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	8977	2,95	POSITIF	AM halo -	AM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	9009	2,99	+	AM halo -	AM	*L. welshimeri*	P	PA
2020	a	1770831	Pasteurizing rinse water	L.welshimeri PSX189	Seeding	0,8	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	9595	3,16	POSITIF	AM halo -	AM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	9062	3,01	+	AM halo -	AM	*L. welshimeri*	P	PA
2020	a	1770832	Waste water tank 1	L.welshimeri PSX189	Seeding	0,8	AM halo -	DM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	8962	2,95	POSITIF	AM halo -	DM	*L. welshimeri*	P	PA	AM halo -	DM	P	PA	8164	2,71	+	BM halo -	BM	*L. welshimeri*	P	PA
2020	a	1770833	Waste water tank 2	L.welshimeri PSX189	Seeding	0,8	AM halo -	DM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	9658	3,18	POSITIF	DM halo -	DM	*L. welshimeri*	P	PA	DM halo -	DM	P	PA	8086	2,68	+	BM halo -	BM	*L. welshimeri*	P	PA
2020	a	1770834	Waste water tank 3	L.welshimeri PSX189	Seeding	0,8	DM halo -	DM	AM halo -	BM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	9283	3,05	POSITIF	DM halo -	EM	*L. welshimeri*	P	PA	BM halo -	EM	P	PA	8162	2,71	+	BM halo -	BM	*L. welshimeri*	P	PA
2020	a	1770835	Water process animal feed industry	L.welshimeri PSX189	Seeding	0,8	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	9682	3,18	POSITIF	AM halo -	AM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	8123	2,70	+	BM halo -	AM	*L. welshimeri*	P	PA
2020	a	1770876	Process water ice tide	L.mono LCM223	Seeding	2,6	AL halo +	AL	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	5559	1,83	POSITIF	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	9018	2,99	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	a	1770877	Food industry siphon water	L.mono LCM223	Seeding	2,6	AM halo +	AM	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	8387	2,76	POSITIF	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8448	2,80	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	a	1778804	Food industry process water	L.welshimeri HDL996	Seeding	1,4	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	9084	3,01	POSITIF	AM halo -	AM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	8760	2,91	+	AM halo -	AM	*L. welshimeri*	P	PA
2012	c	S20	Residue line 1: peas	/	/	/	Ø	-LE	Ø	Ø	/	A	0	0,00	-	/	/	/	A	NA	/	/	/	/	1	0,00	-	/	/	/	A	NA
2012	c	Y4	Residue carpet line 1	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	Y5	Meat stand residues	/	/	/	Ø	Ø	Ø	Ø	/	A	-4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	Y6	Delicatessen stand residue	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	Y7	Cheese stand residues	/	/	/	Ø	Ø	Ø	Ø	/	A	-2	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	Y8	Workshop dirty bin residue	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	Y9	Beef cutting residue	/	/	/	Ø	Ø	Ø	Ø	/	A	-3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	c	R22	Chicken cutting waste	L. ivanovii	Spiking	29	Ø	Ø	Ø	Ø	/	A	22	0,00	-	/	/	/	A	NA	/	/	/	/	69	0,02	-	/	/	/	A	NA
2012	c	R25	Calf cutting waste	L. ivanovii	Spiking	19.4	Ø	Ø	Ø	Ø	/	A	14	0,00	-	/	/	/	A	NA	/	/	/	/	600	0,2	+	-ME	-LE	/	A (FP)	NA (PP)
2020	c	1770873	Egg product vaccum residues	L.mono RAX819	Seeding	2,4	EM	EM	EM	EM	/	A	-3	-0,00	NEGATIF	EL	EL	/	A	NA	Ø	Ø	A	NA	5	-0,00	-	/	/	/	A	NA
2012	c	R13	Meat mincer residue	/	nc	/	+LA	+LA	+MA	+HA	*L. welshimeri*	P	9	0,00	-	+LA	+LA	*L. welshimeri*	A (FN)	ND	/	/	/	/	93	0,03	-	+LA	+LA	*L. welshimeri*	A (FN)	ND
2012	c	A12	Meat stand residues	/	nc	/	+MA	+HB	+MB	+MB	*L. monocytogenes*	P	8399	2,74	+	+HA	+HA	*L. monocytogenes*	P	PA	/	/	/	/	7005	2,28	+	+HA	+HA	*L. monocytogenes*	P	PA
2012	c	B2	Butchery waste residue	/	nc	/	+MB*	+MB*	+MB*	+MB*	*L. monocytogenes* *L. welshimeri*	P	8547	2,79	+	+MB*	+HB	*L. monocytogenes* *L. welshimeri*	P	PA	/	/	/	/	8141	2,65	+	+HB*	+HB	*L. monocytogenes* *L. welshimeri*	P	PA
2012	c	J10	Delicatessen stand residue	/	nc	/	+LA	+LA	+MA	+HA	*L. monocytogenes*	P	6492	2,17	+	+MB	+HA	*L. monocytogenes*	P	PA	/	/	/	/	7729	2,59	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	c	J15	Workshop dirty bin residue	/	nc	/	+MB	+MB	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	7564	2,53	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	7569	2,54	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA
2012	c	R14	Butchery workshop residues	/	nc	/	+LB*	+LB*	+MB*	+HB	*L. welshimeri* *L. innocua*	P	6869	2,35	+	+MB*	+LB*	*L. welshimeri* *L. innocua*	P	PA	/	/	/	/	9896	3,39	+	+MB*	+MB*	*L. welshimeri* *L. innocua*	P	PA
2012	c	R24	Turkey cutting waste	L. innocua	Spiking	12,5	+MA	+LB	+MB	+MB	*L. innocua*	P	10489	3,59	+	+MB	+MB	*L. innocua*	P	PA	/	/	/	/	8989	3,08	+	+MB	+MB	*L. innocua*	P	PA

Environmental samples - General protocol

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							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2020	c	1770836	Poultry offal residues	L.mono RAX819	Seeding	2,4	AM halo +	DM	AM halo +	BM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	8272	2,72	POSITIF	AM halo +	DM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8146	2,70	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	c	1770837	Poultry skins residues	L.mono RAX819	Seeding	2,4	AM halo +	DM	AM halo +	BM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	8026	2,64	POSITIF	AM halo +	DM	*L. monocytogenes*	P	PA	AM halo +	DM	P	PA	8163	2,71	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	c	1770838	Poultry viscous residues	L.mono RAX819	Seeding	2,4	AM halo +	DM	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	8078	2,66	POSITIF	BM halo +	AM	*L. monocytogenes*	P	PA	AM halo -	AM	P	PA	8265	2,74	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	c	1770839	Egg product sweeping residues	L.mono RAX819	Seeding	2,4	EM	EM	AM halo +	EM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	6221	2,06	POSITIF	AM halo +	BM	*L. monocytogenes*	P	PA	AM halo -	AM	P	PA	6119	2,03	+	AM halo +	BM	*L. monocytogenes*	P	PA
2020	c	1770874	Cheese waste residues	L.mono RAX819	Seeding	2,4	AM halo +	BM	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	8225	2,70	POSITIF	AM halo +	BM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8332	2,76	+	BM halo +	BM	*L. monocytogenes*	P	PA
2020	c	1770878	Butchery residues	L.mono LCM223	Seeding	2,6	AL halo +	AL	AM halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	8974	2,95	POSITIF	AM halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	8651	2,87	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	c	1778805	Duck residues	L.welshimeri HDL996	Seeding	1,4	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	1689	0,56	POSITIF	AM halo -	AM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	7378	2,45	+	AM halo -	AM	*L. welshimeri*	P	PA
2020	c	1778806	Chicken residues	L.welshimeri HDL996	Seeding	1,4	AM halo -	AM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	9087	3,02	POSITIF	AM halo -	BM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	9306	3,09	+	AM halo -	BM	*L. welshimeri*	P	PA
2012	c	A13	Meat mincer residue	/	nc	/	Ø	Ø	Ø	Ø	/	A	8430	2,75	+	+LA	+LA	*L. monocytogenes*	P	PD	/	/	/	/	10993	3,59	+	+LA	+MA	*L. monocytogenes*	P	PD

Environmental samples - Specific protocol

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							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2012	b	K2	PS ligne 1 rive pré tunnel DFC	/	/	/	-LE	-LE	-LE	-LE	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	8	0,00	-	/	/	/	A	NA
2012	b	L3	Red cutting board	/	/	/	-LE	-LE	-LE	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	L4	White cutting board	/	/	/	-LE	-LE	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	3	0,00	-	/	/	/	A	NA
2012	b	L5	White cutting board	/	/	/	-LE	-LE	-LE	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	b	L8	Cutting board	/	/	/	-LE	-ME	-ME	-ME	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	L10	Cutting board	/	/	/	-LE	-LE	-LE	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	L11	Sliced local wall	/	/	/	-LE	Ø	Ø	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	L12	Large white tray	/	/	/	-LE	-LE	-LE	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	b	L13	Perforated stainless steel container	/	/	/	-LE	Ø	-LE	Ø	/	A	9	0,00	-	/	/	/	A	NA	/	/	/	/	8	0,00	-	/	/	/	A	NA
2012	b	L14	Knife blade black handle	/	/	/	-LE	-LE	Ø	Ø	/	A	6	0,00	-	/	/	/	A	NA	/	/	/	/	4	0,00	-	/	/	/	A	NA
2012	b	L15	Leaf blade black handle	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	8	0,00	-	/	/	/	A	NA
2012	b	L16	White cutting board	/	/	/	Ø	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	5	0,00	-	/	/	/	A	NA
2012	b	L17	Slicer blade	/	/	/	-LE	Ø	Ø	Ø	/	A	7	0,00	-	/	/	/	A	NA	/	/	/	/	7	0,00	-	/	/	/	A	NA
2012	b	L18	Black handle knife	/	/	/	-LE	-LE	-LE	Ø	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	L19	Knife blade	/	/	/	Ø	Ø	Ø	Ø	/	A	22	0,00	-	/	/	/	A	NA	/	/	/	/	6	0,00	-	/	/	/	A	NA
2012	b	L20	Cutting board	/	/	/	-LE	Ø	Ø	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	273	0,08	+	+LC(2)	-LE	*L. monocytogenes*	P	PD
2012	b	L21	Catering table	/	/	/	-LE	-LE	-ME	-LE	/	A	8	0,00	-	/	/	/	A	NA	/	/	/	/	15	0,00	-		/	/	A	NA
2012	b	L22	Line 2 : fan	/	/	/	-LE	-LE	-LE	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	10	0,00	-	/	/	/	A	NA
2012	b	O1	Hot preparations work plan	/	/	/	-ME	-ME	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O2	Slicer	/	/	/	-LE	-LE	-LE	Ø	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O3	Slicer stall delicatessen	/	/	/	-ME	-LE	-LE	-LE	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O4	Slicer blade	/	/	/	-LE	-ME	Ø	Ø	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O5	Pastry workshop work plan	/	/	/	-LE	-LE	-LE	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O6	Blade mixer	/	/	/	-LE	-LE	Ø	-LE	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O8	Cutter	/	/	/	-ME	-ME	-ME	-ME	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O9	Siphon cold room	/	/	/	-LE	-LE	-ME	-ME	/	A	4	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O10	Tray table	/	/	/	-LE	-LE	-LE	-ME	/	A	5	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O11	Stainless steel for handle	/	/	/	-LE	-LE	-LE	-ME	/	A	3	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	O12	Delicatessen slicer blade	/	/	/	-LE	-ME	-ME	-ME	/	A	11	0,00	-	/	/	/	A	NA	/	/	/	/	/	/	/	/	/	/	A	NA
2012	b	L2	Big knife blade	/	nc	/	+MA	+MA	+MA	+ HA	/	P	5	0,00	-	-LE	-ME	/	A	ND	+MB	+MA	A	ND	22	0,00	-	-ME	-ME	*L. monocytogenes* *L. innocua*	A	ND
2012	b	K1	PS line 1 DFC pre tunnel frames	/	nc	/	+MB*	+MB*	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	8370	2,80	+	+MB*	+MB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8378	2,81	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA
2012	b	K3	PS line 1 DFC pre tunnel carpet	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	8524	2,86	+	+MB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	8647	2,90	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K4	PS line 1 DFC bank pre cool	/	nc	/	+LB*	+LB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	8664	2,90	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8842	2,96	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	b	K5	PS line 2 DFC bank pre cool	/	nc	/	+LB*	+LB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	6582	2,20	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	8938	3,00	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA
2012	b	K6	PS line 2 DFC pre cool carpet	/	nc	/	+LB	+LB	+MB	+MB	*L. monocytogenes*	P	6505	2,18	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	9135	3,06	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K7	PS line 2 DFC pre tunnel carpet	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	6877	2,30	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	7671	2,57	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	b	K8	PS line 2 DFC bank pre tunnel	/	nc	/	+MB	+MB	+MB	+HB	*L. monocytogenes*	P	6874	2,30	+	+HB	+HB	*L. monocytogenes*	P	PA	/	/	/	/	7840	2,63	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	b	K9	PS line 1 pre cool fan NFC	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	7087	2,37	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	7814	2,62	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K10	PS line 1 end of NFC pre tunnel mat	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	7504	2,51	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8034	2,69	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K11	PS line 1 ground near NFC cover	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	8424	2,82	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8183	2,74	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K12	PS line 1 DFC pre cool carpet	/	nc	/	+MB	+MB	+MB	+HB	*L. monocytogenes*	P	8584	2,88	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8150	2,73	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K13	PS line 1 DFC pre tunnel frames	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	8412	2,82	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	7482	2,51	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K14	PS line 2 DFC pre tunnel frames	/	nc	/	+LB*	+LB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	8745	2,93	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	7520	2,52	+	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	PA
2012	b	K15	PS line 2 DLC pre tunnel mat end	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	8946	3,00	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	7673	2,57	+	+MB	+HB	*L. monocytogenes*	P	PA
2012	b	K16	PS line 1 ground near DFC cover	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	9173	3,07	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	7978	2,67	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K17	PS line 2 DFC pre tunnel frames	/	nc	/	+MB	+MB	+MB	+MB	*L. monocytogenes*	P	7593	2,54	+	+MB	+MB	*L. monocytogenes*	P	PA	/	/	/	/	8090	2,71	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K18	PS line pre cool fan	/	nc	/	+LA	+LA	+MA	+MB	*L. monocytogenes*	P	7736	2,59	+	+MB	+HA	*L. monocytogenes*	P	PA	/	/	/	/	8064	2,70	+	+MB	+MB	*L. monocytogenes*	P	PA
2012	b	K19	PS line 2 ground near NFC cover	/	nc	/	+MB*	+MB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	8076	2,71	+	+MB	+MA	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	7708	2,58	+	+MB	+MB	*L. monocytogenes* *L. innocua*	P	PA
2012	b	K20	PS line 2 ground near tunnel DFC	/	nc	/	+LB*	+LB*	+MB*	+MB*	*L. monocytogenes* *L. innocua*	P	7969	2,67	+	+MB*	+MB	*L. monocytogenes* *L. innocua*	P	PA	/	/	/	/	7971	2,67	+	+MB*	+HB	*L. monocytogenes* *L. innocua*	P	PA
2012	b	L1	White consumer plate	/	nc	/	+MA	+MA	+MB	+MA	*L. monocytogenes*	P	6634	2,1	+	+MB	+MA	*L. monocytogenes*	P	PA	/	/	/	/	8211	2,60	+	+MB	+MA	*L. monocytogenes*	P	PA
2016	b	VP87	Swab 1	LIS.4.16	Seeding	1,2	1h+Ø	2h+Ø	2h+Ø	3Ø	*L. monocytogenes*	P	/	3,69	+	+ (L.m)	+ (L.m)	*L. monocytogenes*	P	PA	/	/	/	/	/	3,41	+	2Ø	/	*L. monocytogenes*	P	PA
2016	b	VP88	Swab 2	LIS.5.3	Seeding	1,4	2h-Ø	2h-Ø	2h-Ø	3Ø	*L. seligeri*	P	/	3,23	+	+ (L.se)	+ (L.se)	*L. seligeri*	P	PA	/	/	/	/	/	3,39	+	2Ø	/	*L. seligeri*	P	PA
2016	b	VP89	Sponge 1	LIS.5.3	Seeding	1,4	2h-Ø	2h-Ø	2h-Ø	2Ø	*L. seeligeri*	P	/	3,17	+	+ (L.se)	+ (L.se)	*L. seeligeri*	P	PA	/	/	/	/	/	3,15	+	2Ø	/	*L. seeligeri*	P	PA

Environmental samples - Specific protocol

Study	Type	Identification	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)			RM: EN ISO 11290-1 (■ for the 2020 study only)						AM: VIDAS UP LPT (general protocol)								Confirmation additional tests				AM: VIDAS UP LPT (general protocol) - 72h at 4°C							
							Half Fraser		Fraser				Vidas UP LPT			Conf.					LPT Tube 22h at				Vidas UP LPT			Confirmation				
							ALOA	PAL-CAM	ALOA	PAL-CAM	Confirmation	Result	RFV	VT	Result	ALOA	PAL-CAM	Confirmation	Result	Concor-dance	ALOA	PAL-CAM	Result	Concor-dance	RFV	VT	Result	ALOA	PAL-CAM	Identification	Result	Concor-dance
2020	b	1778807	Soil 1 egg product industry	/	nc	/	AM halo +	AM	AH halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	6972	2,31	+	AH halo +	CM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	7463	2,48	+	CM halo +	AM	*L. monocytogenes*	P	PA
2020	b	1778808	Soil 2 egg product industry	/	nc	/	AM halo +	AM	AH halo +	AM	Camp test:+ Hémolyse:+ API List: *L. mono*	P	9920	3,29	+	AH halo +	AM	*L. monocytogenes*	P	PA	AM halo +	AM	P	PA	9816	3,26	+	AM halo +	AM	*L. monocytogenes*	P	PA
2020	b	1778809	Poultry climping room	L.welshimeri HDL996	Seeding	1,4	BM halo -	BM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	8115	2,69	+	BM halo -	BM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	8576	2,85	+	AM halo +	AM	*L. welshimeri*	P	PA
2020	b	1778810	Poultry plumage room	L.welshimeri HDL996	Seeding	1,4	BM halo -	BM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	12905	4,29	+	BM halo -	BM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	11346	3,77	+	AM halo +	AM	*L. welshimeri*	P	PA
2020	b	1778811	Room tears off poultry head	L.welshimeri HDL996	Seeding	1,4	BM halo -	BM	AM halo -	AM	Camp test: - Hémolyse: - API List: *L.welshimeri*	P	10021	3,33	+	AM halo -	AM	*L. welshimeri*	P	PA	AM halo -	AM	P	PA	9121	3,03	+	AM halo +	AM	*L. welshimeri*	P	PA
2012	b	L6	Slicer plate	/	nc	/	-LE	-LE	-ME	-ME	/	A	1679	0,53	+	+LD	+LD	*L. monocytogenes*	P	PD	/	/	/	/	12573	3,99	+	+MB	+MB	*L. monocytogenes*	P	PD
2012	b	L7	Blade mixer	/	nc	/	-ME	-ME	-ME	-ME	/	A	8161	2,59	+	+MD	+MC	*L. monocytogenes*	P	PD	/	/	/	/	7750	2,46	+	+MB	+MB	*L. monocytogenes*	P	PD
2012	b	L9	Cutting board	/	nc	/	-ME	-ME	-ME	-ME	/	A	7817	2,48	+	+MB	+HB	*L. monocytogenes*	P	PD	/	/	/	/	7741	2,46	+	+MB	+HB	*L. monocytogenes*	P	PD

* *Listeria monocytogenes*

Deleted samples

Category	Type	Code	Sample	Contamination strain or serovar, type (nc,sp,se or cm) and level (CFU/25 g)		Méthode de référence ISO 11290-1						Méthode alternative VIDAS® UP *Listeria* (LPT) 26-30h							Concor-dance	Méthode alternative VIDAS® UP *Listeria* (LPT) 72h +4°C							Concor-dance
						Fraser 1/2		Fraser		Identification	Result	Test VIDAS LPT			Confirmations			Result		Test VIDAS LPT			Confirmations			Result	
						O&A	PAL-CAM	O&A	PAL-CAM			RFV	VT	Test result	PAL-CAM	O&A	Identification			RFV	VT	Test result	PAL-CAM	O&A	Identification		
Dairy products	PL2	I14	Picadon pasteurized goat cheese	Spiking	16,2	+LA	+MB	+MA	+HB	*Listeria innocua*	P	11748	3,94	+	+MA	+MB	*Listeria innocua*	P	PA	11066	3,71	+	+MB	+MB	*Listeria innocua*	P	PA
	PL2	C12	St Maure raw milk goat cheese	Spiking	21,2	-LE	-LE	Ø	Ø	/	A	9987	3,26	+	+LB	+MB	*Listeria monocytogenes*	P	PD	8469	2,76	+	+LB	+MB	*Listeria monocytogenes*	P	PD
	PL2	I12	St Maure goat cheese	Spiking	21,6	+MA	+MB	+MA	+HB	*Listeria innocua*	P	7884	2,64	+	+MB	+MB	*Listeria innocua*	P	PA	8322	2,79	+	+MB	+MB	*Listeria innocua*	P	PA
	PL2	I15	Cabri goat cheese with spices	Spiking	27	+MB	+MB	+MA	+HB	*Listeria innocua*	P	7937	2,66	+	+MA	+MB	*Listeria innocua*	P	PA	7814	2,62	+	+MB	+MB	*Listeria innocua*	P	PA
	PL1	C14	Brie de Meaux raw cow's milk cheese	Spiking	/	+LB	+LB	+MB	+HB	*Listeria monocytogenes*	P	10807	3,53	+	+LB	+LB	*Listeria monocytogenes*	P	PA	7941	2,59	+	+MB	+MB	*Listeria monocytogenes*	P	PA
Seafood products	PP1	W19	Cod fillet	Spiking	20	+LB	+MB	+MB	+MB	*Listeria innocua*	P	8458	3,19	+	+MB	+MA	*Listeria innocua*	P	PA	7467	2,81	+	+MB	+MB	*Listeria innocua*	P	PA
	PP1	A7	Frozen seafood cocktail	Spiking	34,5	+LA	+LA	+MA	+MA	*Listeria innocua*	P	13	0,00	-	Ø	Ø	/	A	ND	16	0	-	Ø	Ø	/	A	ND
	PP2	C16	Smoked salmon Scotland	Spiking	26,4	+LA	+LA	+MB	+MB	*Listeria monocytogenes*	P	8675	2,83	+	+MA	+MA	*Listeria monocytogenes*	P	PA	10263	3,35	+	+MA	+MA	*Listeria monocytogenes*	P	PA
	PP3	A5	Salmon shells	Spiking	13,8	Ø	Ø	Ø	Ø	/	A	11936	3,89	+	+MA	+MA	*Listeria monocytogenes*	P	PD	8372	2,73	+	+MA	+MA	*Listeria monocytogenes*	P	PD
Vegetal products	PV2	R8	Fried fried peppers	Spiking	13,2	+LA	+MA	+MA	+HA	*Listeria welshimeri*	P	7946	2,72	+	+HB	+MA	*Listeria welshimeri*	P	PA	8133	2,79	+	+HA	+MA	*Listeria welshimeri*	P	PA
	PV2	N2	Roman salad	Spiking	16	+LA	+LA	+MA	+MB	*Listeria monocytogenes*	P	8620	2,73	+	+MA	+MA	*Listeria monocytogenes*	P	PA	8769	2,78	+	+MA	+MA	*Listeria monocytogenes*	P	PA
	PV2	N9	4th range grated red cabbage	Spiking	24	+LA	+LA	+MA	+MB	*Listeria monocytogenes*	P	8167	2,59	+	+HA	+MA	*Listeria monocytogenes*	P	PA	7975	2,53	+	+HA	+HA	*Listeria monocytogenes*	P	PA
	PV2	N3	Mixed salad	Spiking	32	+MA	+MA	+MA	+MB	*Listeria monocytogenes*	P	8737	2,77	+	+MA	+MA	*Listeria monocytogenes*	P	PA	8496	2,69	+	+MA	+MB	*Listeria monocytogenes*	P	PA
	PV3	W21	Steamed lentils	Spiking	21	+MA	+MA	+MA	+MA	*Listeria innocua*	P	8120	3,06	+	+HA	+MA	*Listeria innocua*	P	PA	7864	2,96	+	+HA	+MA	*Listeria innocua*	P	PA
	PV3	R7	Ratatouille	Spiking	22	+MA	+MA	+MA	+MA	*Listeria welshimeri*	P	7858	2,69	+	+HA	+MA	*Listeria welshimeri*	P	PA	7913	2,71	+	+HA	+MA	*Listeria welshimeri*	P	PA
	PV3	R2	Cooked zucchini	Spiking	22	+MA	+MA	+MA	+MA	*Listeria innocua*	P	8145	2,79	+	+HA	+HA	*Listeria innocua*	P	PA	8396	2,88	+	+HA	+MA	*Listeria innocua*	P	PA
	PV3	W22	Carrots grated vinaigrette	Spiking	28	+MA	+LA	+MA	+MB	*Listeria innocua*	P	8696	3,28	+	+MA	+MA	*Listeria innocua*	P	PA	8177	3,08	+	+HA	+MA	*Listeria innocua*	P	PA
	PV2	N4	4th range grated carrots	Spiking	40	+LA	+LA	+MA	+HA	*Listeria monocytogenes*	P	6891	2,18	+	+LA	+LA	*Listeria monocytogenes*	P	PA	9544	3,03	+	+MA	+MA	*Listeria monocytogenes*	P	PA
	PV3	R3	Spring Fried	Spiking	33	+MA	+MA	+MA	+MA	*Listeria innocua*	P	8326	2,85	+	+MA	+MB	*Listeria innocua*	P	PA	8289	2,84	+	+MA	+MA	*Listeria innocua*	P	PA
Environ-mental samples	EN1	N5	Frozen water	Spiking	14,2	+MA	+MA	+MB	+MB	*Listeria monocytogenes*	P	9044	2,87	+	+HA	+MA	*Listeria monocytogenes*	P	PA	8964	2,84	+	+HA	+MA	*Listeria monocytogenes*	P	PA
	EN1	R21	Process water from 07/05/11	Spiking	15	+LA	+MA	+MA	+MB	*Listeria innocua*	P	8381	2,87	+	+MA	+MA	*Listeria innocua*	P	PA	8226	2,82	+	+MA	+MA	*Listeria innocua*	P	PA
	EN1	W32	Network water	Spiking	19,5	+MA	+MA	+MA	+MB	*Listeria innocua*	P	8294	3,13	+	+MB	+MA	*Listeria innocua*	P	PA	9213	3,47	+	+HA	+MA	*Listeria innocua*	P	PA
	EN1	R18	Network water	Spiking	20	+MA	+MA	+MA	+HA	*Listeria innocua*	P	8185	2,8	+	+HA	+MA	*Listeria innocua*	P	PA	8355	2,86	+	+HA	+MA	*Listeria innocua*	P	PA
	EN1	N6	Process water	Spiking	21,3	+MA	+MA	+MA	+MA	*Listeria monocytogenes*	P	9095	2,88	+	+HA	+MA	*Listeria monocytogenes*	P	PA	9205	2,92	+	+HA	+MB	*Listeria monocytogenes*	P	PA
	EN1	R17	New water	Spiking	21,5	+LA	+MA	+MA	+MB	*Listeria monocytogenes*	P	11115	3,81	+	+MA	+LA	*Listeria monocytogenes*	P	PA	8154	2,79	+	+MA	+MA	*Listeria monocytogenes*	P	PA
	EN1	W31	Frozen water	Spiking	27	+MA	+MA	+MA	+MB	*Listeria innocua*	P	8244	3,11	+	+MA	+MA	*Listeria innocua*	P	PA	8876	3,35	+	+MA	+MA	*Listeria innocua*	P	PA
	EN1	R26	Beef cutting waste	Spiking	17,2	+MB*	+MB*	+MB	+HB	*Listeria monocytogenes*	P	10206	3,5	+	+MB	+MB	*Listeria monocytogenes*	P	PA	10306	3,53	+	+MB	+MB	*Listeria monocytogenes*	P	PA
	EN1	R27	Lamb cutting waste	Spiking	17,5	+LA	+LB	+MA	+HB	*Listeria monocytogenes* *Listeria innocua*	P	7077	2,42	+	+HA	+MB	*Listeria monocytogenes* *Listeria innocua*	P	PA	6986	2,39	+	+HB	+MB	*Listeria monocytogenes* *Listeria innocua*	P	PA
	EN1	R23	Pork cutting waste	Spiking	21,5	+LB	+LB	+MB	+MB	*Listeria monocytogenes* *Listeria innocua*	P	10743	3,68	+	+LB	+MB*	*Listeria monocytogenes* *Listeria innocua*	P	PA	10540	3,61	+	+LB*	+MB*	*Listeria monocytogenes* *Listeria innocua*	P	PA

APPENDIX E

RELATIVE LEVEL OF DETECTION RAW RESULTS

Caption:

Results

RFV : Relative Fluorescence Value
VT : Valeur du test
+ : positive result
- : negative result

2012 study

Bacterial burden

Ø: no culture
L = low
M = moderate
H = high

Distribution of the flora

A = pure culture of suspect colonies
B = mixture with a majority of suspect colonies
C = mixture with a minority of suspect colonies
D = mixture with rare suspect colonies
E = absence of suspect colonies
(x): x colonies characteristic of Listeria if x ≤ 5

2016 study (composite foods)

0 / 1 / 2 / 3 / 4 : level of typical flora, from absence to high
Ø / L / M / H : level of annex flora, from absence to high
I : result after re-isolation
(XXX) : number of typical colonies
L.m : Listeria monocytogenes
L.w : Listeria welshimeri
L.in: Listeria inocua
L.iv: Listeria ivanovii
L.se: Listeria seeligeri
L.g: Listeria grayi

MATRIX: rillettes
STRAIN : *Listeria monocytogenes* 1/2a (référence L10)
TVC: 6.10E+7/g

Level	Real level (CFU/test portion)	Reference method						Alternative method						
		Fraser 1/2		Fraser		Result	Conclu-sion	RFV	VT	PALCAM	OAA	CHROM ID LMO	Result	Conclusion
		PALCAM	ALOA	PALCAM	ALOA									
1	0,00	-LE	-LE	Ø	Ø	-	0/6	-2	0,00	/	/	/	-	0/6
		Ø	Ø	Ø	Ø	-		-2	0,00	/	/	/	-	
		Ø	Ø	-LE	Ø	-		-4	0,00	/	/	/	-	
		Ø	Ø	Ø	-LE	-		-4	0,00	/	/	/	-	
		Ø	Ø	Ø	-LE	-		-2	0,00	/	/	/	-	
		-LE	-LE	Ø	Ø	-		-4	0,00	/	/	/	-	
2	0,35	Ø	Ø	Ø	Ø	-	2/6	-3	0,00	/	/	/	-	2/6
		+LA	+LA	+MA	+MA	+		9714	3,51	+MA	+MB	+MA	+	
		Ø	Ø	Ø	Ø	-		9526	3,44	+MA	+MB	+MA	+	
		Ø	Ø	Ø	-LE	-		-4	0,00	/	/	/	-	
		+LA	+LA	+LA	+MA	+		-4	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
3	0,70	+LA	+LA	+MA	+MA	+	4/6	-3	0,00	/	/	/	-	2/6
		+LA	+LA	+MA	+MA	+		9858	3,56	+MA	+MB	+MA	+	
		Ø	Ø	-LE	Ø	-		9345	3,02	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		-2	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		+LA	+LA	+HA	+MA	+		-3	0,00	/	/	/	-	
4	1,17	+LA	+LA	+HA	+MA	+	5/6	9759	3,53	+MA	+MA	+MA	+	4/6
		+LA	+LA	+HA	+MA	+		8288	2,99	+MA	+MB	+MA	+	
		+LA	+LA	+HA	+MA	+		8583	3,10	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		-3	0,00	/	/	/	-	
		+LA	+LA	+HA	+MA	+		11158	4,03	+MA	+MB	+LA	+	
		Ø	Ø	Ø	Ø	-		-2	0,00	/	/	/	-	
5	1,88	+LA	+LA	+HA	+MA	+	6/6	8464	3,06	+MA	+MB	+MA	+	6/6
		+LA	+LA	+MA	+MA	+		8768	3,17	+MA	+MB	+MA	+	
		+LA	+LA	+HA	+MA	+		8658	3,13	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		8765	3,17	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		9005	3,25	+MA	+MB	+MA	+	
		+LA	+LA	+HA	+MA	+		9338	3,37	+HA	+MB	+MA	+	

MATRIX : raw milk
STRAIN : Listeria ivanovii (référence L236)
TVC: 8,10E+6/mL

Level	Real level (CFU/test portion)	Reference method						Alternative method						
		Fraser 1/2		Fraser		Result	Conclu-sion	RFV	VT	PALCAM	OAA	CHROM ID LMO	Result	Conclusion
		PALCAM	ALOA	PALCAM	ALOA									
1	0,00	Ø	Ø	Ø	Ø	-	0/6	-3	0,00	/	/	/	-	0/6
		Ø	Ø	Ø	-LE	-		-3	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-4	0,00	/	/	/	-	
		Ø	Ø	Ø	-LE	-		-3	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-4	0,00	/	/	/	-	
2	0,35	Ø	Ø	Ø	-LE	-	1/6	-3	0,00	/	/	/	-	2/6
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		Ø	Ø	Ø	-LE	-		-4	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		11932	4,31	+LA	+MA	+MA	+	
		+LA	+LA	+LA	+LB	+		-4	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		6538	2,36	+LA	+MB	+LA	+	
3	0,69	Ø	Ø	Ø	Ø	-	3/6	10054	3,63	+LA	+MB	+MA	+	3/6
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		+LA	+LA	+MA	+MB	+		-2	0,00	/	/	/	-	
		Ø	Ø	Ø	-LE	-		11811	4,27	+LA	+MA	+LA	+	
		+LA	+LA	+MA	+MA	+		-1	0,00	/	/	/	-	
		+LA	+LA	+LA	+LB	+		10327	3,73	+LA	+MB	+LA	+	
4	1,15	+LA	+LA	+MA	+MB	+	6/6	-2	0,00	/	/	/	-	5/6
		+LA	+LA	+MA	+MB	+		10070	3,64	+MA	+MB	+MA	+	
		+LA	+LA	+LA	+LB	+		8577	3,10	+LA	+LB	+LA	+	
		+LA	+LA	+MA	+MA	+		576	0,20	+LA(1)	+LB(3)	+LA(2)	+	
		+LA	+LA	+MA	+MB	+		4921	1,78	+LA	+MB	+LA	+	
		+LA	+LA	+MA	+MB	+		10070	3,64	+MA	+MB	+MA	+	
5	1,84	+LA	+LA	+MA	+MA	+	6/6	2718	0,98	+LA	+LA	+LA	+	6/6
		+LA	+LA	+MA	+MB	+		5825	2,10	+LA	+LB	+LA	+	
		+LA	+LA	+MA	+MA	+		8341	3,01	+LA	+LA	+MA	+	
		+LA	+LA	+MA	+MA	+		7348	2,65	+LA	+MB	+MA	+	
		+LA	+LA	+MA	+MB	+		7912	2,86	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		2836	0,86	+LA(2)	+LA(1)	+LA(2)	+	

MATRIX : smoked salmon
STRAIN : *Listeria monocytogenes* 1/2a (référence L5)
TVC: 8.10E+5/g / level 5: 5.10E+6/g

Level	Real level (CFU/test portion)	Reference method						Alternative method						
		Fraser 1/2		Fraser		Result	Conclu-sion	RFV	VT	PALCAM	OAA	CHROM ID LMO	Result	Conclusion
		PALCAM	ALOA	PALCAM	ALOA									
1	0,00	Ø	Ø	Ø	Ø	-	0/6	5	0,00	/	/	/	-	0/6
		Ø	Ø	Ø	Ø	-		1	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		7	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		0	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-1	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		0	0,00	/	/	/	-	
2	0,21	Ø	Ø	Ø	Ø	-	0/6	8602	3,11	+MA	+MA	+MA	+	2/6
		Ø	Ø	Ø	Ø	-		-1	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-2	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		5277	1,90	+MA	+MB	+MA	+	
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		0	0,00	/	/	/	-	
3	0,42	Ø	Ø	Ø	Ø	-	1/6	0	0,00	/	/	/	-	3/6
		Ø	Ø	Ø	Ø	-		4344	1,57	+MA	+MA	+MA	+	
		Ø	Ø	Ø	Ø	-		9759	3,53	+MA	+MA	+MA	+	
		Ø	Ø	Ø	Ø	-		2	0,00	/	/	/	-	
		+LA	+LA	+MA	+MA	+		1	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		2951	1,06	+LA	+MC	+MA	+	
4	0,70	+LA	+LA	+MA	+MA	+	3/6	8562	3,09	+HA	+MB	+MA	+	4/6
		Ø	Ø	Ø	Ø	-		-1	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		9811	3,55	+MB	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		9968	3,60	+MA	+MA	+MA	+	
		+LA	+LA	+HA	+MA	+		0	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		1953	0,70	+LA	+MB	+MA	+	
5	1,12	+LA	+LA	+MA	+MA	+	5/6	6896	2,49	+MA	+MA	+MA	+	4/6
		+LA	+LA	+HA	+MA	+		7449	2,69	+MA	+MA	+MA	+	
		+LA	+LA	+HA	+MA	+		-4	0,00	/	/	/	-	
		+LA	+LA	+MA	+MA	+		0	0,00	/	/	/	-	
		+LA	+LA	+MA	+MA	+		11504	4,16	+MA	+MA	+MA	+	
		Ø	Ø	Ø	Ø	-		11465	4,15	+MA	+MB	+MA	+	
6	2,24	+LA	+LA	+MA	+MA	+	6/6	8880	3,01	+MA	+MB	+MA	+	6/6
		+LA	+LA	+MA	+MA	+		9092	3,08	+MA	+MB	+MA	+	
		+LA	+LA	+HA	+MA	+		9560	3,24	+MA	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		9555	3,24	+MB	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		8411	2,85	+MA	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		11081	3,75	+MA	+MB	+MA	+	

MATRIX : cabbage
STRAIN : *Listeria welshimeri* (référence L174)
TVC : 2,3 .10E+7/g / level 5: 3,2.10E+6/g

Level	Real level (CFU/test portion)	Reference method						Alternative method						
		Fraser 1/2		Fraser		Result	Conclu-sion	RFV	VT	PALCAM	OAA	CHROM ID LMO	Result	Conclusion
		PALCAM	ALOA	PALCAM	ALOA									
1	0,00	Ø	Ø	Ø	Ø	-	0/6	-1	0,00	/	/	/	-	0/6
		Ø	Ø	Ø	Ø	-		-5	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-4	0,00	/	/	/	-	
		Ø	Ø	Ø	-LE	-		43	0,00	/	/	/	-	
		Ø	Ø	Ø	-LE	-		-4	0,00	/	/	/	-	
		-LE	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
2	0,23	Ø	Ø	Ø	Ø	-	1/6	-1	0,00	/	/	/	-	1/6
		Ø	Ø	Ø	Ø	-		10964	4,14	+MA	+MB	+MA	+	
		Ø	Ø	Ø	Ø	-		-2	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-2	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		+LA(2)	+LA	+MA	+MA	+		-2	0,00	/	/	/	-	
3	0,46	Ø	Ø	Ø	Ø	-	2/6	-2	0,00	/	/	/	-	4/6
		+LA	+LA	+MA	+MA	+		-2	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		10835	4,09	+MA	+MB	+MA	+	
		Ø	Ø	Ø	Ø	-		11952	4,51	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		9355	3,53	+MA	+MB	+MA	+	
		Ø	Ø	Ø	Ø	-		10343	3,90	+MA	+MB	+MA	+	
4	1,24	+LA	+LA	+MA	+MA	+	4/6	7965	3,00	+MA	+MB	+MA	+	5/6
		Ø	Ø	Ø	Ø	-		10970	4,14	+MA	+MB	+MA	+	
		Ø	Ø	Ø	Ø	-		11624	4,38	+MA	+LB	+MA	+	
		+LA	+LA	+MA	+MA	+		-3	0,00	/	/	/	-	
		+LA(1)	+LA(2)	+MA	+MA	+		10699	4,04	+MB	+MB	+MA	+	
		+LA(1)	+LA(1)	+MA	+MA	+		12176	4,59	+MA	+MB	+MA	+	
5	4,56	+LA	+LA	+MA	+LA	+	6/6	8181	2,96	+MA	+MB	+MA	+	6/6
		+LA	+LA	+MA	+LA	+		8927	3,23	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		8440	3,05	+MA	+LB	+MA	+	
		+LA	+LA	+MA	+MA	+		8558	3,09	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+LA	+		8960	3,24	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+LA	+		9220	3,33	+MA	+LB	+MA	+	

MATRIX : surface sample
STRAIN :L1 *Listeria innocua* (référence L132)
TVC : 1,04.10E+4

Level	Real level (CFU/test portion)	Reference method						Alternative method						
		Fraser 1/2		Fraser		Result	Conclu-sion	RFV	VT	PALCAM	OAA	CHROM ID LMO	Result	Conclusion
		PALCAM	ALOA	PALCAM	ALOA									
1	0,00	Ø	Ø	Ø	Ø	-	0/6	-3	0,00	/	/	/	-	0/6
		Ø	Ø	Ø	-LE	-		-2	0,00	/	/	/	-	
		-LE	Ø	Ø	Ø	-		-2	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		Ø	Ø	Ø	Ø	-		-3	0,00	/	/	/	-	
		Ø	Ø	-LE	-LE	-		-2	0,00	/	/	/	-	
2	0,61	Ø	Ø	Ø	Ø	-	3/6	-3	0,00	/	/	/	-	2/6
		+LA	+LA(4)	+MA	+MA	+		-2	0,00	/	/	/	-	
		Ø	Ø	-LE	-LE	-		10172	3,61	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		-3	0,00	/	/	/	-	
		+MA	+MA	+MA	+MA	+		-3	0,00	/	/	/	-	
		Ø	Ø	-LE	Ø	-		8638	3,07	+MA	+MB	+MA	+	
3	1,21	+MA	+MA	+MA	+MA	+	5/6	-2	0,00	/	/	/	-	5/6
		+MA	+MA	+MA	+MA	+		8518	3,02	+MA	+MB	+MA	+	
		+MA	+MA	+MA	+MA	+		8670	3,08	+MA	+MB	+MA	+	
		+MA	+MA	+MA	+MA	+		9944	3,53	+MA	+MB	+MA	+	
		Ø	Ø	-LE	Ø	-		9295	3,30	+MB	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		9194	3,26	+MA	+LB	+MA	+	
4	2,43	+LA	+MA	+MA	+MA	+	6/6	6931	2,46	+MA	+MB	+MA	+	6/6
		+LA	+LA	+MA	+MA	+		7169	2,54	+MA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		7424	2,64	+HA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		7812	2,77	+HA	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		9510	3,38	+MA	+LB	+MA	+	
		+MA	+MA	+MA	+MA	+		8244	2,93	+HA	+MB	+MA	+	

MATRIX : tabbouleh
STRAIN : Listeria welshimeri LIS 6.24
TVC : 1,04.10E+4

Matrix	Sample	Contami-nation level (CFU/25 g)	RM: NF EN ISO 11290-1 (*)						AM: Vidas LPT										AM: Vidas LPT after storage 3 days at 5°C				Confirmation ISO 16140-2 on MA negative samples		Number of positive results per method
			Half Fraser		Fraser		Confir-mation	Final result	Vidas LPT		Confirmation 1		Conf. 2	Conf. 3	Result				Vidas LPT		Confir-mation	Final result			
			ALOA	PAL-CAM	ALOA	PAL-CAM			VT	Final result	ALOA	PAL-CAM			1	2	3		VT	Final result			Conf.	Final result	
Composite foods	VP 01	0	0L	0L	0L	0L	-	**A**	0,00	-	0L	1L	-	-	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	RM = 0/5 AM = 0/5
	VP 02		0L	0L	0Ø	0Ø	-	**A**	0,00	-	0L	1M	-	-	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP 03		0Ø	0L	0Ø	0Ø	-	**A**	0,00	-	0Ø	1M	-	-	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP 04		0L	0L	0Ø	0Ø	-	**A**	0,00	-	0Ø	1M	-	-	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP 05		1h-L	1L	0L	0L	-	**A**	0,00	-	0Ø	0M	-	-	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP F1	0,8	1h-Ø	1L	2h-Ø	2Ø	+ (L.w)	**P**	4,71	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		3,27	+	1h-Ø	**P**			RM = 13/20 AM = 13/20
	VP F2		0Ø	1L	0Ø	0Ø	-	**A**	3,17	+	1h-Ø	1L	+ (L.w)	+ (L.w)	**P**	**P**	**P**		3,76	+	1h-Ø	**P**			
	VP F3		1h-Ø	1L	2h-Ø	2Ø	+ (L.w)	**P**	0,18	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		0,13	+	1h-Ø	**P**			
	VP F4		0Ø	1L	0Ø	0Ø	-	**A**	0,00	-	0Ø	1M	-	-	**A**	**A**	**A**		0,00	-	0L	**A**	-	**A**	
	VP F5		1h-Ø	1L	1h-L	1L	+ (L.w)	**P**	4,71	+	2h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		4,71	+	2h-Ø	**P**			
	VP F6		1h-Ø	1L	1h-Ø	1L	+ (L.w)	**P**	0,00	-	0L	1M	-	-	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP F7		0L	1L	0L	0Ø	-	**A**	2,83	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		3,19	+	1h-Ø	**P**			
	VP F8		1h-L	1L	2h-Ø	2Ø	+ (L.w)	**P**	4,01	+	2h-L	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		2,99	+	1h-Ø	**P**			
	VP F9		1h-Ø	1L	1h-L	1Ø	+ (L.w)	**P**	0,00	-	0L	1L	/	/	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP F1		1h-Ø	1M	1h-Ø	1Ø	+ (L.w)	**P**	0,00	-	0L	1M	/	/	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP F1		1h-Ø	1L	1h-Ø	1Ø	+ (L.w)	**P**	1,64	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		0,67	+	1h-Ø	**P**			
	VP F1		0L	1L	0L	0L	-	**A**	0,39	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		0,38	+	1h-Ø	**P**			
	VP F1		0L	1L	0L	0L	-	**A**	1,10	+	1h-L	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		3,97	+	1h-Ø	**P**			
	VP F1		1h-Ø	1L	2h-Ø	2Ø	+ (L.w)	**P**	2,49	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		4,21	+	1h-Ø	**P**			
	VP F1		1h-Ø	1Ø	1h-Ø	1Ø	+ (L.w)	**P**	0,00	-	0L	1L	/	/	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP F1		0Ø	1L	0Ø	0Ø	-	**A**	0,00	-	0Ø	0L	/	/	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP F1		1h-Ø	1Ø	2h-Ø	2Ø	+ (L.w)	**P**	4,71	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		3,00	+	1h-Ø	**P**	-	**A**	
	VP F1		1h-Ø	1Ø	2h-Ø	2Ø	+ (L.w)	**P**	0,00	-	0L	1M	/	/	**A**	**A**	**A**		0,00	-	0Ø	**A**	-	**A**	
	VP F1		0Ø	0L	0Ø	0L	-	**A**	0,19	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		1,79	+	1h-Ø	**P**			
	VP F2		1h-L	1L	1h-Ø	1L	+ (L.w)	**P**	4,20	+	2h-Ø	1m	+ (L.w)	+ (L.w)	**P**	**P**	**P**		2,87	+	1h-Ø	**P**			
	VP E1	3,8	1h-Ø	1Ø	1h-Ø	1Ø	+ (L.w)	**P**	1,70	+	1h-L	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		3,31	+	1h-Ø	**P**			RM = 5/5 AM = 5/5
	VP E2		1h-Ø	1L	1h-Ø	1Ø	+ (L.w)	**P**	4,71	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		3,31	+	1h-Ø	**P**			
	VP E3		1h-Ø	1L	2h-Ø	2Ø	+ (L.w)	**P**	4,71	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		4,71	+	2h-Ø	**P**			
	VP E4		1h-Ø	1L	1h-Ø	1Ø	+ (L.w)	**P**	0,55	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		0,64	+	2h-Ø	**P**			
	VP E5		1h-Ø	1L	1h-Ø	1Ø	+ (L.w)	**P**	2,58	+	1h-Ø	1M	+ (L.w)	+ (L.w)	**P**	**P**	**P**		1,13	+	1h-Ø	**P**			

Appendix F - Inclusivity and exclusivity study

Inclusivity

Strain		Origin	Inoculation level	VIDAS LPT			
				RFV	Test value	Palcam	OAA
L3	*Listeria innocua*	Cow liver	4,0	6609	2,21	+HA	+MA
L12	*Listeria monocytogenes* 1/2a	Smoked salmon	44,0	8211	2,75	+MA	+MA
L14	*Listeria monocytogenes* 1/2c	Minced meat	53,0	8510	2,85	+HA	+MA
L17	*Listeria monocytogenes* 1/2c	Pork bellies	65,0	9764	3,27	+MA	+MA
L18	*Listeria monocytogenes* 1/2c	Munster	55,0	8566	2,87	+MA	+MA
L37	*Listeria monocytogenes* 1/2b	Maroilles with raw milk	53,0	8779	2,94	+MA	+MA
L43	*Listeria monocytogenes* 1/2a	Minced meat	35,0	7829	2,62	+MA	+MA
L44	*Listeria monocytogenes* 1/2a	Salami sausage	54,0	7842	2,63	+MA	+MA
L47	*Listeria monocytogenes* 1/2a	Fried potatoes	57,0	11749	3,94	+HA	+MA
L51	*Listeria monocytogenes* 1/2b	Maturated cheese	41,0	9764	3,27	+MA	+MA
L55	*Listeria monocytogenes* 3b	Collection SLCC 2540	31,0	11489	3,85	+MA	+MA
L56	*Listeria monocytogenes* 3c	Collection SLCC 2479	32,0	9631	3,23	+MA	+MA
L57	*Listeria monocytogenes* 4a	Collection ATCC 19114	28,0	10825	3,63	+HA	+MA
L58	*Listeria monocytogenes* 4b	Salad	25,0	8309	2,63	+HA	+MA
L60	*Listeria monocytogenes* 4d	Collection ATCC 19117	65,0	4508	1,51	+MA	+MA
L61	*Listeria monocytogenes* 4e	Collection ATCC 19118	68,0	3309	1,05	+LA	+MA
L62	*Listeria monocytogenes* 4e	Reblochon	73,0	8647	2,74	+MA	+MA
L64	*Listeria innocua*	Epoisses	52,0	8719	2,76	+HA	+MA
L66	*Listeria innocua*	Spinach	71,0	8894	2,82	+HA	+MA
L72	*Listeria innocua*	Avesnes ball	17,0	8942	2,83	+HA	+MA
L76	*Listeria innocua 6b*	Minced beef	11,0	10480	3,32	+LA	+MA
L77	*Listeria innocua 6a*	Toulouse sausages	47,0	7917	2,51	+HA	+MA
L78	*Listeria innocua*	Cockerel	40,0	7928	2,51	+MA	+MA
L81	*Listeria grayi*	Collection ATCC 19120	10,0	4	0,00	-	-
			12,0	4	0,00	-	-
			56,0	2	0,00	-	-
			36,0	802	0,29	-	+LA
L83	*Listeria seeligeri* 1/2b	Jelly pork tongue	39,0	521	0,16	+MA	+LA
L86	*Listeria welshimeri* 6b	Collection ATCC 35897	43,0	252	0,08	+MA	+LA
L89	*Listeria welshimeri* 6a	Minced beef	10,0	745	0,23	+LA	+LA
L100	*Listeria welshimeri*	Paste to paste	1,0	1160	0,36	+LA	+MA
L101	*Listeria welshimeri*	Oldfashioned ham	1,0	12212	3,87	+MA	+MA
L108	*Listeria innocua*	Gorgonzola	2,0	5	0,00	-	-
			13,0	201	0,07	+MA	+MA
L113	*Listeria innocua*	Smoked halibut	55,0	7866	2,49	+HA	+MA
L116	*Listeria monocytogenes* 1/2a	Shell fish	23,0	10789	3,23	+HA	+MA
L117	*Listeria monocytogenes* 1/2c	Montbéliard sausages	74,0	11273	3,57	+HA	+MA
L119	*Listeria monocytogenes* 1/2a	Spinach	80,0	8261	2,62	+MA	+MA
L124	*Listeria monocytogenes* 1/2	Perch fillet	88,0	8254	2,88	+HA	+MA
L125	*Listeria monocytogenes*	Fried vegetables	78,0	8270	2,89	+HA	+MA
L133	*Listeria ivanovii*	Roquefort	70,0	9206	3,22	+MA	+MA
L140	*Listeria seeligeri*	Deep-freeze chips	44,0	9695	3,39	+MA	+MA
L142	*Listeria seeligeri*	Cheese with raw milk	41,0	10535	3,68	+MA	+MA
L143	*Listeria grayi*	Deep-freeze chips	48,0	-2	0,00	-	-
			51,0	-4	0,00	-	-
			60,0	864	0,29	+	+
			58,0	-1	0,00	-	-
L147	*Listeria grayi (murayi)*	ATCC 25 401	3,0	0	0,00	-	-
			10,0	-1	0,00	-	-
			56,0	9050	3,27	-	+MA
L151	*Listeria ivanovii*	Minced beef	78,0	11506	4,02	+MA	+MA
L152	*Listeria monocytogenes*	Environment sample (fish workshop)	62,0	8230	2,87	+MA	+MA
L153	*Listeria ivanovii*	Environment sample (fish workshop)	74,0	9938	3,47	+MA	+MA
L155	*Listeria welshimeri*	Salmon fillet	44,0	8883	3,10	+MA	+MA
L157	*Listeria ivanovii ssp ivanovii*	9811009Biom, collection	31,0	244	0,08	+MA	+MA
L167	*Listeria ivanovii ssp londoniensis*	9101019Biom, Cheese	44,0	254	0,08	+MA	+MA
L217	*Listeria monocytogenes 4b*	Environment (waste filter)	78,0	7918	2,76	/	+MA
L223	*Listeria monocytogenes ½ c*	Environment (box washing fish)	71,0	7924	2,77	/	+LA
L226	*Listeria monocytogenes 3a*	Frozen herring fillets	67,0	7997	2,79	/	+MA

Exclusivity

Strain		Origin	Inoculation level	VIDAS LPT			
				RFV	Test value	Palcam	OAA
BA19	*Bacillus cereus*	Environment	1,52.10E+5	-2	0,00	Ø	Ø
BA15	*Bacillus cereus*	Egg custard	1,77.10E+5	-2	0,00	-LE	Ø
BA7	*Bacillus coagulans*	Collection	1,24.10E+5	-2	0,00	Ø	Ø
BA5	*Bacillus sphaericus*	Meat product	1,26.10E+5	-3	0,00	Ø	Ø
BA4	*Bacillus*	Dairy product	2,3.10E+4	-2	0,00	Ø	Ø
BA2	*Bacillus cereus*	Beet	1,8.10E+5	-3	0,00	-LE	Ø
15	*Brochotrix*	Minced meat	2,4.10E+4	-2	0,00	Ø	Ø
Le3	*Candida albicans*	Collection	6,9.10E+4	-2	0,00	-LE	-LE
37	*Corynebacterium*	ATCC10340	1,5.10E+4	-3	0,00	Ø	-LE
E1	*Enterococcus faecalis*	Egg product	1,35.10E+6	-2	0,00	Ø	Ø
E6	*Enterococcus faecalis*	Collection ATCC 19433	4,8.10E+5	-3	0,00	Ø	Ø
E9	*Enterococcus faecium*	Tarama	2.10E+6	-2	0,00	Ø	Ø
E7	*Enterococcus faecium*	Collection CIP 5433	5.10E+5	-2	0,00	Ø	Ø
E13	*Streptococcus bovis*	Collection CIP 5623	9.10E+4	21	0,00	Ø	Ø
EN18	*Enterobacter cloacae*	Collection	1,2.10E+5	-2	0,00	Ø	Ø
L139	*Jonesia denitrificans*	Collection	4,5.10E+5	46	0,01	+MA	-ME
EN63	*Klebsiella pneumoniae*	Celery	1,24.10E+5	-4	0,00	Ø	Ø
33	*Lactobacillus casei*	Dairy product	7,4.10E+4	-3	0,00	Ø	Ø
Lb1	*Lactobacillus plantarum*	Collection	1,3.10E+4	-2	0,00	Ø	Ø
M1	*Micrococcus* spp.	Environment	2.10E+5	29	0,01	Ø	Ø
PS90	*Pseudomonas putida*	Fish	6,1.10E+4	-1	0,00	Ø	Ø
PS91	*Pseudomonas putida*	Mushroom	7,2.10E+4	-3	0,00	-ME	-LE
32	*Rhodococcus equi*	Meat product	6,4.10E+6	-2	0,00	Ø	-ME
Le1	*Rhodotorula rubra*	Pastri	1,04.10E+5	-1	0,00	Ø	Ø
Le3	*Candida albicans*	Collection	6,9.10E+4	-2	0,00	-LE	-LE
Le5	*Saccharomyces*	Coffee extract	3,3.10E+5	-2	0,00	Ø	Ø
EN49	*Serratia marcescens*	Raw milk	6,5.10E+4	-2	0,00	Ø	Ø
ST17	*Staphylococcus aureus*	Yoghurt	6,5.10E+4	57	0,02	Ø	Ø
ST15	*Staphylococcus*	Collection ATCC 12228	4.10E+5	-2	0,00	-ME	-ME
ST12	*Staphylococcus hyicus*	Meat product	6.10E+5	-2	0,00	Ø	-LE

APPENDIX G – Interlaboratory study raw results

Laboratory A

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	2	0,00	-	-	-	=
2	-	-	-	-	-	=	4	0,00	-	-	-	=
3	-	-	-	-	-	=	3	0,00	-	-	-	=
4	-	-	-	-	-	=	3	0,00	-	-	-	=
5	-	-	-	-	-	=	3	0,00	-	-	-	=
6	-	-	-	-	-	=	2	0,00	-	-	-	=
7	-	-	-	-	-	=	8	0,00	-	-	-	=
8	-	-	-	-	-	=	1	0,00	-	-	-	=
9	-	-	-	-	-	#	1	0,00	-	-	-	#
10	-	-	-	-	-	#	-3	0,00	-	-	-	#
11	-	-	-	-	-	#	1	0,00	-	-	-	#
12	-	-	-	-	-	#	2	0,00	-	-	-	#
13	-	-	-	-	-	#	2	0,00	-	-	-	#
14	-	-	-	-	-	#	10980	3,72	+	+	+	=
15	-	-	-	-	-	#	0	0,00	-	-	-	#
16	-	-	-	-	-	#	-1	0,00	-	-	-	#
17	+	+	+	+	+	=	6768	2,29	+	+	+	=
18	+	+	+	+	+	=	6796	2,30	+	+	+	=
19	+	+	+	+	+	=	7896	2,68	+	+	+	=
20	+	+	+	+	+	=	5	0,00	-	-	-	#
21	+	+	+	+	+	=	7546	2,56	+	+	+	=
22	-	-	-	-	-	#	7646	2,59	+	+	+	=
23	+	+	+	+	+	=	8165	2,77	+	+	+	=
24	+	+	+	+	+	=	6749	2,29	+	+	+	=
VTC numbering (CFU/ml) :				3,00E+04								

Laboratory B

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	4	0,00	-	-	-	=
2	-	-	-	-	-	=	-1	0,00	-	-	-	=
3	-	-	-	-	-	=	1	0,00	-	-	-	=
4	-	-	-	-	-	=	-4	0,00	-	-	-	=
5	-	-	-	-	-	=	5	0,00	-	-	-	=
6	-	-	-	-	-	=	4	0,00	-	-	-	=
7	-	-	-	-	-	=	4	0,00	-	-	-	=
8	-	-	-	-	-	=	8	0,00	-	-	-	=
9	-	-	+	+	+	=	11731	4,10	+	+	+	=
10	-	-	-	-	-	#	-2	0,00	-	-	-	#
11	-	-	-	-	-	#	7	0,00	-	-	-	#
12	-	-	-	-	-	#	2	0,00	-	-	-	#
13	-	-	+	+	+	=	-3	0,00	-	-	-	#
14	-	-	-	-	-	#	3	0,00	-	-	-	#
15	+	+	+	+	+	=	9	0,00	-	-	-	#
16	-	-	-	-	-	#	4	0,00	-	-	-	#
17	-	-	-	-	-	#	9829	3,43	+	+	+	=
18	+	+	+	+	+	=	5060	1,76	+	+	+	=
19	+	+	+	+	+	=	9580	3,34	+	+	+	=
20	+	+	+	+	+	=	9915	3,46	+	+	+	=
21	-	-	+	+	+	=	10207	3,56	+	+	+	=
22	+	+	+	+	+	=	11576	4,04	+	+	+	=
23	+	+	+	+	+	=	8653	3,02	+	+	+	=
24	+	+	+	+	+	=	8996	3,14	+	+	+	=
VTC numbering (CFU/ml) :				>300 000								

Laboratory C

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	3	0,00	-	-	-	=
2	-	-	-	-	-	=	13	0,00	-	-	-	=
3	-	+	-	-	-	=	2	0,00	-	-	-	=
4	-	-	-	-	-	=	3	0,00	-	-	-	=
5	-	-	-	-	-	=	5	0,00	-	-	-	=
6	-	-	-	-	-	=	4	0,00	-	-	-	=
7	-	-	-	-	-	=	46	0,01	-	-	-	=
8	-	-	-	-	-	=	7	0,00	-	-	-	=
9	-	-	-	-	-	#	6930	2,61	+	+	+	=
10	-	-	-	-	-	#	2	0,00	-	-	-	#
11	-	-	-	-	-	#	8915	3,36	+	+	+	=
12	+	+	+	+	+	=	5672	2,13	+	+	+	=
13	+	+	+	+	+	=	3058	1,15	+	+	+	=
14	-	-	-	-	-	#	1507	0,56	+	+	+	=
15	-	-	-	-	-	#	2032	0,76	+	+	+	=
16	-	-	-	-	-	#	2768	1,04	+	+	+	=
17	+	+	+	+	+	=	10480	3,95	+	+	+	=
18	-	-	-	-	-	#	10759	4,05	+	+	+	=
19	+	+	+	+	+	=	7658	2,88	+	+	+	=
20	+	+	+	+	+	=	8609	3,24	+	+	+	=
21	+	+	+	+	+	=	7191	2,71	+	+	+	=
22	+	+	+	+	+	=	10789	4,06	+	+	+	=
23	-	-	-	-	-	#	10590	3,99	+	+	+	=
24	+	+	+	+	+	=	10853	4,09	+	+	+	=
VTC numbering (CFU/ml) :				-								

Laboratory D

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	3	0,00	-	-	-	=
2	-	-	-	-	-	=	1	0,00	-	-	-	=
3	-	-	-	-	-	=	3	0,00	-	-	-	=
4	-	-	-	-	-	=	1	0,00	-	-	-	=
5	-	-	-	-	-	=	3	0,00	-	-	-	=
6	-	-	-	-	-	=	2	0,00	-	-	-	=
7	-	-	-	-	-	=	3	0,00	-	-	-	=
8	-	-	-	-	-	=	4	0,00	-	-	-	=
9	-	-	-	-	-	#	11708	4,09	+	+	+	=
10	-	-	-	-	-	#	12249	4,27	+	+	+	=
11	-	-	-	-	-	#	12264	4,28	+	+	+	=
12	-	-	-	-	-	#	9459	3,30	+	+	+	=
13	-	-	-	-	-	#	8381	2,92	+	+	+	=
14	-	-	-	-	-	#	12185	4,25	+	+	+	=
15	+	+	+	+	+	=	10122	3,53	+	+	+	=
16	-	-	-	-	-	#	9012	3,14	+	+	+	=
17	+	+	+	+	+	=	6033	2,10	+	+	+	=
18	+	+	+	+	+	=	6052	2,11	+	+	+	=
19	+	+	+	+	+	=	6630	2,31	+	+	+	=
20	+	+	+	+	+	=	6383	2,23	+	+	+	=
21	+	+	+	+	+	=	5821	2,03	+	+	+	=
22	+	+	+	+	+	=	5796	2,02	+	+	+	=
23	+	+	+	+	+	=	5632	1,96	+	+	+	=
24	+	+	+	+	+	=	5447	1,90	+	+	+	=
VTC numbering (CFU/ml) :				-								

Laboratory E

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=		0,00	-	-	-	=
2	-	-	-	-	-	=		0,00	-	-	-	=
3	-	-	-	-	-	=		0,00	-	-	-	=
4	-	-	-	-	-	=		0,00	-	-	-	=
5	-	-	-	-	-	=		0,00	-	-	-	=
6	-	-	-	-	-	=		0,00	-	-	-	=
7	-	-	-	-	-	=		0,00	-	-	-	=
8	-	-	-	-	-	=		0,00	-	-	-	=
9	-	-	-	-	-	#		3,64	+	+	+	=
10	-	-	-	-	-	#		0,00	-	-	-	#
11	+	+	+	+	+	=		4,03	+	+	+	=
12	+	+	+	+	+	=		3,34	+	+	+	=
13	-	-	-	-	-	#		0,00	-	-	-	#
14	-	-	-	-	-	#		3,39	+	+	+	=
15	-	-	-	-	-	#		0,00	-	-	-	#
16	-	-	-	-	-	#		0,00	-	-	-	#
17	+	+	+	+	+	=		3,28	+	+	+	=
18	+	+	+	+	+	=		3,10	+	+	+	=
19	+	+	+	+	+	=		3,50	+	+	+	=
20	+	+	+	+	+	=		3,47	+	+	+	=
21	+	+	+	+	+	=		4,06	+	+	+	=
22	+	+	+	+	+	=		3,74	+	+	+	=
23	+	+	+	+	+	=		4,10	+	+	+	=
24	+	+	+	+	+	=		3,87	+	+	+	=
VTC numbering (CFU/ml) :				8,00E+08								

Laboratory F

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=		0,00	-	-	-	=
2	-	-	-	-	-	=		0,00	-	-	-	=
3	-	-	-	-	-	=		0,00	-	-	-	=
4	-	-	-	-	-	=		0,00	-	-	-	=
5	-	-	-	-	-	=		0,00	-	-	-	=
6	-	-	-	-	-	=		0,00	-	-	-	=
7	-	-	-	-	-	=		0,00	-	-	-	=
8	-	-	-	-	-	=		0,00	-	-	-	=
9	+	+	+	+	+	=		2,57	+	+	+	=
10	-	-	-	-	-	#		2,53	+	+	+	=
11	+	+	+	+	+	=		2,67	+	+	+	=
12	-	-	-	-	-	#		2,68	+	+	+	=
13	+	+	+	+	+	=		2,39	+	+	+	=
14	-	-	-	-	-	#		2,48	+	+	+	=
15	+	+	+	+	+	=		2,37	+	+	+	=
16	+	+	+	+	+	=		2,39	+	+	+	=
17	-	-	-	-	-	#		0,03	-	-	-	#
18	-	-	-	-	-	#		2,59	+	+	+	=
19	-	-	-	-	-	#		3,01	+	+	+	=
20	-	-	-	-	-	#		2,54	+	+	+	=
21	-	-	-	-	-	#		0,00	-	-	-	#
22	-	-	-	-	-	#		2,51	+	+	+	=
23	-	-	-	-	-	#		2,50	+	+	+	=
24	-	-	-	-	-	#		2,53	+	+	+	=
VTC numbering (CFU/ml) :				>300 000								

Laboratory G

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	2	0,00	-	-	-	=
2	-	-	-	-	-	=	1	0,00	-	-	-	=
3	-	-	-	-	-	=	3	0,00	-	-	-	=
4	-	-	+	+	-	=	0	0,00	-	-	-	=
5	-	-	-	-	-	=	3	0,00	-	-	-	=
6	-	-	-	-	-	=	-2	0,00	-	-	-	=
7	-	-	+	-	-	=	3	0,00	-	-	-	=
8	-	-	-	-	-	=	0	0,00	-	-	-	=
9	-	-	+	+	+	=	11236	3,92	+	+	+	=
10	-	-	-	-	-	#	-2	0,00	-	-	-	#
11	-	-	-	-	-	#	0	0,00	-	-	-	#
12	-	-	-	-	-	#	3	0,00	-	-	-	#
13	-	-	+	+	-	#	3	0,00	-	-	-	#
14	+	+	+	+	+	=	11170	3,89	+	+	+	=
15	-	-	-	-	-	#	0	0,00	-	-	-	#
16	-	-	-	-	-	#	1	0,00	-	-	-	#
17	+	+	+	+	+	=	8638	3,01	+	+	+	=
18	+	+	+	+	+	=	8843	3,08	+	+	+	=
19	+	+	+	+	+	=	10232	3,57	+	+	+	=
20	+	+	+	+	+	=	10111	3,52	+	+	+	=
21	+	+	+	+	+	=	10015	3,49	+	+	+	=
22	+	+	+	+	+	=	10008	3,49	+	+	+	=
23	+	+	+	+	+	=	10022	3,49	+	+	+	=
24	+	+	+	+	+	=	10061	3,51	+	+	+	=
VTC numbering (CFU/ml) :				>300 000								

Laboratory I

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=		0,00	-	-	-	=
2	-	-	-	-	-	=		0,00	-	-	-	=
3	-	-	-	-	-	=		0,00	-	-	-	=
4	-	-	-	-	-	=		0,00	-	-	-	=
5	-	-	-	-	-	=		0,00	-	-	-	=
6	-	-	-	-	-	=		0,00	-	-	-	=
7	-	-	-	-	-	=		0,00	-	-	-	=
8	-	-	-	-	-	=		0,00	-	-	-	=
9	+	+	+	+	+	=		4,05	+	+	+	=
10	+	+	+	+	+	=		3,94	+	+	+	=
11	+	+	+	+	+	=		3,62	+	+	+	=
12	+	+	+	+	+	=		3,69	+	+	+	=
13	+	+	+	+	+	=		3,92	+	+	+	=
14	+	+	+	+	+	=		3,88	+	+	+	=
15	+	+	+	+	+	=		4,53	+	+	+	=
16	+	+	+	+	+	=		4,44	+	+	+	=
17	+	+	+	+	+	=		3,63	+	+	+	=
18	+	+	+	+	+	=		3,45	+	+	+	=
19	+	+	+	+	+	=		3,02	+	+	+	=
20	+	+	+	+	+	=		3,10	+	+	+	=
21	+	+	+	+	+	=		3,02	+	+	+	=
22	+	+	+	+	+	=		3,43	+	+	+	=
23	+	+	+	+	+	=		3,30	+	+	+	=
24	+	+	+	+	+	=		3,32	+	+	+	=
VTC numbering (CFU/ml) :				>334 000								

Laboratory J

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=		0,00	-	-	-	=
2	-	-	-	-	-	=		0,00	-	-	-	=
3	-	-	-	-	-	=		0,00	-	-	-	=
4	-	-	-	-	-	=		0,00	-	-	-	=
5	-	-	-	-	-	=		0,00	-	-	-	=
6	-	-	-	-	-	=		0,00	-	-	-	=
7	-	-	-	-	-	=		0,00	-	-	-	=
8	-	-	-	-	-	=		0,00	-	-	-	=
9	-	-	-	-	-	#		3,42	+	+	+	=
10	+	+	+	+	+	=		3,65	+	+	+	=
11	+	+	+	+	+	=		2,32	+	+	+	=
12	+	+	-	+	+	=		2,41	+	+	+	=
13	-	-	-	-	-	#		1,86	+	+	+	=
14	+	+	+	+	+	=		0,00	-	-	-	#
15	+	+	+	+	+	=		2,66	+	+	+	=
16	-	-	-	-	-	#		3,28	+	+	+	=
17	+	+	+	+	+	=		1,85	+	+	+	=
18	+	+	+	+	+	=		1,86	+	+	+	=
19	+	+	+	+	+	=		1,95	+	+	+	=
20	+	+	+	+	+	=		1,93	+	+	+	=
21	+	+	+	+	+	=		1,93	+	+	+	=
22	+	+	+	+	+	=		1,92	+	+	+	=
23	+	+	+	+	+	=		1,94	+	+	+	=
24	+	+	+	+	+	=		1,91	+	+	+	=
VTC numbering (CFU/ml) :				>300 000								

Laboratory K

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	19	0,00	-	-	-	=
2	-	-	-	-	-	=	2	0,00	-	-	-	=
3	-	-	-	-	-	=	2	0,00	-	-	-	=
4	-	-	-	-	-	=	3	0,00	-	-	-	=
5	-	-	-	-	-	=	0	0,00	-	-	-	=
6	-	-	-	-	-	=	2	0,00	-	-	-	=
7	-	-	-	-	-	=	2	0,00	-	-	-	=
8	-	-	-	-	-	=	1	0,00	-	-	-	=
9	-	-	+	+	+	=	3	0,00	-	-	-	#
10	-	-	-	-	-	#	3	0,00	-	-	-	#
11	-	-	-	-	-	#	3	0,00	-	-	-	#
12	-	-	-	-	-	#	2	0,00	-	-	-	#
13	-	-	-	-	-	#	3	0,00	-	-	-	#
14	-	-	-	-	-	#	4	0,00	-	-	-	#
15	-	-	-	-	-	#	3	0,00	-	-	-	#
16	-	-	-	-	-	#	3	0,00	-	-	-	#
17	+	+	+	+	+	=	9732	3,59	+	+	+	=
18	+	+	+	+	+	=	7883	2,91	+	+	+	=
19	+	+	+	+	+	=	5195	1,91	+	+	+	=
20	+	+	+	+	+	=	3977	1,46	+	+	+	=
21	+	+	+	+	+	=	8296	3,06	+	+	+	=
22	+	+	+	+	+	=	65	0,02	-	-	-	#
23	+	+	+	+	+	=	8025	2,96	+	+	+	=
24	+	+	+	+	+	=	10632	3,92	+	+	+	=
VTC numbering (CFU/ml) :				>300 000								

Laboratory L

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	25	0,00	-	-	-	=
2	-	-	-	-	-	=	6	0,00	-	-	-	=
3	-	-	-	-	-	=	1	0,00	-	-	-	=
4	-	-	-	-	-	=	4	0,00	-	-	-	=
5	-	-	-	-	-	=	5	0,00	-	-	-	=
6	-	-	-	-	-	=	3	0,00	-	-	-	=
7	-	-	-	-	-	=	4	0,00	-	-	-	=
8	-	-	-	-	-	=	-1	0,00	-	-	-	=
9	+	+	+	+	+	=	10568		+	+	+	=
10	+	+	+	+	+	=	3053		+	+	+	=
11	+	+	+	+	+	=	6111		+	+	+	=
12	+	+	+	+	+	=	6137		+	+	+	=
13	+	+	+	+	+	=	11157		+	+	+	=
14	+	+	+	+	+	=	11251		+	+	+	=
15	+	+	+	+	+	=	11153		+	+	+	=
16	+	+	+	+	+	=	10823		+	+	+	=
17	+	+	+	+	+	=	8715		+	+	+	=
18	+	+	+	+	+	=	8687		+	+	+	=
19	+	+	+	+	+	=	9591		+	+	+	=
20	+	+	+	+	+	=	8934		+	+	+	=
21	+	+	+	+	+	=	9184		+	+	+	=
22	+	+	+	+	+	=	8924		+	+	+	=
23	+	+	+	+	+	=	8904		+	+	+	=
24	+	+	+	+	+	=	8636		+	+	+	=

VTC numbering (CFU/ml) : >100 000 000

Laboratory M

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=		0,00	-	-	-	=
2	-	-	-	-	-	=		0,00	-	-	-	=
3	-	-	-	-	-	=		0,00	-	-	-	=
4	-	-	-	-	-	=		0,00	-	-	-	=
5	-	-	-	-	-	=		0,00	-	-	-	=
6	-	-	-	-	-	=		0,00	-	-	-	=
7	-	-	-	-	-	=		0,00	-	-	-	=
8	-	-	-	-	-	=		0,00	-	-	-	=
9	+	+	+	+	+	=	10276	3,56	+	+	+	=
10	+	+	+	+	+	=	10513	3,64	+	+	+	=
11	+	+	+	+	+	=	10906	3,77	+	+	+	=
12	+	+	+	+	+	=	9620	3,33	+	+	+	=
13	+	+	+	+	+	=	11846	4,10	+	+	+	=
14	+	+	+	+	+	=	7464	2,58	+	+	+	=
15	+	+	+	+	+	=	11033	3,82	+	+	+	=
16	+	+	+	+	+	=	4258	1,47	+	+	+	=
17	+	+	+	+	+	=	8912	3,08	+	+	+	=
18	+	+	+	+	+	=	9511	3,29	+	+	+	=
19	+	+	+	+	+	=	8857	3,06	+	+	+	=
20	+	+	+	+	+	=	7750	2,68	+	+	+	=
21	+	+	+	+	+	=	8876	3,07	+	+	+	=
22	+	+	+	+	+	=	10067	3,48	+	+	+	=
23	+	+	+	+	+	=	7469	2,58	+	+	+	=
24	+	+	+	+	+	=	7964	2,75	+	+	+	=

VTC numbering (CFU/ml) : 1,70E+07

Laboratory N

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	46	0,01	-	-	-	=
2	-	-	-	-	-	=	30	0,01	-	-	-	=
3	-	-	-	-	-	=	49	0,01	-	-	-	=
4	-	-	-	-	-	=	29	0,01	-	-	-	=
5	-	-	-	-	-	=	20	0,00	-	-	-	=
6	-	-	-	-	-	=	31	0,01	-	-	-	=
7	-	-	-	-	-	=	14	0,00	-	-	-	=
8	-	-	-	-	-	=	34	0,01	-	-	-	=
9	+	+	+	+	+	=	9130	3,16	+	+	+	=
10	+	+	+	+	+	=	8356	2,89	+	+	+	=
11	+	+	+	+	+	=	7573	2,62	+	+	+	=
12	+	+	+	+	+	=	7612	2,64	+	+	+	=
13	+	+	+	+	+	=	7436	2,57	+	+	+	=
14	+	+	+	+	+	=	9221	3,19	+	+	+	=
15	+	+	+	+	+	=	2435	0,84	+	+	+	=
16	+	+	+	+	+	=	7543	2,61	+	+	+	=
17	+	+	+	+	+	=	10589	3,67	+	+	+	=
18	+	+	+	+	+	=	10493	3,63	+	+	+	=
19	+	+	+	+	+	=	11648	4,04	+	+	+	=
20	+	+	+	+	+	=	11622	4,03	+	+	+	=
21	+	+	+	+	+	=	11293	3,91	+	+	+	=
22	+	+	+	+	+	=	11269	3,90	+	+	+	=
23	+	+	+	+	+	=	11677	4,05	+	+	+	=
24	+	+	+	+	+	=	11155	3,86	+	+	+	=
VTC numbering (CFU/ml) :				5,00E+08								

Laboratory O

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	5	0,00	-	-	-	=
2	-	-	-	-	-	=	4	0,00	-	-	-	=
3	-	-	-	-	-	=	4	0,00	-	-	-	=
4	-	-	-	-	-	=	3	0,00	-	-	-	=
5	-	-	-	-	-	=	4	0,00	-	-	-	=
6	-	-	-	-	-	=	4	0,00	-	-	-	=
7	-	-	-	-	-	=	5	0,00	-	-	-	=
8	-	-	-	-	-	=	4	0,00	-	-	-	=
9	+	+	+	+	+	=	150	0,05	+	+	+	=
10	+	+	+	+	+	=	141	0,04	-	-	-	#
11	+	+	+	+	+	=	119	0,04	-	-	-	#
12	+	+	+	+	+	=	91	0,03	-	-	-	#
13	+	+	+	+	+	=	74	0,02	-	-	-	#
14	+	+	+	+	+	=	110	0,03	-	-	-	#
15	+	+	+	+	+	=	17	0,00	-	-	-	#
16	+	+	+	+	+	=	251	0,08	+	+	+	=
17	+	+	+	+	+	=	1266	0,44	+	+	+	=
18	+	+	+	+	+	=	405	0,14	+	+	+	=
19	+	+	+	+	+	=	365	0,12	+	+	+	=
20	+	+	+	+	+	=	493	0,17	+	+	+	=
21	+	+	+	+	+	=	1131	0,39	+	+	+	=
22	+	+	+	+	+	=	898	0,31	+	+	+	=
23	+	+	+	+	+	=	967	0,34	+	+	+	=
24	+	+	+	+	+	=	1334	0,46	+	+	+	=
VTC numbering (CFU/ml) :				>300 000								

Laboratory P

Reference	Reference method					Comparison / expected results	Alternative method : VIDAS LPT					Comparison / expected results
	Fraser 1/2		Fraser		Result		Test LPT		Test result	Confirmation	Result	
	OAA	PALCAM	OAA	PALCAM			RFV	VT				
1	-	-	-	-	-	=	5	0,00	-	-	-	=
2	-	-	-	-	-	=	5	0,00	-	-	-	=
3	-	-	-	-	-	=	6	0,00	-	-	-	=
4	-	-	-	-	-	=	4	0,00	-	-	-	=
5	-	-	-	-	-	=	3	0,00	-	-	-	=
6	-	-	-	-	-	=	5	0,00	-	-	-	=
7	-	-	-	-	-	=	11	0,00	-	-	-	=
8	-	-	-	-	-	=	3	0,00	-	-	-	=
9	+	+	+	+	+	=	9723	3,36	+	+	+	=
10	+	+	+	+	+	=	10273	3,55	+	+	+	=
11	+	+	+	+	+	=	10176	3,52	+	+	+	=
12	+	+	+	+	+	=	8145	2,82	+	+	+	=
13	+	+	+	+	+	=	8987	3,11	+	+	+	=
14	+	+	+	+	+	=	1124	3,81	+	+	+	=
15	+	+	+	+	+	=	10948	3,79	+	+	+	=
16	+	+	+	+	+	=	8918	3,09	+	+	+	=
17	+	+	+	+	+	=	8192	2,83	+	+	+	=
18	+	+	+	+	+	=	8211	2,84	+	+	+	=
19	+	+	+	+	+	=	8060	2,79	+	+	+	=
20	+	+	+	+	+	=	7830	2,71	+	+	+	=
21	+	+	+	+	+	=	7646	2,64	+	+	+	=
22	+	+	+	+	+	=	7652	2,65	+	+	+	=
23	+	+	+	+	+	=	7325	2,53	+	+	+	=
24	+	+	+	+	+	=	7293	2,52	+	+	+	=
VTC numbering (CFU/ml) :				>300 000								