Inovalys Tours

bioMérieux

NF VALIDATION - Validation of alternative methods of analysis
Food microbiology applications

SUMMARY REPORT

Study conducted according to EN ISO 16140-2 : 2016

"ALOA® COUNT" AES 10/5-09/06 for the enumeration of *Listeria monocytogenes* and other *Listeria spp.* in human food products and environmental samples

Quantitative method

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Version 0
20 July 2022

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Preamble

Validation protocol :

ISO 16140-2 (September 2016): Microbiology of the food chain – Method validation - Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method.

AFNOR Technical Rules (PR Revision 7).

Reference method :

ISO 11290-2 (May 2017)

Alternative method :

ALOA® COUNT for *Listeria monocytogenes* and *Listeria spp.* enumeration

Scope :

All human food products (by validation tests on a wide range of foods) and environmental samples.

Certification organism:

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

1. Introduction

The ALOA® COUNT method was certified by AFNOR Certification according to the ISO 16140-2 standard under the reference AES 10/05 – 09/06.
The validation stages and the standards used during the studies are presented in the table below.

Date	Purpose	Standards
September 2006	Initial validation for *Listeria monocytogenes* enumeration, in all human food products	EN ISO 11290-2/A1:2005 EN ISO 16140 : 2003 AFNOR requirements
July 2010	Renewal study without modification	
October 2012	First Extension study for : - extension of the scope of application to include environmental samples - possibility of no revivification: 1 hour (+/- 5 min), at 20°C (+/- 2°C) - possibility of preparing the sample in Buffered Peptone Water (BPW) or ½ Fraser, at the user's choice - possibility of storing the agar for a maximum of 72 hours at 5°C +/- 3°C, before reading - possibility of enumerating *Listeria spp.*	EN ISO 11290-2/A1:2005 EN ISO 16140/A1:2011 AFNOR requirements v4
March 2013	Extension study to a new "FAST Rhamnose" confirmation mode, concerning both the ALOA® One Day and the ALOA® COUNT methods.	
July 2014	Renewal study without modification	
October 2018	Renewal study taking into account the specific requirements of ISO 16140-2:2016 and AFNOR validation V6	EN ISO 11290-2:2017 EN ISO 16140-2:2016 AFNOR requirements v6

The certificate expires on the 15th of September 2022. BioMérieux would like to proceed to the certification renewal of the alternative method.

2. Method protocols

2.1. Alternative method

2.1.1. Principle of the alternative method

The ALOA® agar medium is a chromogenic medium that makes it possible to detect all *Listeria* by highlighting beta-glucosidase activity (round colonies, regular edges, blue-green in colour) and to distinguish *Listeria monocytogenes* by the formation of a clear halo of precipitation of phospholipids cleaved by its specific phospholipase.

2.1.2. Protocol of the alternative method

The ALOA® COUNT method is based on the use of the ALOA® chromogenic medium.
The analytical protocol is as follows:

- Creation of an initial suspension of X g (or X mL) of a sample in 9 x X g (or 9 x X mL) of buffered peptone water (BPW) or ½ Fraser.
- Optional revivification for 1 hour (+/- 5 min), at18°C - 25°C.
- Inoculation of the ALOA® agar.

Two inoculation methods are provided by the manufacturer (at the choice of the user):

- **Surface** inoculation

* Spreading of 0.1 mL on the ALOA® Ø90 mm agar (it is possible, and foreseen in the manufacturer's technical data sheet, to spread up to 1 mL across three Ø90 mm dishes
* or Spreading of 1 mL per ALOA® Ø140 mm dish.

- **Pour-plating** inoculation

Pour-plating inoculation (simple layer) of 1 mL in approx. 15 ml of ALOA® agar in a Ø90 mm dish.

Irrespective of the method of inoculation used, only 1 dish is prepared by dilution, except in the case of inoculation of 1 ml in 3 dishes.

- Incubation at 37°C (+/-1°C).
- Analysing the dishes: The final result of the enumeration is obtained after 48 ± 3 hours. An initial reading can be done after 24 hours to detect more quickly which samples are heavily contaminated.

Listeria monocytogenes and *Listeria ivanovii* form blue to blue-green colonies and are surrounded by an opaque halo. Other *Listeria* form blue to blue-green colonies, and are round and regular but without an opaque halo.

- In accordance with the requirements of AFNOR Certification and the manufacturer, typical colonies must be tested for confirmation.

For typical *Listeria monocytogenes* colonies (blue to blue-green colonies surrounded by an opaque halo):

1- confirmation of a positive colony according to common standardised methods tests, including the purification step,
2- confirmation according to the "ALOA® Confirmation" protocol,
3- confirmation according to the VIDAS LMO2 protocol,
4- confirmation performing an API Listeria gallery,
5- confirmation performing a RAPIDEC L.mono gallery,
6- confirmation performing a FAST Rhamnose test.

For typical *Listeria spp.* colonies (blue to blue-green colonies surrounded or not by an opaque halo):

1- confirmation of a positive colony according to common standardised methods tests, including the purification step,
2- confirmation by pricking an isolated colony on a PALCAM agar ,
3- rapid confirmation by the "*Listeria* Species Confirmation Strip" immunochromatographic test.

The ALOA® dishes can be placed in the refrigerator after incubation for 72 hours without the halo and the colour of the colonies experiencing any changes.

A synopsis of the protocol for using the alternative method is presented in Appendix 1.

2.1.3. Updated records, indicating changes

The package insert in force when the ALOA® Count (2012) method was extended was Version V. Version W brought the following modifications: addition of the "FAST Rhamnose" confirmation method (confirmation 2f in the kit insert).

Following the change in the manufacturer's name, version X was published in January 2014: replacement of "AES Chemunex" by "bioMérieux" and change of visual to comply with bioMérieux's graphic charter.

Version Y of the ALOA® agar leaflet was published in July 2014 at the request of the technical committee, in order to make the following changes:
- insertion of bioMérieux phrase templates next to the logos,
- precision concerning the number of colonies to be confirmed.

Version Z corresponds to the compliance of hazard logos and risk phrases with GHS regulations.

Version AA deals with the renewal of the ALOA One Day method with the possibility of analysing the agar from 22 hours of incubation in the ALOA One Day method. We also note the exclusion of raw sheep's milk products for confirmation with the ALOA confirmation medium

Package insert reference 049971 version 02 was presented for the previous renewal in 2018.
The version 049971 version 03 was proposed to integrate the ISO 7218 requirements and is unchanged for this renewal.

2.1.4. Scope of application:

All human food products and food production environmental samples.

2.2. Reference method

In previous validation studies, the reference method against which the alternative method was compared was the standard EN ISO 11290-2 / A1 (2005) entitled Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* Part 2: Enumeration method.
During additional testing in 2018, the revised standard EN ISO 11290-2: 2017 was applied. Changes made in relation to the previous standard are considered to be major but have no impact on performance. Results from previous validation studies can therefore be used.

The protocols are presented in Appendix 2.

3. Summary of results obtained from the different validation studies

3.1. Comparative study

The method comparison study is a part of the validation process that is performed in the expert laboratory. For the extension studies the expert laboratory carried out the statistical analysis of the following data :
- preparation of samples in BPW, with no revivification,
- surface and pour-plating inoculation,
- enumerations after 24H* and 45H* of incubation (for both inoculation methods),
- new analysis of agar after storage for 72 hours at 5°C +/- 3°C.

*: *minimum incubation times specified in the manufacturer's analytical protocol.*

The ALOA Count method also claims the possibility of preparing the sample in ½ Fraser brothsample in the same way as standard ISO 11290-2: 2017. This preparation was applied in previous validation studies.

3.1.1. Relative accuracy study

3.1.1.1. Number and nature of samples

3.1.1.1.1. *Listeria monocytogenes*

In 2012, only pour-plating inoculation was done for BPW preparation without revivification. For the statistical study on surface inoculation, the 2006 data were therefore used. These data correspond to a BPW preparation with revivification and cold storage was not tested at the time. The different studies showed that there was no significant difference between the preparation with revivification and the preparation without revivification, and that the storage of the agars for 72h at 5°C +/- 3°C did not affect the results.
Some data from 2006 were also used to complete the statistical study on pour-plating inoculation as validated during the presentation of the project to the technical office.

The number of samples analysed and stored for the statistical study during the various validations are as follows:
- In 2006: 279 samples analysed, 85 used in surface inoculation and 15 used in pour-plating inoculation.
- In 2012: 83 samples analysed, 70 used in pour-plating inoculation.
- In 2018: 38 samples analysed, 38 used in surface inoculation and 13 used in pour-plating inoculation.

Taking into account the various validation studies, and after reclassification, 400 samples were analysed, giving 123 usable results for surface inoculation and 98 usable results for pour-plating inoculation.

The distribution of samples by category and type is presented in Table 1.

Table 1: Number and nature of the samples analysed - *Listeria monocytogenes*

Category	Type	Number of samples analysed	Number of results used	
			Surface inoculation	Pour-plating inoculation
Dairy products	Raw milk cheese	28	9	5
	Raw milk	15	5	5
	Dairy dessert	25	5	6
	Total	68	19	16
Meat products	Raw product	54	9	7
	Deli foods/salting	25	8	5
	Processed foods	8	5	5
	Total	87	22	17
Seafood products	Raw fish	54	21	5
	Smoked fish	25	10	5
	Processed foods	10	5	5
	Total	89	36	15
Vegetable products	Fresh	36	5	5
	Frozen	16	5	6
	Processed	11	5	5
	Total	63	15	16
Composite foods	RTE and RTRH	16	5	5
	Pastries	26	6	5
	Raw and cooked eggs	19	5	5
	Total	61	16	15
Environmental samples	Surface	16	5	8
	Process water	11	5	6
	Dust/residues	5	5	5
	Total	32	15	19
TOTAL		**400**	**123**	**98**

3.1.1.1.2. *Listeria spp*

The number of samples analysed and stored for the statistical study during the various validations are as follows:

- in 2012: 63 samples analysed, 52 used
- in 2018: 41 samples analysed, 40 used

Taking into account the various validation studies, and after reclassification, 104 samples were analysed, giving 92 usable results for surface inoculation and 91 usable results for pour-plating inoculation.

The distribution of samples by category and type is presented in Table 2.

Table 2: Number and nature of the samples analysed - *Listeria spp.*

Category	Type		Number of samples analysed	Number of results used	
				Surface inoculation	Pour-plating inoculation
Dairy products	L1	Raw milk cheese	7	6	5
	L2	Raw milk	6	5	6
	L3	Dairy dessert	5	5	5
	Total		18	16	16
Meat products	C1	Raw meat	6	5	5
	C2	Deli foods/salting	6	5	5
	C3	Processed	5	5	5
	Total		17	15	15
Seafood products	P1	Raw fish	5	5	5
	P2	Smoked fish	5	5	5
	P3	Cooked product	6	5	5
	Total		16	15	15
Vegetable products	V1	Fresh	6	5	5
	V2	Frozen	6	5	5
	V3	Processed	5	5	5
	Total		17	15	15
Composite foods	T1	RTE	5	5	5
	T2	RTRH	5	5	5
	T3	Egg product	6	5	5
	Total		16	15	15
Environmental samples	E1	Surface	9	6	5
	E2	Process water	6	5	5
	E3	Dust/residues	5	5	5
	Total		20	16	15
TOTAL			**104**	**92**	**91**

3.1.1.2. Artificial contaminations of samples

Artificial contaminations have been carried out, either by seeding or spiking. A single strain of *Listeria* has never been used more than 6 times in total to obtain a positive result.
Details about the artificial contaminations are presented in Appendix 3.

3.1.1.2.1. *Listeria monocytogenes*

- 162 samples were artificially contaminated, giving 78 interpretable results.
- 195 samples were naturally contaminated, giving 30 interpretable results.

In total, naturally contaminated samples accounted for 8% of interpretable results with surface inoculation and 20% with pour-plating inoculation.

3.1.1.2.2. *Listeria spp*

- 82 samples were artificially contaminated, giving 80 interpretable results.
- 22 samples were naturally contaminated, giving 14 interpretable results.

In total, naturally contaminated samples accounted for 18% of interpretable results with surface inoculation and 19% with pour-plating inoculation.

3.1.1.3. Protocols applied during the study

➢ **Initial validation from 2006**

- 1/10 dilution of the sample in buffered peptone water (BPW), with revivification.
- Inoculation of the ALOA® agar:
  - Surface inoculation (0.1 mL in one dish or 1 mL in 3 dishes)
  - Pour-plating inoculation (1 mL)
- Incubation at 37°C for 24 hours then up to 45 hours
- Confirmed through:
  - Conventional tests
  - ALOA CONFIRMATION™

➢ **2012 extension**

- 1/10 dilution of the sample in buffered peptone water (BPW) and ½ Fraser, without revivification.
- Inoculation of the ALOA® agar, both surface and pour-plating, after sample preparation with ½ Fraser,
- Pour-plating inoculation after sample preparation with BPW,
- Incubation at 37°C for 24 hours then up to 45 hours
- Confirmed through:
  - Biochemical gallery
  - ALOA CONFIRMATION™ for *Listeria monocytogenes.*
  - "*Listeria* Species Confirmation Strip" strips for *Listeria spp.*
- New analysis of agar after storage for 72 hours at 5°C +/- 3°C.

➢ **Renewal 2018**

- 1/10 dilution of the sample in buffered peptone water (BPW), without revivification.
- Inoculation of the ALOA® agar:
  - Surface inoculation (0.1 mL in one dish or 1 mL in 3 dishes)
  - Pour-plating inoculation (1 mL)
- Incubation at 37°C for 24 hours then up to 45 hours
- Confirmation:
  - *Listeria monocytogenes* by:
    - Conventional tests
    - API Listeria
    - VIDAS LMO2

ALOA Confirmation, Rapidec Lmono and FAST Rhamnose having been validated specifically for the confirmation of *Listeria monocytogenes*, the technical office has agreed to not implement these confirmation tests.

  - *Listeria spp.* by:
    - Conventional tests,

- Rapid check Listeria (Immunochromatography)
- Palcam spicking

- New analysis of agar after storage for 72 hours at 5°C +/- 3°C.

➢ **Protocols applied for environmental samples during validations**

- wipes: a neutraliser is added after performing the surface sampling following a disinfection protocol. Then 50 mL of TS diluent is added. Finally, the wipe is kneaded before making two identical samples of 10 ml each (one for the BPW protocol and one for the ½ Fraser protocol). 1/10th dilutions are then done.
- swabs: the swab is dipped in 5 ml of diluent. Then, two samples of 2 ml each are prepared (one for the BPW protocol and one for the ½ Fraser protocol). 1/10th dilutions are then done.
- process water: the samples are prepared in 250 ml vials. Then 25 ml is used to perform each 1/10th analysis (BPW protocol and ½ Fraser protocol).

➢ **Protocols applied for environmental samples during 2018 renewal**

- Wipes: +100 mL of BPW
- Swabs: +10 mL of BPW
- Water and dust: 25g or 25 mL + 225 mL of BPW

3.1.1.4. Results

The samples were analysed using the reference method and the alternative method, obtain at least 15 interpretable results per category and at least 5 per type.
During previous validations, the analyses were performed in duplicate. Only the first repetition was retained for statistical analysis according to ISO 16140-2: 2016.

The results are classified into three categories:
- Interpretable results for both methods.
- Results presenting less than 4 colonies per petri dish with the alternative method and/or the reference method (not taken into account for the statistical analysis).
- Results below the detection limit or above the quantification limit.

According to ISO 16140-2: 2016, if a result is below the quantification limit, the data values should be represented graphically using a substituted value of 1 log. In the same way, any value exceeding the upper limit must be modified by adding one more log.

3.1.1.5.1. *Listeria monocytogenes*

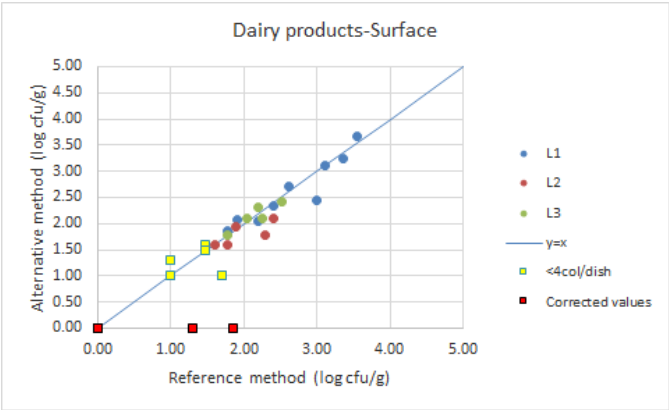
The raw data are presented in Appendix 4.
The statistical analysis was conducted using the results obtained after 45 hours of incubation of agar plates.

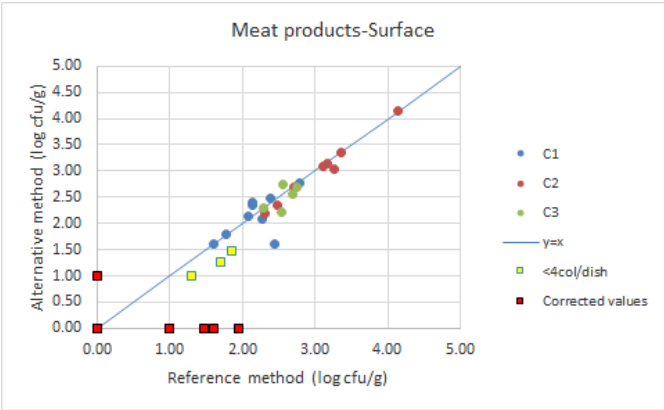
➢ **Statistical interpretation**

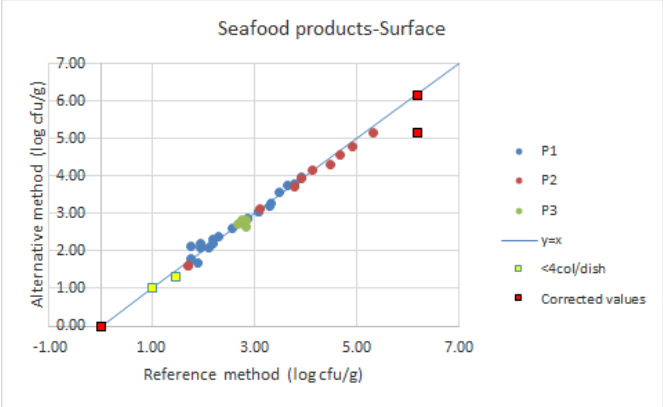
Statistical calculations as well as the samples excluded from the statistical analysis are presented in Appendix 5.

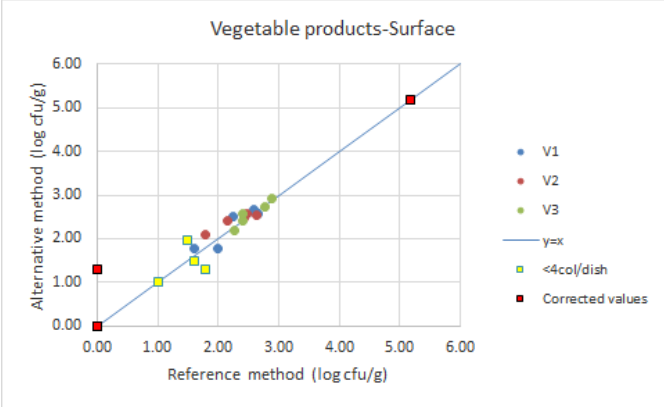
The data obtained were analysed using graphic representation of data for each sample by category
(Figure 1 for surface inoculation and Figure 2 for pour-plating inoculation) and for each sample in all categories (Figure 3 for surface inoculation and Figure 4 for pour-plating inoculation). The identity line y=x on which all the points are supposed to be if the two methods gave identical results is also represented.

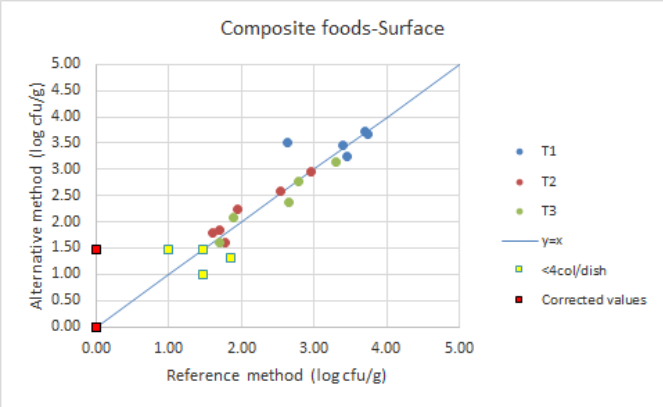
Figure 1: Dispersion plot by category, surface seeding -*Listeria monocytogenes*-45h











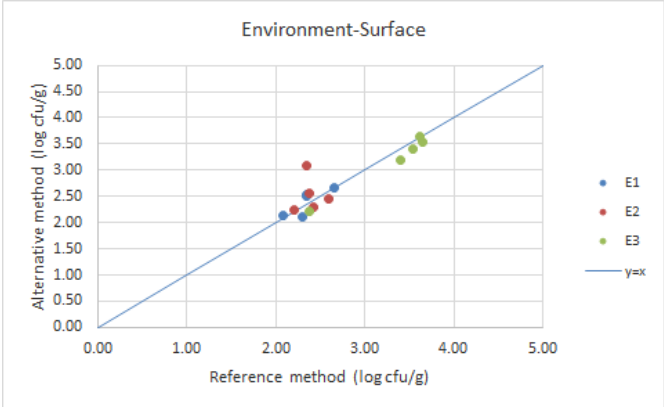
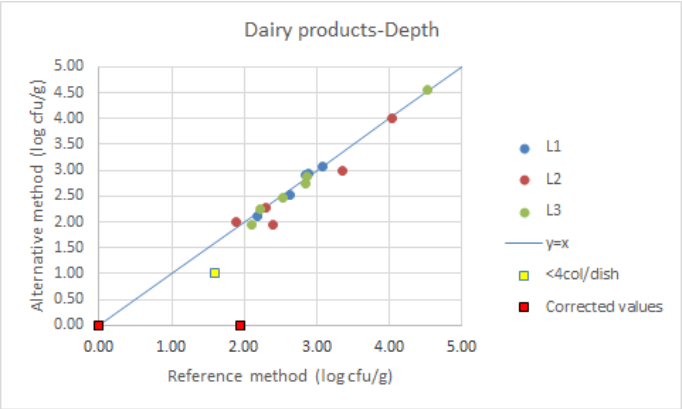
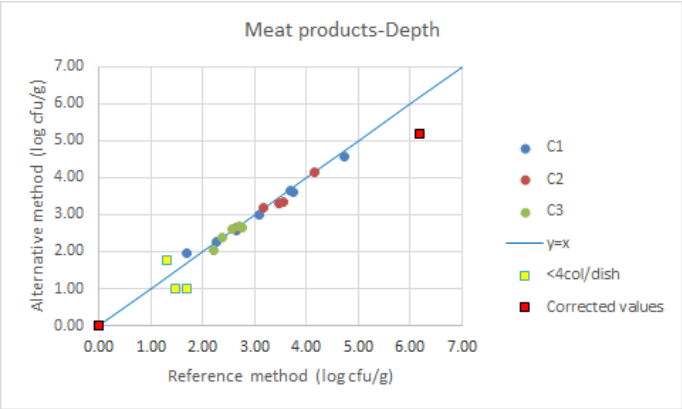
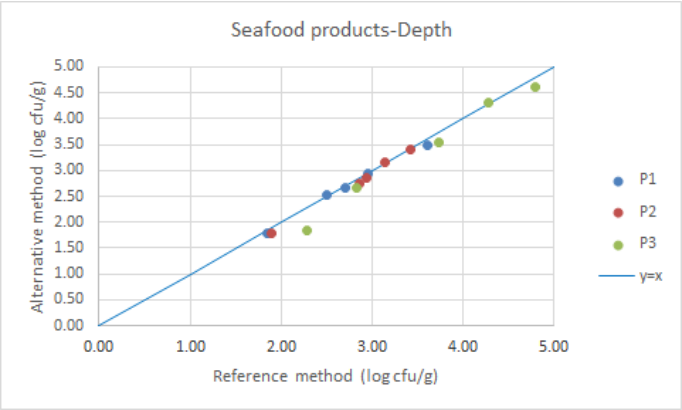
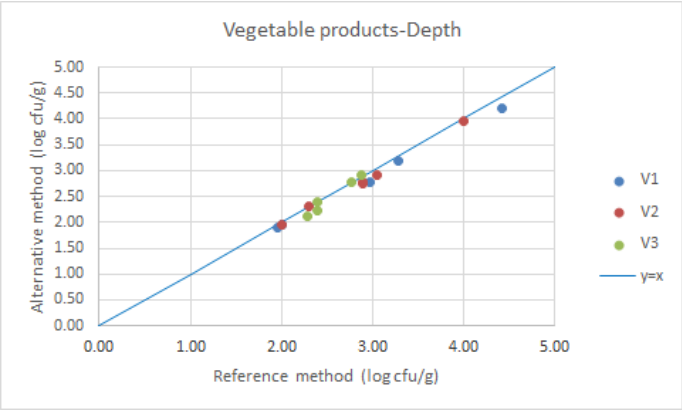


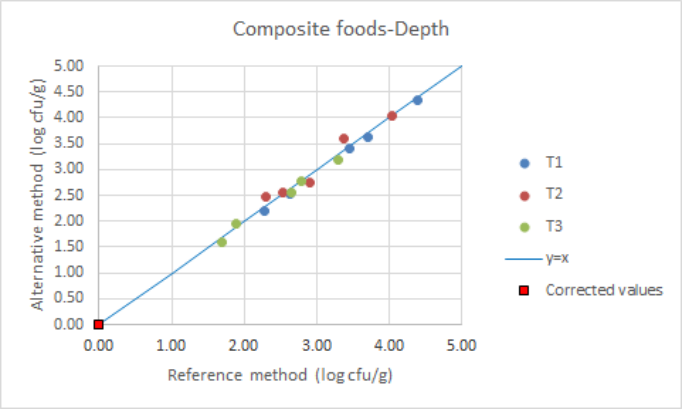
Figure 2: Dispersion plot by category, pour-plating inoculation -*Listeria monocytogenes*-45h











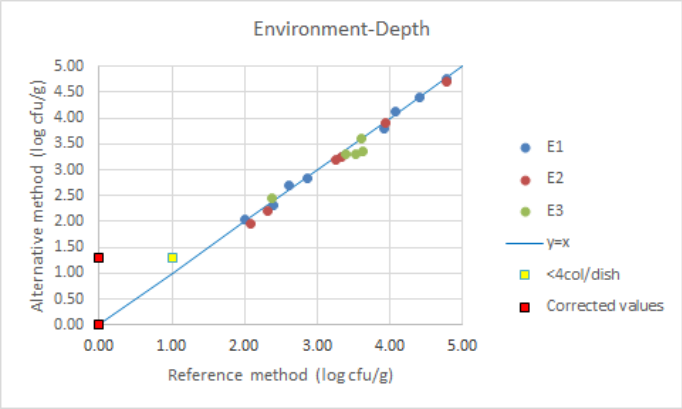


Figure 3: Dispersion plot for all categories, surface inoculation -*Listeria monocytogenes*-45h

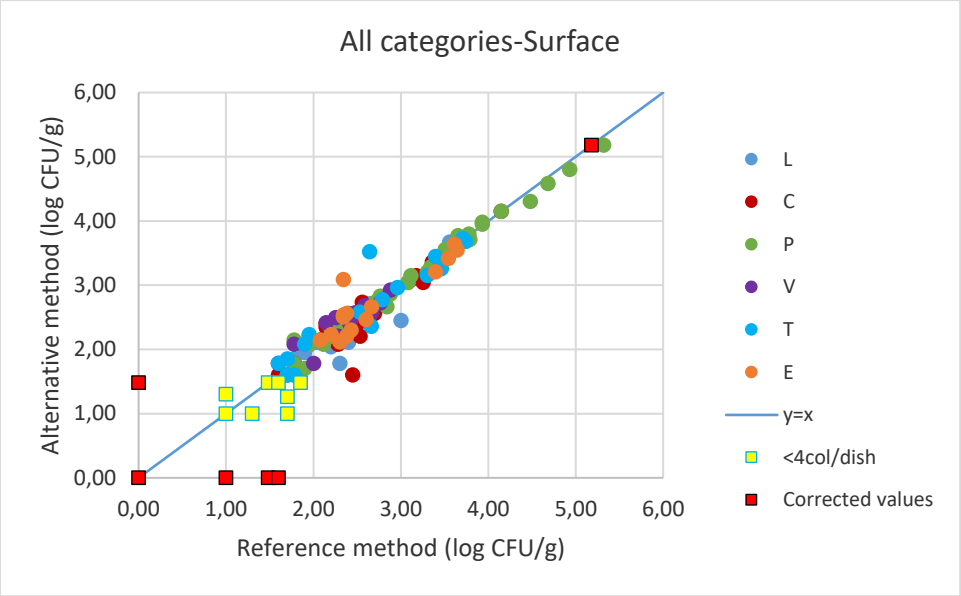
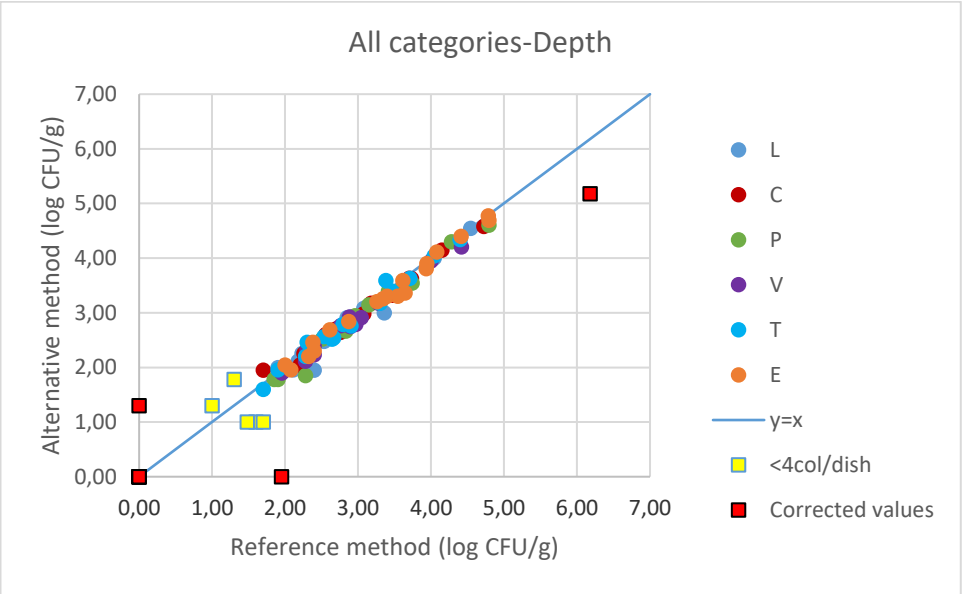


Figure 4: Dispersion plot for all categories, pour-plating inoculation -*Listeria monocytogenes*-45h



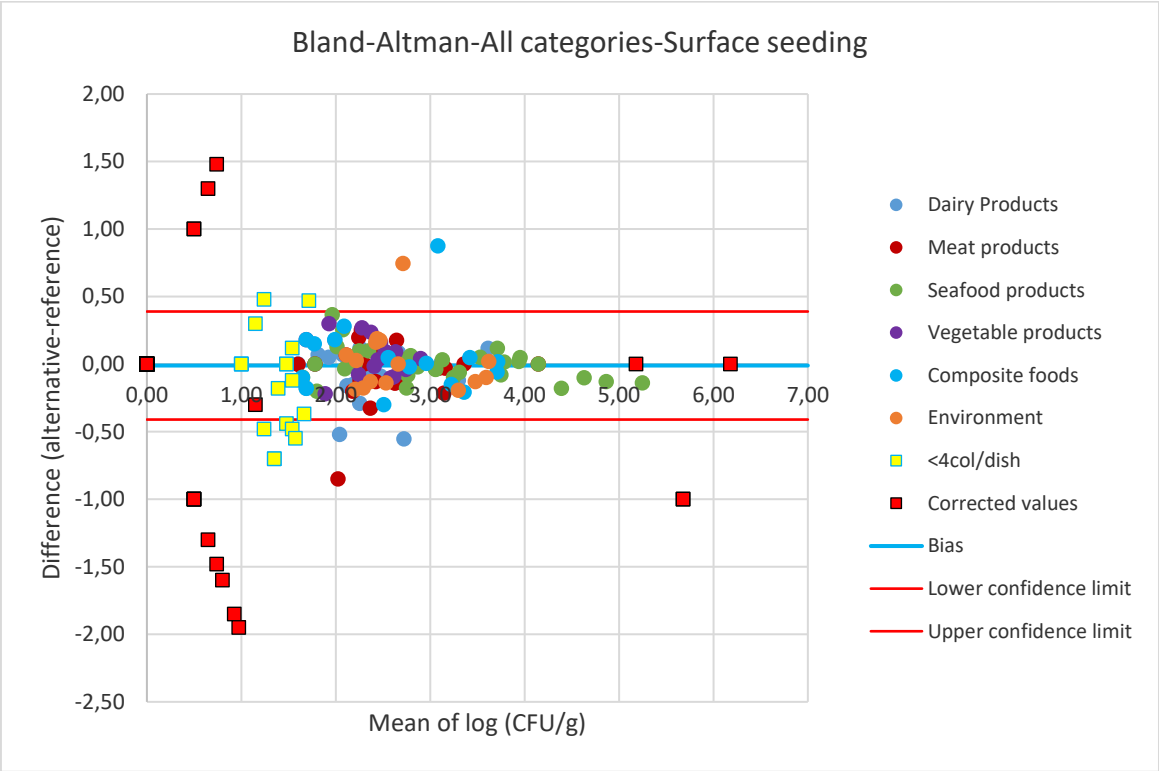
The calculated values are presented in Table 3, per category and protocol.

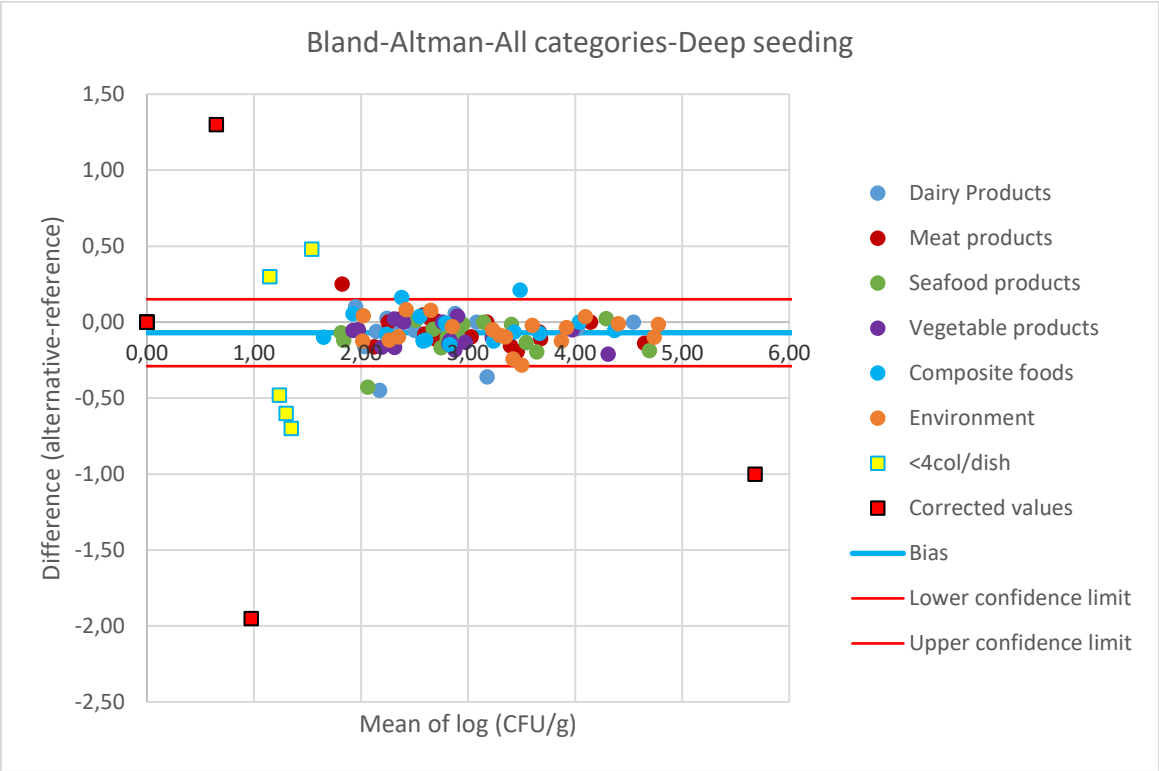
Table 3: Calculated values per inoculation protocol and category (*N: Number of data pairs; D: Mean difference; SD: standard deviation of differences; CL: Confidence limits at 95% above and below bias agreement)*

Inoculation	Category	N	D	SD	Lower CL	Upper CL
Surface inoculation	L	19	-0.08	0.20	/	/
	C	22	-0.06	0.22	/	/
	P	36	-0.01	0.12	/	/
	V	15	0.06	0.15	/	/
	T	16	0.07	0.26	/	/
	E	15	0.02	0.24	/	/
	All cat.	**123**	**-0.01**	**0.20**	**-0.41**	**0.39**
Pour-plating inoculation	L	16	-0.07	0.15	/	/
	C	17	-0.05	0.11	/	/
	P	15	-0.10	0.12	/	/
	V	16	-0.09	0.08	/	/
	T	15	-0.02	0.11	/	/
	E	19	-0.06	0.10	/	/
	All cat.	**98**	**-0.07**	**0.11**	**-0.29**	**0.15**

The results obtained are analysed using a Bland-Altman plot for both inoculation methods (Figure 5).

Figure 5: Bland-Altman plot of differences for all categories-*Listeria monocytogenes*-45h





As shown in Table 3 and plotted on the graphs, the bias values observed between the two methods are very low and the confidence limits at 95% are very narrow (0.4 log for surface inoculation and 0.2 log for pour-plating inoculation). The performance results of both methods are thus absolutely comparable.

Samples for which the difference between the result obtained using the reference method and that obtained with the alternative method is less than or greater than the limits are listed in Table 4.

Table 4: results outside of the confidence intervals

Values in blue: Difference in favour of the alternative method
Values in red: Difference in favour of the reference method
Values obtained with less than 4 colonies per dish
Corrected values

Protocol	Category	Type	Sample ref.	Date of analysis	log CFU/g		Average	Difference
					Ref. method	Altern. method		
Surface	L	L1	42.13	2006	3.00	2.45	2.72	-0.55
		L1	42.22	2006	1.70	1.00	1.35	-0.70
		L2	43.10	2006	2.30	1.78	2.04	-0.52
		L2	43.1	2006	1.30	0.00	0.65	-1.30
		L2	43.5	2006	1.70	1.00	1.35	-0.70
		L3	38.8	2006	1.85	0.00	0.93	-1.85
	C	C1	29.8	2006	2.45	1.60	2.03	-0.85
		C1	50.19	2006	1.00	0.00	0.50	-1.00
		C1	50.20	2006	1.00	0.00	0.50	-1.00
		C1	50.22	2006	1.70	1.26	1.48	-0.44
		C1	29.1	2006	1.48	0.00	0.74	-1.48
		C1	29.10	2006	0.00	1.00	0.50	1.00
		C1	29.2	2006	1.60	0.00	0.80	-1.60
		C1	29.4	2006	1.00	0.00	0.50	-1.00
		C1	29.9	2006	1.95	0.00	0.98	-1.95
		C1	30.1	2006	1.00	0.00	0.50	-1.00
		C2	34.3	2006	6.18	5.18	5.68	-1.00
	P	P1	35.11	2006	6.18	5.18	5.68	-1.00
	V	V1	36.1	2006	1.78	1.30	1.54	-0.48
		V2	51.5	2006	1.48	1.95	1.72	0.47
		V3	41.2	2006	0.00	1.30	0.65	1.30
	T	T1	14	2018	2.64	3.52	3.08	0.88
		T1	46.6	2006	1.85	1.30	1.58	-0.55
		T1	46.7	2006	0.00	1.00	0.50	1.00
		T2	52.13	2006	1.48	1.00	1.24	-0.48
		T3	53.13	2006	1.00	1.48	1.24	0.48
		T3	53.6	2006	0.00	1.48	0.74	1.48
		E2	81	2018	2.34	3.09	2.71	0.74
Depth	**L**	L2	147	2012	1.60	1.00	1.30	-0.60
		L3	12	2012	1.95	0.00	0.98	-1.95
		L2	146	2012	3.36	3.00	3.18	-0.36
		L2	43.6	2006	2.40	1.95	2.17	-0.45
	C	C1	8	2012	1.48	1.00	1.24	-0.48
		C1	**51**	2012	1.70	1.95	1.83	0.25
		C1	182	2012	1.30	1.78	1.54	0.48
		C2	3	2012	6.18	5.18	5.68	-1.00
		C3	6	2012	1.70	1.00	1.35	-0.70
	P	P3	45	2012	2.28	1.85	2.06	-0.43
	T	T2	**201**	2012	3.38	3.59	3.49	0.21
	E	E1	129	2012	1.00	1.30	1.15	0.30
		E1	134	2012	0.00	1.30	0.65	1.30

- Surface inoculation:

28 samples have values outside the confidence limits. 23 correspond to the corrected values or values obtained with less than 4 colonies per dish; 2 are above the confidence limit and 3 are below the confidence limit.

- Pour-plating inoculation:

13 samples have values outside the confidence limits. 8 correspond to the corrected values or values obtained with less than 4 colonies per dish; 2 are above the confidence limit and 3 are below the confidence limit.

3.1.1.5.2. *Listeria spp*

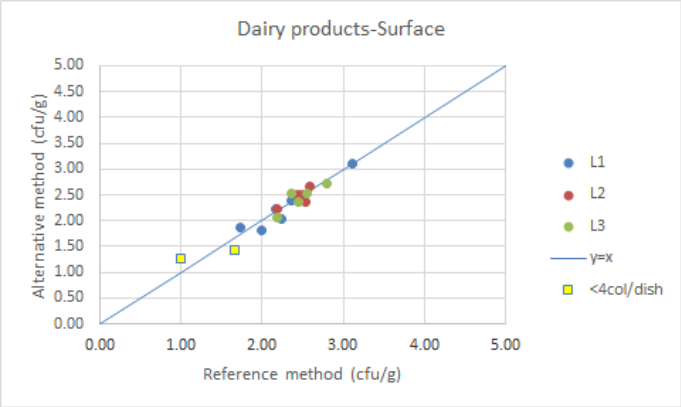
The initial results are presented in Appendix 6.
The statistical analysis was conducted using the results obtained after 45 hours of incubation of agar plates.

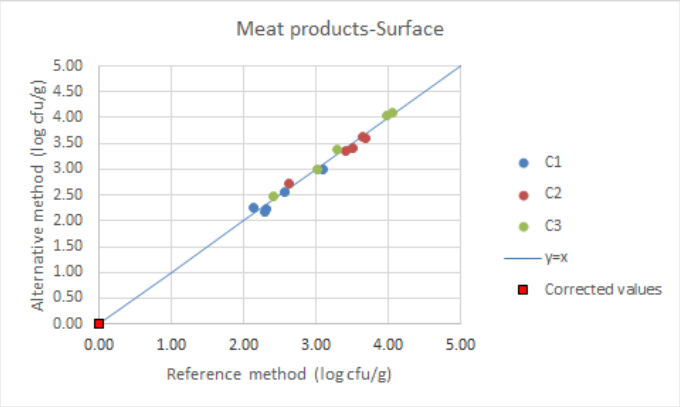
➢ **Statistical interpretation**

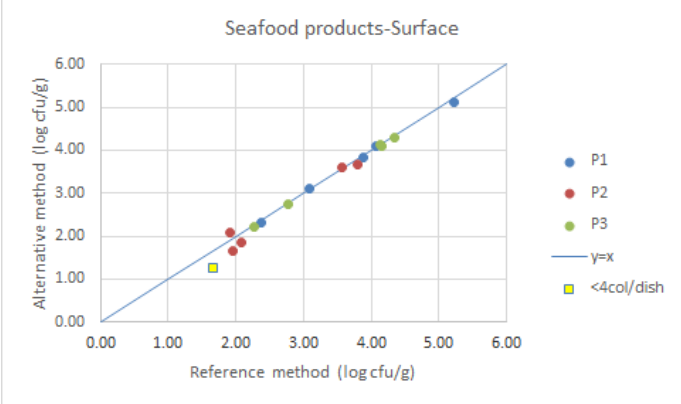
Statistical calculations as well as samples excluded from the statistical analysis are presented in Appendix 7.

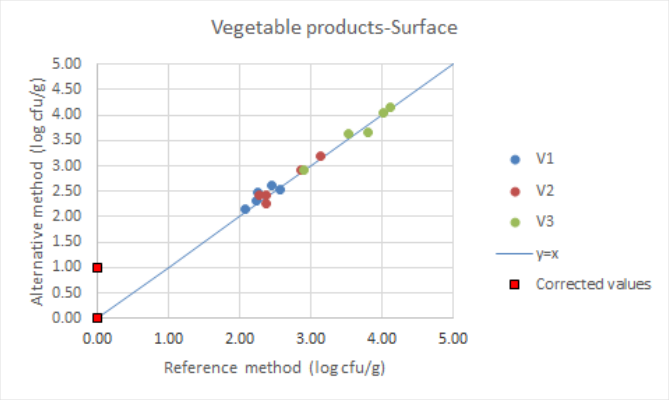
The data obtained were analysed using graphic representation of data for each sample by category
(Figure 6 for surface inoculation and Figure 7 for pour-plating inoculation) and for each sample in all categories (Figure 8 for surface inoculation and Figure 9 for pour-plating inoculation). The identity line y=x on which all the points are supposed to be if the two methods gave identical results is also represented.

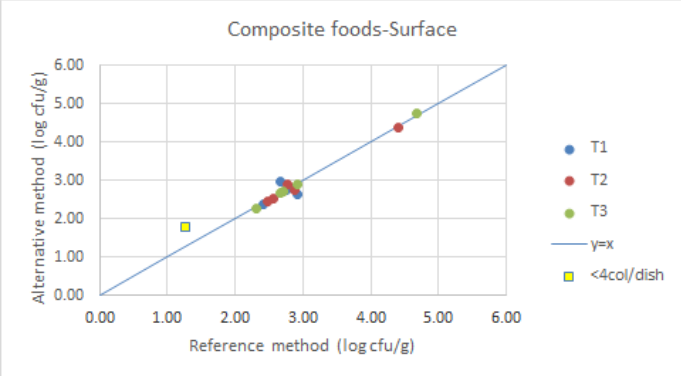
Figure 6: Dispersion plot by category, surface inoculation -*Listeria spp.*-45h











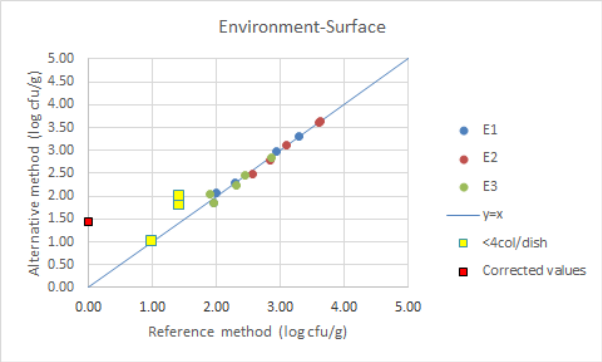
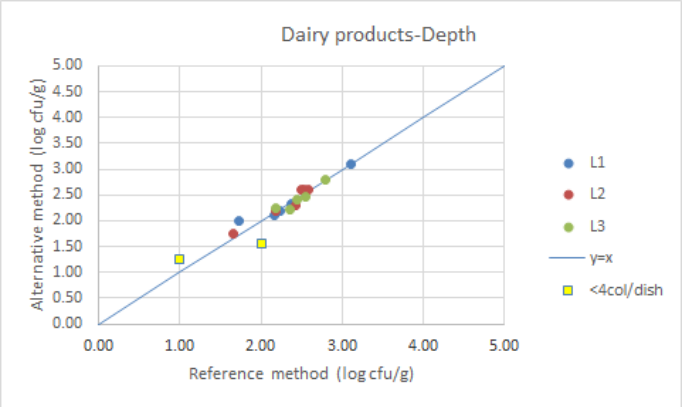
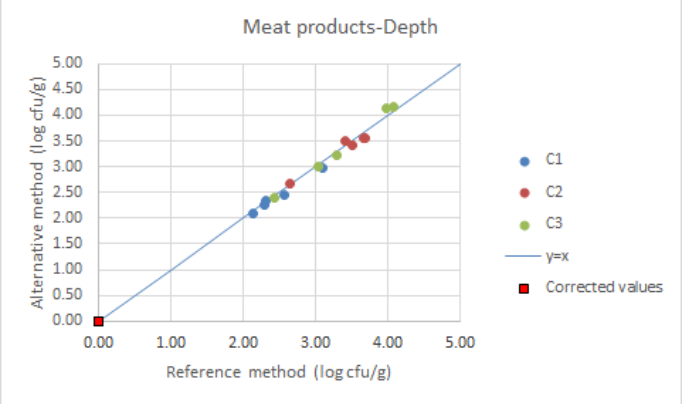
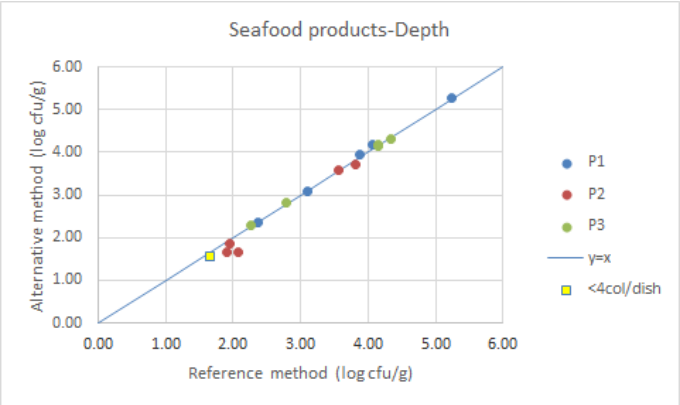
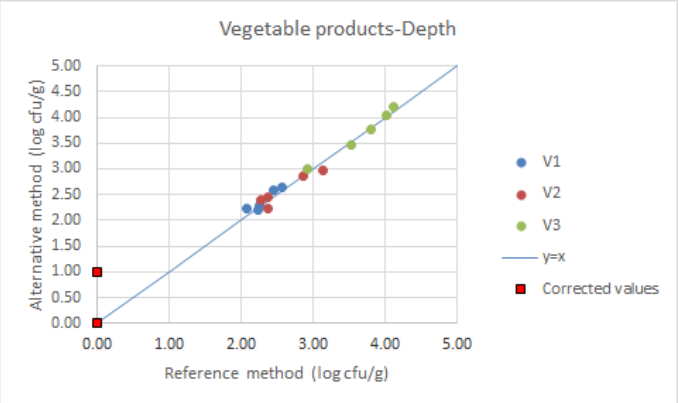


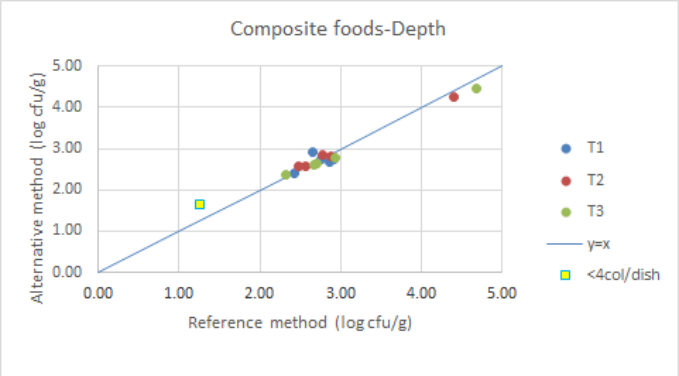
Figure 7: Dispersion plot by category, pour-plating inoculation -*Listeria spp.*-45h











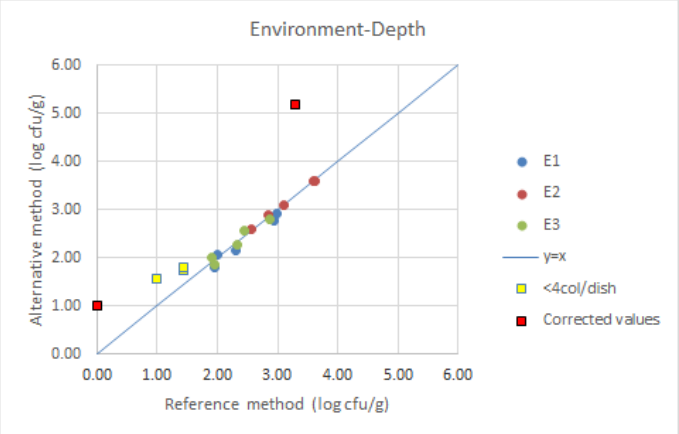


Figure 8: Dispersion plot for all categories, surface inoculation -*Listeria spp.*-45h

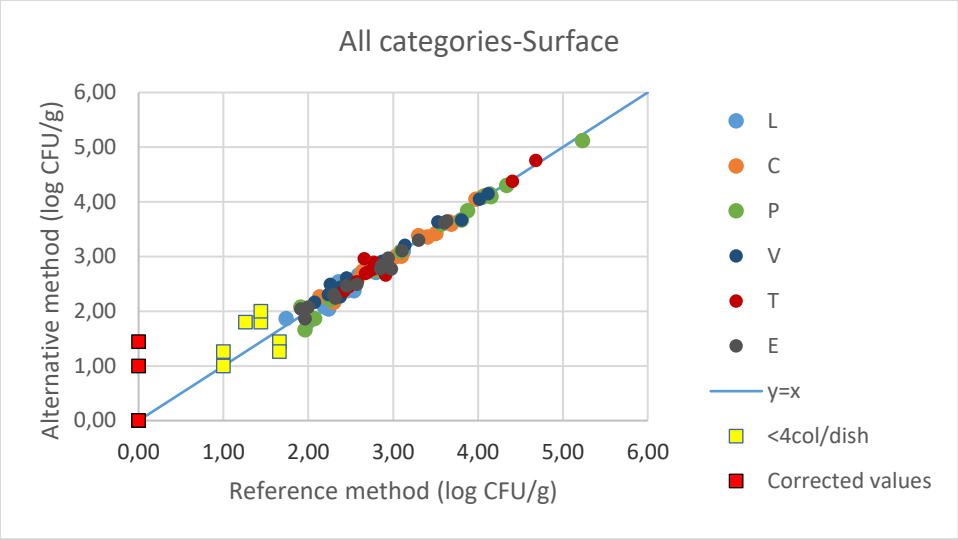
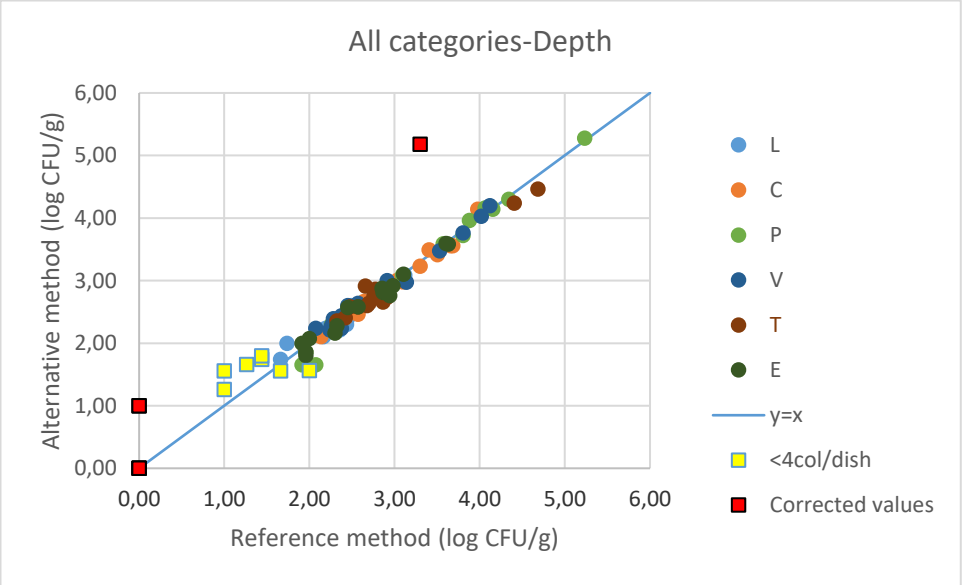


Figure 9: Dispersion plot for all categories, pour-plating inoculation -*Listeria spp.*-45h



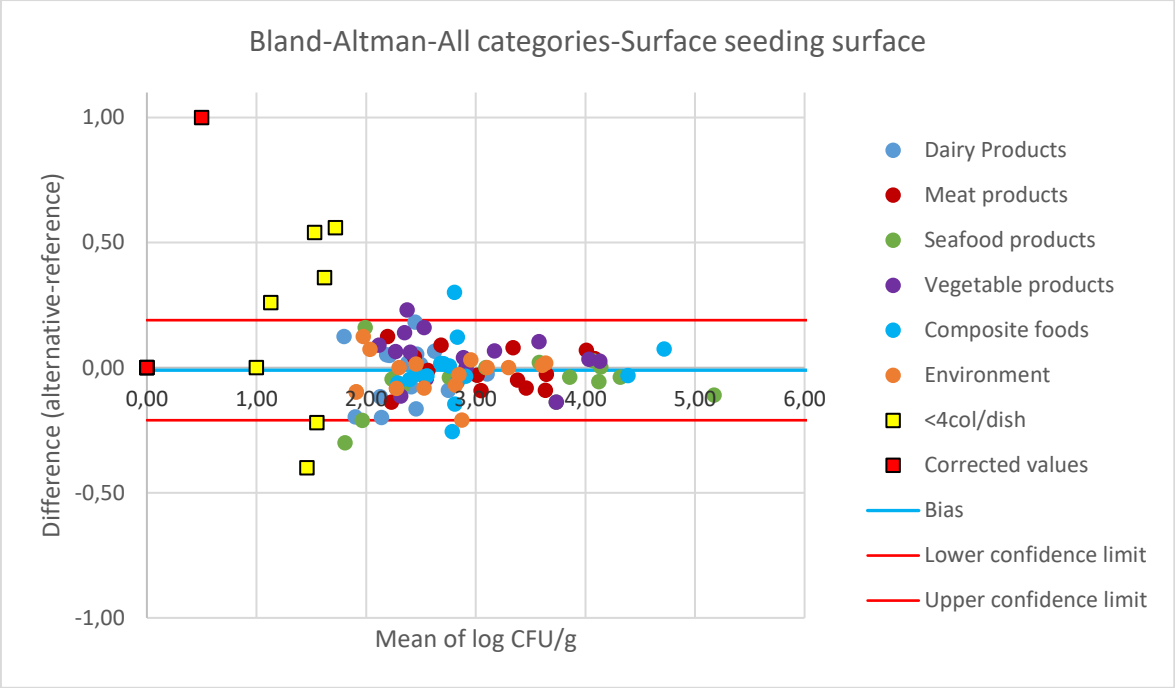
The calculated values are presented in Table 6, per category and protocol.

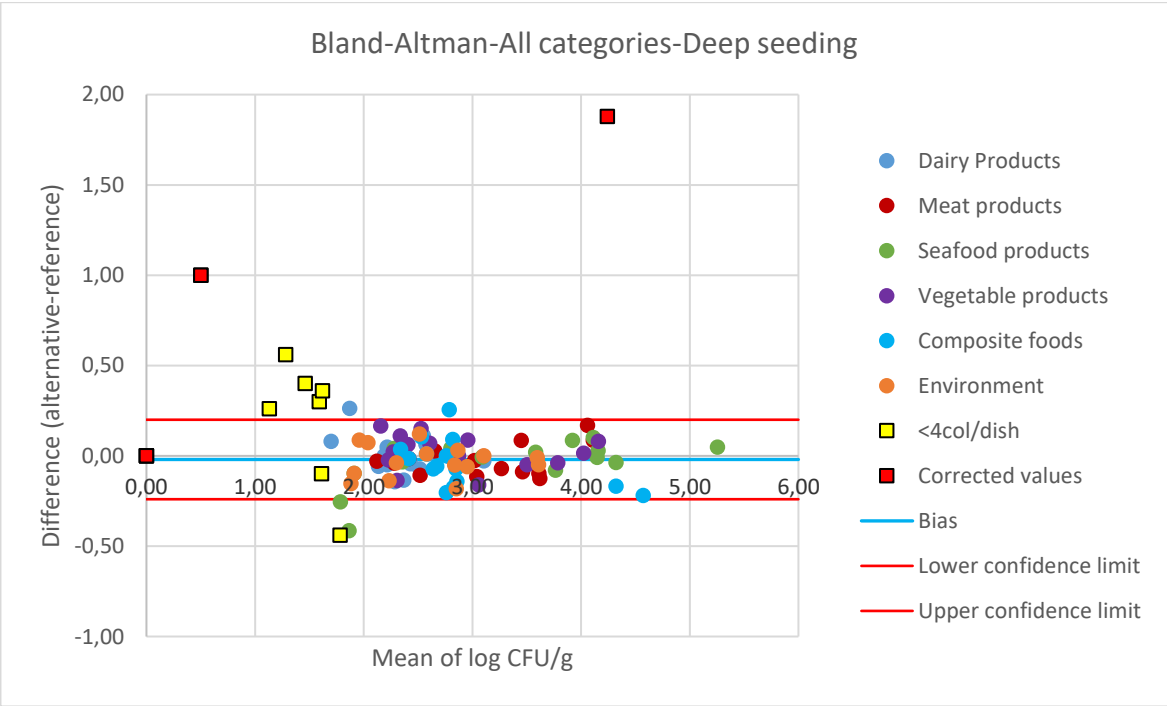
Table 6: Calculated values per inoculation protocol and category (*N: Number of data pairs; D: Mean difference; SD: standard deviation of differences; CL: Confidence limits at 95% above and below bias agreement.*

Inoculation	Category	N	D	SD	Lower CL	Upper CL
Surface inoculation	L	16	-0.02	0.11	/	/
	C	15	-0.01	0.08	/	/
	P	15	-0.06	0.11	/	/
	V	15	0.05	0.10	/	/
	T	15	-0.02	0.12	/	/
	E	15	-0.02	0.08	/	/
	All cat.	**92**	**-0.01**	**0.10**	**-0.21**	**0.19**
Pour-plating inoculation	L	16	0.00	0.10	/	/
	C	15	-0.02	0.09	/	/
	P	15	-0.04	0.14	/	/
	V	15	0.02	0.09	/	/
	T	15	-0.03	0.13	/	/
	E	15	-0.03	0.09	/	/
	All cat.	**91**	**-0.02**	**0.11**	**-0.24**	**0.20**

The results obtained are analysed using a Bland-Altman plot for both inoculation methods (Figure 10).

Figure 10: Bland-Altman plot of differences for all categories -*Listeria spp.*-45h





As shown in Table 6 and plotted on the graphs, the bias values observed between the two methods are very low and the confidence limits at 95% are very narrow (0.2 log for surface inoculation or pour-plating inoculation). The performance results of both methods are therefore absolutely comparable.

Samples for which the difference between the result obtained using the reference method and that obtained with the alternative method is less than or greater than the limits listed in Table 7.

Table 7: results outside of the confidence intervals

Values in blue: Difference in favour of the alternative method
Values in red: Difference in favour of the reference method
Values obtained with less than 4 colonies per dish
Corrected values

Protocol	Category	Type	Sample ref.	Date of analysis	log CFU/g		Average	Difference
					Ref. method	Altern. method		
Surface	L	L1	161	2012	1.00	1.26	1.13	0.26
		L2	164	2012	1.66	1.44	1.55	-0.22
	P	P2	181	2012	1.96	1.66	1.81	-0.30
		P3	158	2012	1.66	1.26	1.46	-0.40
	V	V1	36	2018	0.00	1.00	0.50	1.00
		V1	37	2018	2.26	2.49	2.37	0.23
	T	T1	49	2018	2.66	2.96	2.81	0.30
		T1	50	2018	2.91	2.66	2.79	-0.26
		T3	86	2012	1.26	1.80	1.53	0.54
	E	E1	134	2012	1.44	1.80	1.62	0.36
		E1	166	2012	0.00	1.44	0.72	1.44
		E2	141	2014	1.44	2.00	1.72	0.56
Depth	L	L1	219	2012	1.74	2.00	1.87	0.26
		L1	161	2012	1.00	1.26	1.13	0.26
		L1	218	2012	2.00	1.56	1.78	-0.44
	P	P2	34	2012	1.91	1.66	1.79	-0.26
		P2	163	2012	2.07	1.66	1.87	-0.41
	V	V1	36	2018	0.00	1.00	0.50	1.00
	T	T1	49	2018	2.66	2.91	2.79	0.26
		T3	86	2012	1.26	1.66	1.46	0.40
	E	E1	156	2012	3.30	5.18	4.24	1.88
		E1	134	2012	1.44	1.74	1.59	0.30
		E1	166	2012	0.00	1.00	0.50	1.00
		E1	168	2012	1.00	1.56	1.28	0.56
		E2	141	2014	1.44	1.80	1.62	0.36

- Surface inoculation:

12 samples have values outside the confidence limits. 8 correspond to the corrected values or values obtained with less than 4 colonies per dish; 2 are above the confidence limit and 2 are below the confidence limit.

- Pour-plating inoculation:

13 samples have values outside the confidence limits. 9 correspond to the corrected values or values obtained with less than 4 colonies per dish; 2 are above the confidence limit and 2 are below the confidence limit.

3.1.1.5. Confirmations

All confirmed colonies had a positive result with all confirmation tests applied.
The confirmation results are presented in Appendix 8.

3.1.1.6. Storage of agar at 2-8°C for 72 hours

No changes were observed when enumerating agar dishes after storage at 5°C for 72 hours, neither for surface inoculation nor pour-plating inoculation and neither in the 2012 study nor the previous 2018 study, for the enumeration of *Listeria monocytogenes* and *Listeria spp*.

3.1.1.7. Conclusion

The relative accuracy of the alternative method is satisfactory for the enumeration of *Listeria monocytogenes* and *Listeria spp,* for the surface inoculation method and for the pour-plating inoculation method.

3.1.2. Accuracy profile

3.1.2.1. *Listeria monocytogenes*

3.1.2.1.1. Protocols

Six pairs of matrix/strain were tested. One type per category with two different batches was selected, with 6 samples per type. Two samples were contaminated at a low level, two at an intermediate level and two at a high level. For each sample, five replicates were analysed using both methods. In total, thirty samples were studied per matrix type. Both inoculation methods, surface and pour-plating, were applied.
The different pairs of matrix/strain analysed are presented in Table 8.

Table 8: pairs of matrices/strains – *Listeria monocytogenes*

Category	Product	Strain	Origin of the strain	Targeted contamination rate (CFU/g)
Dairy	Raw goat milk cheese	*L. monocytogenes* 2b (ref 75)	Valençay (goat cheese)	100 500 3000
Meat	Minced meat	*L. monocytogenes* 2a (ref 9)	Angel hair (beef meat)	
Seafood	Smoked salmon	*L. monocytogenes* 1/2a (ref 161)	Smoked salmon	
Vegetables	Salad	*L. monocytogenes* 4b (ref 20)	Green salad	
Composite	Tabbouleh	*L. monocytogenes* 4b (ref 2214)	Citrus fruit tabbouleh	
Environment	Process water	*L. monocytogenes* 1/2a (ref 166)	Rinsing water	

3.1.2.1.1. Results and interpretation

The raw data are presented in Appendix 9. Statistical data and accuracy profiles are presented in Figures 11 (surface inoculation) and 12 (pour-plating inoculation).
The calculations were performed using the worksheet AP calculation tool MCS (clause 6-1-3-3 calculation and interpretation of accuracy profile study) around 27-01-2015 available at http://standards.iso.org/iso/16140.

Figure 11: Accuracy profiles-*Listeria monocytogenes*-Surface inoculation-45h

Figure 12: Accuracy profiles-*Listeria monocytogenes*-Pour-plating inoculation-45h

The observed accuracy profiles fall between the acceptability limits set at +/- 0.5 log for both inoculation methods.

3.1.2.2. *Listeria spp*

3.1.2.2.1. Protocols

Six pairs of matrices/strains were tested. One type per category with two different batches was selected, with 6 samples per type. Two samples were contaminated at a low level, two at an intermediate level and two at a high level. For each sample, five replicates were analysed using both methods. In total, thirty samples were studied per matrix type. Both inoculation methods, surface and pour-plating, were applied.

The different pairs of matrices/strains analysed are presented in Table 9.

Table 9: pairs of matrices/strains – *Listeria spp.*

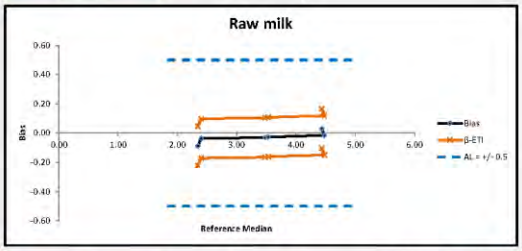
Category	Product	Strain	Origin of the strain	Targeted contamination rate (CFU/g)
Dairy	Raw milk	*Listeria innocua* (ref 228)	Goat's milk	300 3000 30000
Composite	Piedmont	*Listeria seeligeri* (ref 24)	Mixed salad	
Seafood	Fish terrine	*Listeria welshimeri* (ref 261)	Fish	
Meat	Minced meat	*L. monocytogenes* 2a (ref 9)	Angel hair (beef meat)	100 500 3000
Vegetables	Salad	*L. monocytogenes* 4b (ref 20)	Green salad	
Environment	Process water	*L. monocytogenes* 1/2a (ref 166)	Rinsing water	

3.1.2.2.1. Results and interpretation

The raw data are presented in Appendix 10. Statistical data and accuracy profiles are presented in Figures 13 and 14.
The calculations were performed using the worksheet AP calculation tool MCS (clause 6-1-3-3 calculation and interpretation of accuracy profile study) around 27-01-2015 available at http://standards.iso.org/iso/16140.

Figure 13: Accuracy profiles-*Listeria spp.*-Surface inoculation-45h

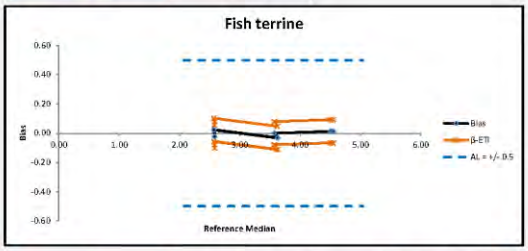
(Food) Category	Dairy products
(Food) Type	Raw milk



Sample Name	Reference central value	Bias	Lower β-ETI	Upper β-ETI	β-ETI compared to AL=±0.5 Acceptable	β-ETI compared to final AL Acceptable
1 à 5	2.34	-0.087	-0.221	0.047	YES	YES
6 à 10	2.40	-0.036	-0.170	0.098	YES	YES
11 à 15	3.48	-0.030	-0.164	0.104	YES	YES
16 à 20	3.53	-0.026	-0.161	0.108	YES	YES
21 à 25	4.48	-0.015	-0.149	0.120	YES	YES
26 à 30	4.43	0.031	-0.103	0.165	YES	YES

	Reference method	Alternative method	SD repeatability of reference method <= 0.125	Final AL
SD Repeatability	0.091	0.093	YES	+/- 0.500

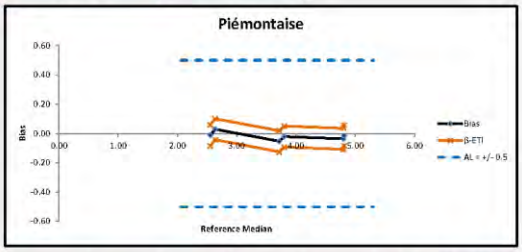
(Food) Category	Seafood products
(Food) Type	Fish terrine



Sample Name	Reference Central value	Bias	Lower β-ETI	Upper β-ETI	β-ETI compared to AL=±0.5 Acceptable	β-ETI compared to final AL Acceptable
1 à 5	2.58	-0.028	-0.103	0.056	YES	YES
6 à 10	2.57	0.023	-0.057	0.102	YES	YES
11 à 15	3.62	-0.032	-0.112	0.047	YES	YES
16 à 20	3.57	0.000	-0.079	0.079	YES	YES
21 à 25	4.51	0.013	-0.066	0.093	YES	YES
26 à 30	4.54	0.012	-0.067	0.092	YES	YES

	Reference method	Alternative method	SD repeatability of reference method <= 0.125	Final AL
SD Repeatability	0.048	0.055	YES	+/- 0.500

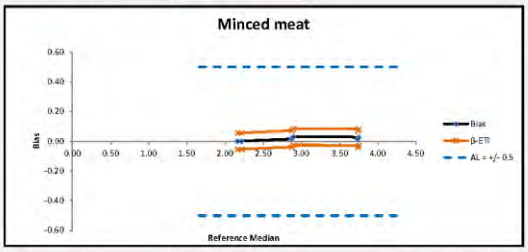
(Food) Category	Composite foods
(Food) Type	Piémontaise



Sample Name	Reference Central value	Bias	Lower β-ETI	Upper β-ETI	β-ETI compared to AL=±0.5 Acceptable	β-ETI compared to final AL Acceptable
1 à 5	2.56	-0.012	-0.084	0.060	YES	YES
6 à 10	2.63	0.029	-0.043	0.101	YES	YES
11 à 15	3.72	-0.063	-0.125	0.019	YES	YES
16 à 20	3.80	-0.021	-0.093	0.051	YES	YES
21 à 25	4.80	-0.036	-0.108	0.036	YES	YES
26 à 30	4.81	-0.014	-0.086	0.058	YES	YES

	Reference method	Alternative method	SD repeatability of reference method <= 0.125	Final AL
SD Repeatability	0.068	0.050	YES	+/- 0.500

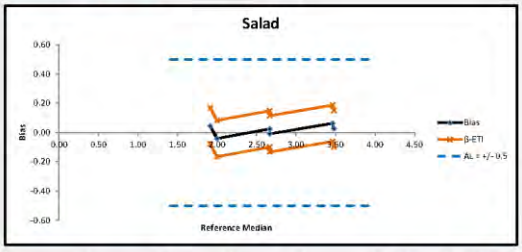
(Food) Category	Meat products
(Food) Type	Minced meat



Sample Name	Reference Central value	Bias	Lower β-ETI	Upper β-ETI	β-ETI compared to AL=±0.5 Acceptable	β-ETI compared to final AL Acceptable
1 à 5	2.21	0.000	-0.055	0.055	YES	YES
6 à 10	2.16	0.000	-0.055	0.055	YES	YES
11 à 15	2.87	0.016	-0.039	0.071	YES	YES
16 à 20	2.89	0.029	-0.026	0.084	YES	YES
21 à 25	3.75	0.027	-0.028	0.082	YES	YES
26 à 30	3.74	0.014	-0.041	0.069	YES	YES

	Reference method	Alternative method	SD repeatability of reference method <= 0.125	Final AL
SD Repeatability	0.045	0.038	YES	+/- 0.500

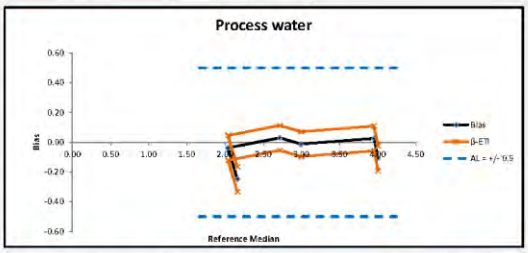
(Food) Category	Vegetables
(Food) Type	Salad



Sample Name	Reference Central value	Bias	Lower β-ETI	Upper β-ETI	β-ETI compared to AL=±0.5 Acceptable	β-ETI compared to final AL Acceptable
1 à 5	1.91	0.045	-0.079	0.169	YES	YES
6 à 10	2.00	-0.041	-0.165	0.083	YES	YES
11 à 15	2.67	0.025	-0.100	0.149	YES	YES
16 à 20	2.67	-0.009	-0.133	0.116	YES	YES
21 à 25	3.46	0.063	-0.061	0.187	YES	YES
26 à 30	3.48	0.026	-0.099	0.150	YES	YES

	Reference method	Alternative method	SD repeatability of reference method <= 0.125	Final AL
SD Repeatability	0.068	0.086	YES	+/- 0.500

(Food) Category	Environment
(Food) Type	Process water



Sample Name	Reference Central value	Bias	Lower β-ETI	Upper β-ETI	β-ETI compared to AL=±0.5 Acceptable	β-ETI compared to final AL Acceptable
1 à 5	2.16	-0.248	-0.331	-0.164	YES	YES
6 à 10	2.04	-0.037	-0.121	0.046	YES	YES
11 à 15	2.71	0.030	-0.054	0.114	YES	YES
16 à 20	2.99	-0.012	-0.096	0.072	YES	YES
21 à 25	3.95	0.026	-0.058	0.110	YES	YES
26 à 30	4.00	-0.106	-0.190	-0.022	YES	YES

	Reference method	Alternative method	SD repeatability of reference method <= 0.125	Final AL
SD Repeatability	0.096	0.058	YES	+/- 0.500

Figure 14: Accuracy profiles-*Listeria spp.*-Pour-plating inoculation-45h

The observed accuracy profiles fall between the acceptability limits set at +/- 0.5 log for both inoculation methods.

3.1.3. Inclusivity/Exclusivity

This study was conducted many times during the initial validation of the ALOA® One Day method for research on *Listeria monocytogenes* or during its various extension studies.

As proposed and accepted during the presentation of the study project, no additional tests were carried out for these parameters as part of the ALOA® Count method validations.

As a reminder, the results obtained were as follows:
Study (2000) conducted as part of the initial validation of the "ALOA® / L. Monodisk" method for research on *Listeria monocytogenes* (Appendix 11)**:**

50 strains of *Listeria monocytogenes* were tested and yielded a positive result.
51 non-*Listeria monocytogenes* strains were tested. All of them yielded a negative result except for several strains of *Listeria ivanovii*, which showed a fine halo at 24 hours. The implementation of the confirmation tests differentiated the two species.

Study (2005) conducted as part of the initial protocol extension continuation of the "ALOA® One Day" method for detection of *Listeria monocytogenes* (Appendix 12)**:**

50 collection strains or strains from food products of *Listeria monocytogenes* were tested. These 50 *Listeria monocytogenes* strains yielded a positive result.

30 non-targeted strains other than *Listeria monocytogenes* were tested in duplicate on the ALOA® agar.
These 30 non-targeted strains yielded negative results. It should be noted that some colonies of *Listeria ivanovii* have a typical appearance with a fine halo at the end of the first 24 hours of incubation. After 48 hours of incubation, *Listeria ivanovii* can have the same appearance as *Listeria monocytogenes.*

Study (2006) conducted by ISHA as part of the extension of the "ALOA® One Day" method for research of *Listeria monocytogenes*, integrating the confirmation protocol "ALOA® Confirmation" (Appendix 13)**:**

Targeted strains:
152 targeted strains were tested. The results obtained fully correspond with those expected. All *Listeria monocytogenes* strains formed characteristic colonies on ALOA® after 24 hours of incubation (including the non-haemolytic strain tested). No discordant results between ALOA®/ALOA® Confirmation were observed.

Non-targeted strains:
100 non-targeted strains were tested, including 27 *Listeria ivanovii* strains. The results obtained fully correspond with those expected. All *Listeria ivanovii* strains tested formed characteristic colonies on ALOA® after 48 hours of incubation. However, the profiles obtained on ALOA® Confirmation showed did not match those of *Listeria monocytogenes*. The results of the identification tests performed on these strains using the reference method confirm that it was *Listeria ivanovii*.

Study (2010) conducted as part of the extension of the "ALOA® One Day" protocol for research of *Listeria monocytogenes* and *Listeria* spp. (Appendix 14)**:**

63 pure strains of *Listeria spp.* (20 *Listeria monocytogenes* and 43 *Listeria* other than *monocytogenes*), including collection strains or strains from food products, were tested.

32 non-targeted strains other than *Listeria spp.* were tested. These strains are known either to interfere with *Listeria spp.*, or to be naturally present in the food products in the test.
The 63 strains of *Listeria spp.* yielded a positive result.
All of the strains were confirmed by immunochromatographic testing ("*Listeria* Species Confirmation Strip") and by Palcam spot.

The 32 non-targeted strains all yielded negative results (either no colony or non-typical colonies).
None of the strains were confirmed by immunochromatographic testing ("*Listeria* Species Confirmation Strip"). It should be noted that certain strains, such as *Bacillus,* were able to grow on Palcam agar, but none of the spots had an appearance characteristic of Listeria.

The confirmation results obtained by the "*Listeria* Species Confirmation Strip" method and by Palcam spot corresponded with those expected.

3.1.4. Practicability

Practicability was studied according to the 4 criteria defined by the technical committee.

1 - <u>Storage conditions and expiry of unopened products</u>

The storage temperature of ALOA® agar dishes is as mentioned in the manufacturer's instructions: 2-8°C.
The expiry date is indicated on the bottom of the ALOA® agar dishes (inkjet printing).
For vials, the expiry date is also written on each vial.
Dishes poured by the user laboratory using ready-to-use vials can be stored for one week at 2-8°C.

2 - <u>Terms of use after first use</u>

Not applicable for the pre-plated ALOA® agar dish.

The terms of use after first use are specified in the manufacturer's data sheet. In this case:
Dishes poured by the user laboratory using ready-to-use vials can be stored for one week at 2-8°C.
On the other hand, non-supplemented ALOA® BASE vials can undergo two undercooling regeneration and maintenance cycles without the analytical quality of the results obtained using the alternative method being jeopardised.

3 - Timeline for obtaining results

Steps	Timeline set Reference method EN ISO 11290-2/A1	Timeline set Alternative method "ALOA® Count"*
Preparation of the initial suspension and dilutions	D0	D0
Inoculation of the media	D0	D0
Analysis, interpretation and calculation	D1 and D2	D1 and D2
Obtaining "negative" results	D2	D2
Obtaining "positive" results or negative results after confirmation		
Confirmations:		
- Standard tests	D4 to D8	D4 to D8
- ALOA® Confirmation	-	D3
- "RAPIDEC Lmono" protocol	-	D2 to D3
- VIDAS LMO2 protocol,	-	D2
- Accuprobe *L. monocytogenes* protocol,	-	D2
- API Listeria gallery,	D3 to D4	D3 to D4
- *Listeria* species Confirmation Strip*	-	D2
- FAST Rhamnose test	-	D2 to D3

* Analysis after 48 hours of incubation

4- Common steps with the reference method

Regardless of the possible confirmation steps, the alternative method and the reference method merge perfectly in terms of their common steps and medium.
The alternative method allows for pour-plating inoculation.

3.2. Interlaboratory study

The results of the interlaboratory study conducted in 2012 were interpreted according to ISO 16140-2: 2016, using the worksheet AP calculation tool ILS (clause 6-2-3 calculation summary and interpretation of data) around 14-03-2016 available at http://standards.iso.org/iso/16140.

3.2.1. Study organisation

- **Number of participating laboratories**

Thirteen laboratories took part in the collaborative study during the no. 1 and no. 2 shipments.
Of these thirteen laboratories, nine participated in no. 1, no. 2 and no. 3 shipments.
Indeed, during preparation of the samples for the initial package shipment, a handling error occurred, resulting in an increase at a rate of 10 times the target rates. A second shipment, under the same conditions and with the samples reserved for the enumeration of aerobic microorganisms at 30°C and the temperature measurement, was initiated the following week with the contaminated samples at a rate of 10 to 100 CFU/mL.

A third consignment was made at the request of the AFNOR technical committee, in order to carry out the study again on only two levels of intermediate contaminations by integrating an additional inoculation into the protocol (0.1 ml of the initial suspension): 100 to 1,000 CFU/mL and 1,000 to 10,000 CFU/mL. The third shipment was only done for nine participating laboratories.

- **Matrix and strain used**

The analyses were performed on samples of pasteurised milk (with a non-zero mesophilic aerobic flora), artificially contaminated with a strain of *Listeria monocytogenes* 4b (isolated from a dairy product). Inoculation levels were as follows:

- < 10 CFU/mL (level L0)
- 10 to 100 CFU/mL (level L1)
- 100 to 1,000 CFU/mL (level L2)
- 1000 to 10,000 CFU/mL (level L3)
- 10,000 to 100,000 CFU/mL (level L4)

- **Shipment methods**

Each sample was blind-coded. The samples were sent by express route (maximum 24 hours) in insulated containers with cooling blocks in order to guarantee the best thermal inertia.

Samples for analysis had to be received by the various laboratories within a period not exceeding 24 hours. The sample receiving temperature should be less than or equal to 8 °C. The temperatures measured upon receipt, thanks to the sample provided for this purpose, were communicated on the day of receipt to the Expert Laboratory.
Moreover, analysis of TOMPROBE™ data (devices returned by the participating laboratories) allowed the Expert laboratory to verify that the temperature was between 0 and 8°C during transportation.

Note: the Expert laboratory also sent a parcel to his attention and under the same conditions in order to measure the impact of transportation on the results (comparative analysis of equivalent samples with and without transportation - monitoring of temperatures during transportation).

- **Analyses**

On the day of receipt, the participating laboratories and the Expert laboratory carried out analyses, for each sample intended for enumeration of *Listeria monocytogenes*, according to the methods of the ALOA® COUNT alternative method and according to the reference method.
Each participating laboratory also carried out an enumeration of total aerobic mesophilic flora on the sample provided for this purpose.

After proposal of the Expert laboratory and acceptance by the technical committee, the following was defined:

- only one of the two inoculation protocols ("surface"/"depth") was retained during the interlaboratory study. Since the "surface inoculation" protocol is the closest to the reference method, the "pour-plating inoculation" protocol was the most interesting to experiment with in this collaborative study.

- only the most innovative protocol was retained for confirmation of the positives obtained by the alternative method: confirmation using the ALOA® Confirmation method.
- for the reference method (and taking into account the exhaustive knowledge of the phenotypic characteristics of the 4b contaminant *Listeria monocytogenes* strain selected in this study), the standard tests were replaced by the implementation of an identifying biochemical gallery, notably "MICROGEN LISTERIA", which integrates in particular the implementation of assimilation of sugars (including rhamnose and xylose) as well as the haemolytic character of the strain tested.

3.2.2. Experimental parameters control

3.2.2.1. Strain stability and background microflora stability

For all three shipments, in order to verify the stability of the 4b *Listeria monocytogenes* strain, an enumeration was performed on the day of inoculation and after 72 hours of storage at 4°C.

The values presented below correspond to:
- Level 1 and Level 4: shipments no. 1 and no. 2;
- Level 2 and Level 3: shipment no. 3.

	Level 1 (10 to100 CFU/mL)	Level 2 (100 to1,000 CFU/mL)	Level 3 (1,000 to 10,000 CFU/mL)	Level 4 (10,000 to 100,000 CFU/mL)
D0	30	690	5,700	29,500
	35	660	6,200	32,500
D1	25	640	5,500	35,500
	30	640	5,200	28,000
D2	35	670	5,500	32,000
	35	640	5,700	28,000
D3	40	620	6,300	34,500
	35	650	5,900	29,000

No changes in the strain level were observed in the matrix over time.

A stability study of total flora was also performed: an enumeration was made on the day of inoculation and after 72 hours of storage at 4°C.

Shipment 1		**Total flora (CFU/mL)**	**Shipment 2**		**Total flora (CFU/mL)**	**Shipment 3**		**Total flora (CFU/mL)**
27/03/06	D0	6,000	03/04/06	D0	330,000	26/06/06	D0	340,000
	D1	5,400		D1	340,000		D1	320,000
	D2	6,000		D2	340,000		D2	330,000
	D3	5,800		D3	350,000		D3	360,000

No changes in total mesophilic flora were observed in the matrix over time.

3.2.2.2. Logistic conditions

	receipt on 28/03/06		receipt on 04/04/06		receipt on 27/06/06	
LABORATORIES	**T°C, measured upon receipt (by the laboratory)**	**Time of receipt**	**T°C, measured upon receipt (by the laboratory)**	**Time of receipt**	**T°C, measured upon receipt (by the laboratory)**	**Time of receipt**
Expert Laboratory	4.4	8:30 am	7.0	8:00 am	7.4	8:40 am
A	10.0*	10:00 am	3.8	11:00 am	6.9	9:00 am
B	6.8	2:00 pm	6.2	9:45 am	10.8**	9:00 am
C	3.9	11:15 am	4.2	10:10 am	6.9	11:35 am
D	3.9	9:00 am	4.5	9:30 am	5.8	9:00 am
E	4.8	9:45 am	3.8	10:45 am	2.5	10:00 am
F	3.6	8:15 am	6.0	8:15 am	5.2	9:00 am
G	4.6	4:30 pm	7.1	4:20 pm	5.2	4:15 pm
H	4.4	9:00 am	5.0	11:00 am	5.6	12:45 pm
I	4.6	10:30 am	4.7	11:30 am	8.0	10:50 am
J	6.0	9:20 am	5.0	9:10 am	/	/
K	4.6	9:45 am	4.5	9:30 am	/	/
L	3.2	9:00 am	2.8	9:00 am	/	/
M	4.2	9:15 am	5.1	10:10 am	/	/

*: Thermometer problem in the participating laboratory. The temperature recorded by the TOMPROBE™ calibrated probe was 2°C.
**: Thermometer problem in the participating laboratory. The temperature recorded by the TOMPROBE™ calibrated probe was 8°C.

The temperatures recorded by the participating laboratories, which are summarised in the table, may show some differences when compared to the temperatures recorded by the Tomprobe™ probes. It should be noted that the probes are calibrated and that these differences can depend on the thermometer used, the time the temperature was taken and the time the employee read the result.

All packages were delivered on D1, in good condition.

No anomaly was observed during transportation; the temperature was kept well below 8°C: Appendix 15.

3.2.3. Results analysis

The results of the enumeration of total flora are presented in Table 10.

Table 10: Enumeration of additional flora

	receipt on 28/03/06	receipt on 04/04/06	receipt on 27/06/06
LABORATORIES	**Mesophilic aerobic flora (CFU/mL)**	**Mesophilic aerobic flora (CFU/mL)**	**Mesophilic aerobic flora (CFU/mL)**
Expert Laboratory	5,500	340,000	> 300,000
A	5,700	> 300,000	77,000
B	5,100	> 300,000	> 300,000
C	5,500	> 330,000	> 320,000
D	4,500	> 300,000	> 300,000
E	5,900	> 300,000	> 300,000
F	4,400	> 300,000	> 300,000
G	4,300	> 300,000	> 300,000
H	5,900	> 300,000	> 300,000
I	4,800	310,000	> 300,000
J	6,700	180,000	/
K	5,700	> 300,000	/
L	5,000	> 300,000	/
M	3,700	> 300,000	/

3.2.3.1. Results obtained by the expert laboratory

The summary of results obtained by the expert laboratory is presented in Table 11.

Table 11: Results obtained by the expert laboratory

Target rate	**ISO 11290-2/ A1**		**Aloa Count™**	
(CFU/mL)	**Rep. 1**	**Rep. 2**	**Rep. 1**	**Rep. 2**
< 10	<10	<10	<10	<10
10 - 100	30	25	30	20
100 – 1,000	740	650	650	630
1,000 – 10,000	5,500	6,200	6,000	4,700
10,000 – 100,000	30,000	29,500	28,200	33,600

3.2.3.2. Results obtained by collaborators

- Four laboratories (named J, K, L, M) were excluded due to non-compliance with the protocol sent (consignments 1 and 2). Indeed, a request was made to seed 1 ml for the initial suspension, then 0.1 ml for the other dilutions. In view of the raw data (number of initial colonies) and after confirmation from the laboratories concerned, it turns out that these four laboratories inoculated 1 ml in the dilutions following the initial suspension for the reference method.

- The third shipment was not done for laboratories J, K, L and M.

- Laboratory I was also excluded due to non-compliance with the protocol sent (consignment no. 3). Indeed, only one dish was inoculated with 0.1 ml of the initial suspension, instead of the two requested.

In the end, eight participating laboratories were retained for the statistical study.

A summary of the results obtained (in log CFU/mL) is presented in Table 12.

Table 12: Summary of results obtained by collaborators (log CFU/mL)

Laboratory	Level 1				Level 2				Level 3				Level 4				Level 5			
	ISO		Aloa Count™		ISO		Aloa Count™		ISO		Aloa Count™		ISO		Aloa Count™		ISO		Aloa Count™	
	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2	Rep. 1	Rep. 2
A	<1	<1	<1	<1	1.398	1.602	1.477	1.301	2.820	2.792	2.875	2.881	3.778	3.881	3.633	3.681	4.464	4.515	4.515	4.450
B	<1	<1	<1	<1	1.398	1.176	1.477	1.477	2.898	2.903	2.748	2.881	3.820	3.845	3.732	3.708	4.422	4.497	4.515	4.301
C	<1	<1	<1	<1	1.875	1.477	1.602	0.954	2.833	2.813	2.708	2.716	3.851	3.914	3.748	3.763	4.428	4.428	4.502	4.356
D	<1	<1	<1	<1	1.653	1.477	1.845	1.000	2.613	2.778	2.690	2.724	3.690	3.716	3.580	3.623	4.490	4.436	4.389	4.436
E	<1	<1	<1	<1	1.477	1.398	1.602	1.778	2.740	2.820	2.813	2.771	3.863	3.826	3.771	3.716	4.382	4.550	4.450	4.422
F	<1	<1	<1	<1	1.602	1.477	1.602	1.903	2.785	2.806	2.875	2.799	3.771	3.799	3.785	3.756	4.572	4.470	4.389	4.356
G	<1	<1	<1	<1	1.544	1.301	1.477	1.477	2.833	2.869	2.771	2.778	3.813	3.886	3.813	3.949	4.484	4.621	4.190	4.464
H	<1	<1	<1	<1	1.176	1.176	1.477	1.301	2.792	2.820	2.724	2.851	3.763	3.845	3.771	3.875	4.515	4.662	4.436	4.373
I	<1	<1	<1	<1	1.477	1.398	1.477	1.477	2.778	2.892	2.732	2.663	3.602	3.881	3.756	3.663	4.587	4.566	4.407	4.450
J	<1	<1	<1	<1	1.301	1.000	1.301	1.477	/	/	/	/	/	/	/	/	4.490	4.533	4.561	4.407
K	<1	<1	<1	<1	1.477	1.544	1.699	1.477	/	/	/	/	/	/	/	/	4.533	4.497	4.373	4.422
L	<1	<1	<1	<1	1.301	1.544	1.000	1.477	/	/	/	/	/	/	/	/	4.398	4.356	4.422	4.322
M	<1	<1	<1	<1	1.477	1.301	1.000	1.301	/	/	/	/		/	/	/	4.959	5.127	4.658	4.630

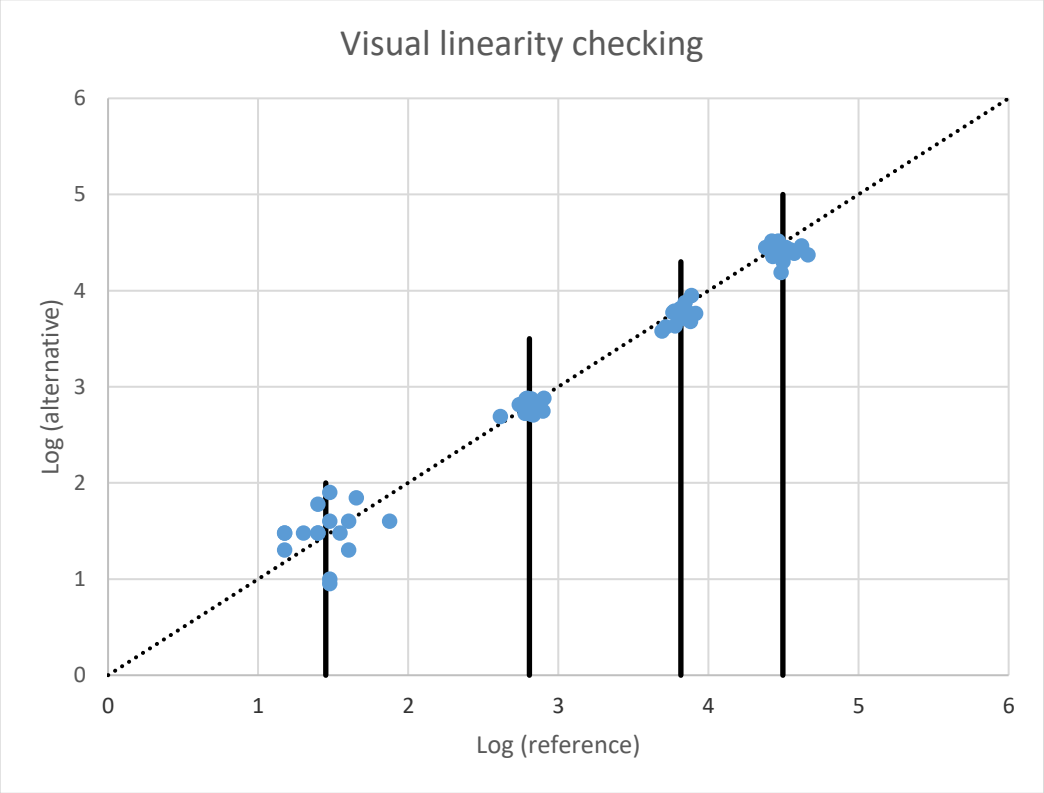
: Laboratories excluded from the statistical analysis

3.2.4. Calculations and interpretation

3.2.4.1. Visual inspection of linearity

Figure 15 illustrates the data points after logarithmic transformation. The visual evaluation shows that the alternative method yields results that are proportional to those of the reference method. The data are distributed closely around the first bisector (y = x), confirming this result. The medians of measurements obtained using the reference method for each level are also represented (vertical lines).

Figure 15: Visual inspection of linearity



3.2.4.2. Calculation of the accuracy profile

The study was conducted using 4 levels of contamination, while ISO 16140-2: 2016 requires 3 levels for statistical calculations according to the Excel spreadsheet available at http://standards.iso.org/iso/16140.

Two sets of data were used, the first considering levels 2, 3 and 4, the second considering levels 2, 3 and 5.

- **Levels 2, 3, 4**

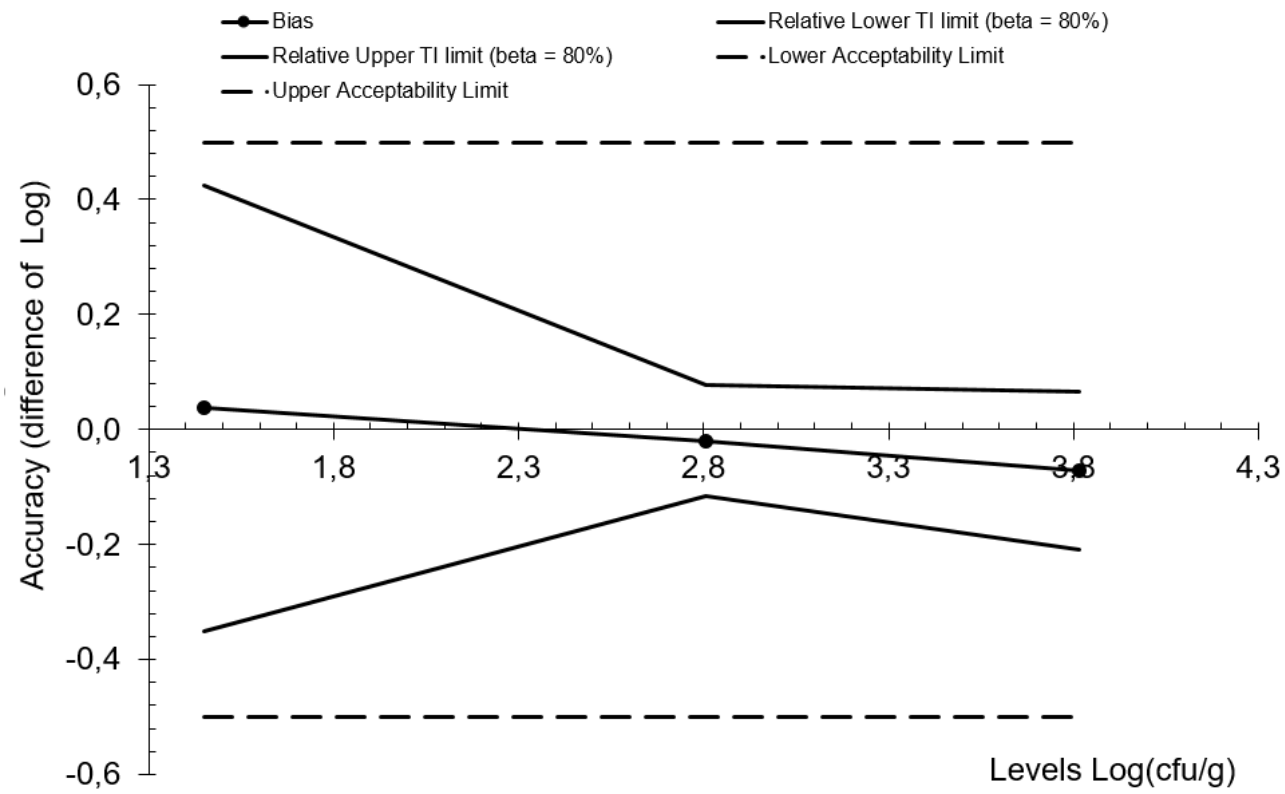
A summary of the statistical calculations is presented in Table 13.

Table 13: Summary of the calculations of the accuracy profile

Accuracy profile	0,5		
Study Name	Aloa Count		
Date	2006		
Coordinator	Laboratoire de Touraine		
Tolerance probability (beta)	80%	80%	80%
Acceptability limit in log (lambda)	0.50	0.50	0.50
	Alternative method		
Levels	**Low**	**Medium**	**High**
Target value	**1.451**	**2.807**	**3.816**
Number of participants (K)	8	8	8
Average for alternative method	1.487	2.788	3.744
Repeatability standard deviation (sr)	0.281	0.052	0.049
Between-labs standard deviation (sL)	0.000	0.045	0.081
Reproducibility standard deviation (sR)	0.281	0.069	0.095
Corrected number of dof	14.933	11.955	9.142
Coverage factor	1.382	1.416	1.454
Interpolated Student t	1.341	1.357	1.381
Tolerance interval standard deviation	0.2893	0.0717	0.0996
Lower TI limit	1.099	2.691	3.606
Upper TI limit	1.875	2.885	3.882
Bias	**0.037**	**-0.019**	**-0.072**
Relative Lower TI limit (beta = 80%)	**-0.351**	**-0.117**	**-0.210**
Relative Upper TI limit (beta = 80%)	**0.425**	**0.078**	**0.065**
Lower Acceptability Limit	**-0.50**	**-0.50**	**-0.50**
Upper Acceptability Limit	**0.50**	**0.50**	**0.50**
New acceptability limits may be based on reference method pooled variance			
Pooled repro standard dev of reference	0.123		

The graphical representation of the accuracy profile is shown in Figure 16.

Figure 16: Accuracy profile



For all levels of contamination, the tolerance interval limits for the alternative method fall within the acceptability limits set at 0.5 log.

- **Levels 2, 3, 5**

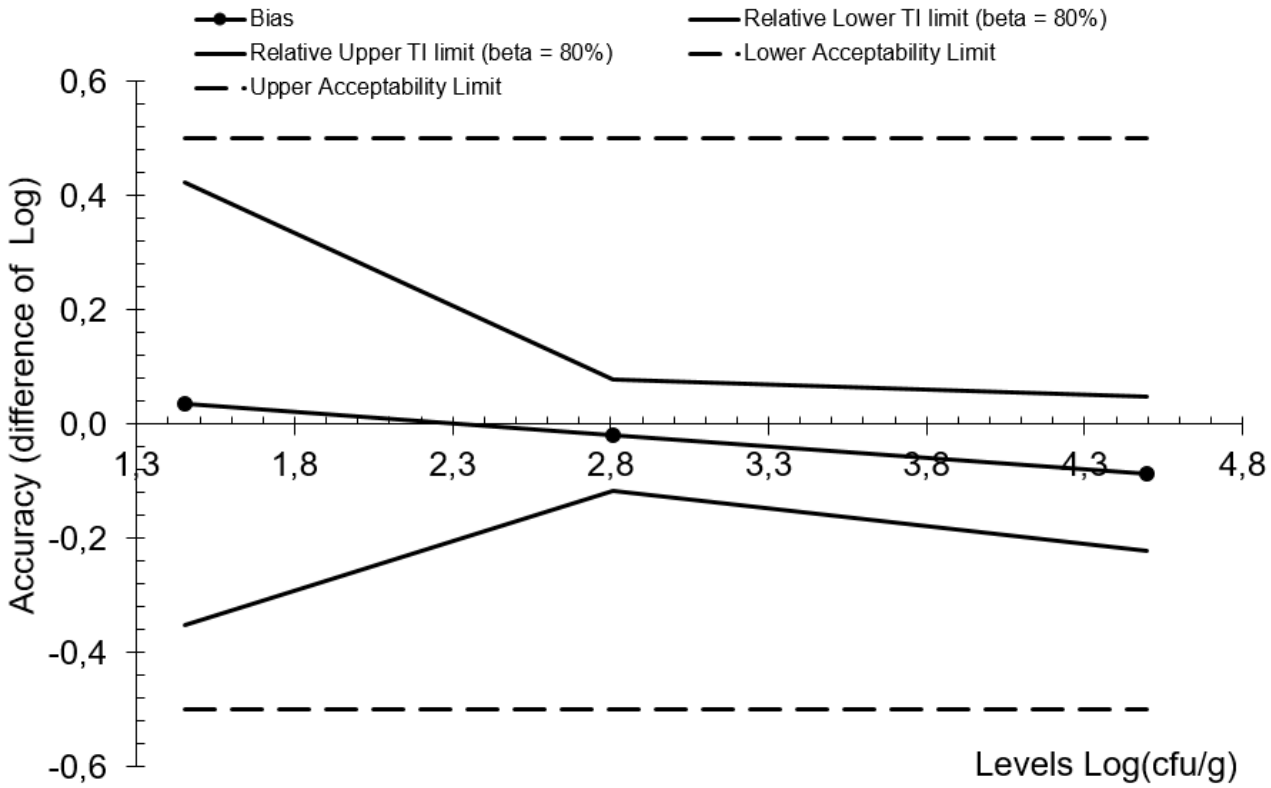
A summary of the statistical calculations is presented in Table 14.

Table 14: Summary of statistical calculations

Accuracy profile		0,5		
Study Name		Aloa Count		
Date		2006		
Coordinator		Laboratoire de Touraine		
Tolerance probability (beta)		80%	80%	80%
Acceptability limit in log (lambda)		0.50	0.50	0.50
		Alternative method		
Levels		**Low**	**Medium**	**High**
Target value		**1.451**	**2.807**	**4.496**
Number of participants (K)		8	8	8
Average for alternative method		1.487	2.788	4.409
Repeatability standard deviation (sr)		0.281	0.052	0.098
Between-labs standard deviation (sL)		0.000	0.045	0.000
Reproducibility standard deviation (sR)		0.281	0.069	0.098
Corrected number of dof		14.933	11.955	14.933
Coverage factor		1.382	1.416	1.382
Interpolated Student t		1.341	1.357	1.341
Tolerance interval standard deviation		0.2893	0.0717	0.1012
Lower TI limit		1.099	2.691	4.273
Upper TI limit		1.875	2.885	4.545
Bias		**0.037**	**-0.019**	**-0.087**
Relative Lower TI limit (beta = 80%)		**-0.351**	**-0.117**	**-0.223**
Relative Upper TI limit (beta = 80%)		**0.425**	**0.078**	**0.049**
Lower Acceptability Limit		**-0.50**	**-0.50**	**-0.50**
Upper Acceptability Limit		**0.50**	**0.50**	**0.50**
New acceptability limits may be based on reference method pooled variance				
Pooled repro standard dev of reference		0.125		

The graphical representation of the accuracy profile is shown in Figure 17.

Figure 17: Accuracy profile



For all levels of contamination, the tolerance interval limits for the alternative method fall within the acceptability limits set at 0.5 log.

3.2.4. Conclusion of the interlaboratory study

The alternative method is equivalent to the reference method.

3.3. General conclusion

The results of the comparative study and the interlaboratory study meet the criteria of ISO 16140-2 (2016) for the enumeration of *Listeria monocytogenes* and *Listeria spp*. The ALOA Count method is considered equivalent to the reference method described in ISO 11290-2 (2017).

TOURS, the 20th of July 2022
Stéphanie Rotily-Forcioli
Head of Microbiology Department

APPENDICES

APPENDIX 1

Analytical protocol
ALOA® COUNT Method

ENUMERATION OF *LISTERIA SPP. (foodstuffs and environment)*
ALOA® COUNT METHOD (AFNOR CERTIFICATION NO. AES 10/5 – 09/06)
ANALYTICAL PROTOCOL

X g or X mL of test sample + 9 X mL of BPW or 1/2 Fraser

↓ **1 hour +/- 5 min at 20°C +/- 2°C** (optional step, at the choice of the user)

*: same inoculation method for successive dilutions (if necessary) - 1 plate per dilution, except for the option: "1 ml spread over 3 Ø90 mm dishes"

Either of the following, Pour-plating inoculation:
1 ml in about 15 ml of ALOA® agar cooled to 47°C +/-2°C *
or Surface inoculation:
0.1 ml spread on the ALOA® (diameter 90 mm)*
1 ml spread on the ALOA® (diameter 140 mm)*

↓ 24H at 37°C+/-1°C
and 24H +/- 3H additional at 37°C +/-1°C

Possibility to store the plates for 72 hours at 5 ± 3°C, after incubation

typical colonies?

YES with/without halo → Presumption ***L. spp.***

YES with halo → Presumption ***L. monocytogenes***

NO → Less than **X** ***L. monocytogenes / L. spp.*** per gram of product

Confirmation *Listeria spp.* (as preferred):
- standard tests using standard methods,
- Palcam agar spiking,
- "*Listeria* Species Confirmation Strip" protocol

↓ **X *L. spp.*** per gram of product

Confirmation (as preferred), 1 colony:
- standard tests using standard methods,
- "ALOA® Confirmation" protocol,
- "RAPIDEC Lmono" protocol
- VIDAS LMO2 protocol,
- API Listeria gallery,
- "FAST Rhamnose" test.

→ **X *L. monocytogenes*** per gram of product

APPENDIX 2

Operating procedures for the EN ISO 11290-2 reference method

OPERATING PROCEDURE FOR THE EN ISO 11290-2/A1 METHOD (2005)

Test sample (x g or x mL)
+
Diluent for the preparation of the initial suspension:
buffered peptone water or Half Fraser broth basal medium
(9 x g or 9 x mL)

↓

Revivification for 1 h +/- 5 min at 20°C +/- 2°C.

↓

Surface inoculation of the ALOA® agar:
0.1 ml on 1 Ø90 mm dish, by dilution, with two successive dilutions
In the case of small numbers: 1 ml spread over 3 Ø90 mm dishes or 1 Ø140 mm dish

↓

Incubation at 37°C +/-1°C for 24h +/-3h at 48h,
and 24h +/-3h additional if necessary *(low growth or no colony)*

↓

Identification and enumeration of *Listeria* spp.

↓

Choose 5 suspicious colonies per dish and per dilution

↓

Confirmation of the *Listeria* spp. genus:
- Isolation on TSAYE agar and incubation at 37°C, 18 to 24 hours
- catalase reaction
- Gram stain
- motility test if necessary

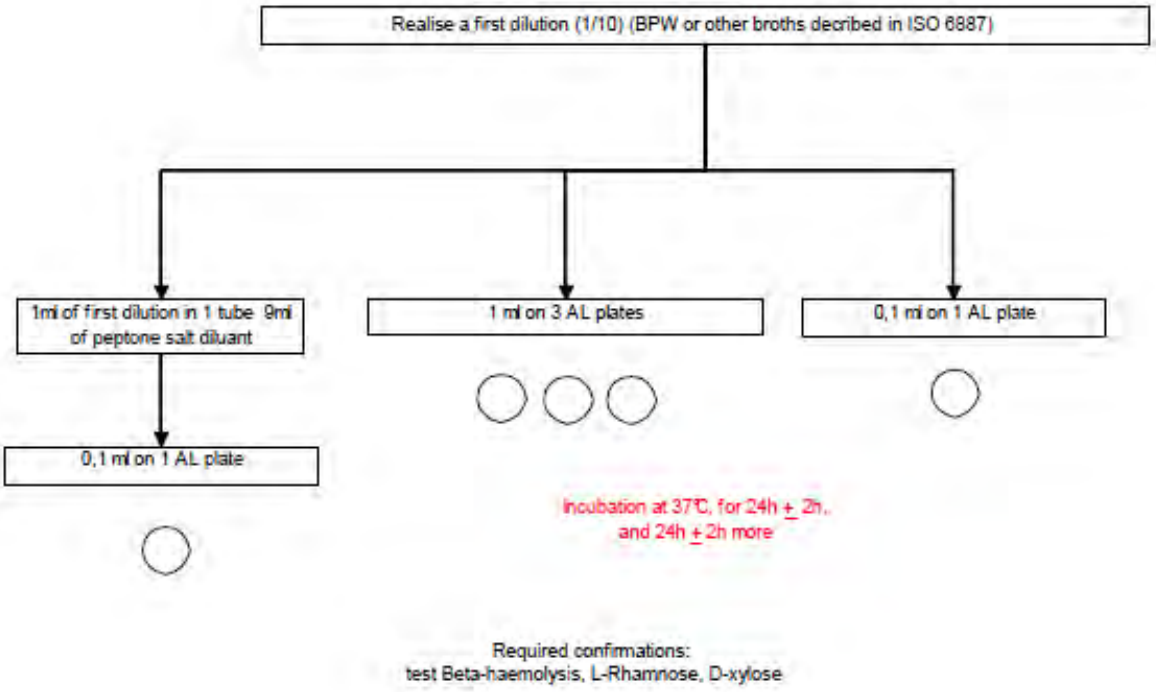
- biochemical gallery (isolated colony)

↓

Confirmation of the *Listeria monocytogenes* species:
- hemolysis test
- CAMP test
- use of carbohydrates

- biochemical gallery (isolated colony)

EN ISO 11290-2: 2017



APPENDIX 3

Relative accuracy:
Data on artificial contaminations of samples

Data on artificial contaminations of samples: *Listeria monocytogenes* 2006

Ref. Matrix	Matrix	Strain used	Origin	Type of stress	delta log (selective medium/ non-selective medium)
		L. mono milk	Raw milk	-18°C, 24h	0.81
38.6	Lemon sorbet popsicle				
38.7	Giga dark chocolate ice cream bar				
38.8	Piccola mini				
38.9	Euro Ice cream				
38.10	Iso Cup vanilla/chocolate				
38.14	Giga bar white				
		L. mono meat	Hamburger meat	-18°C, 24h/55°C, 15 min	0.66
49.13	Rillettes				
49.14	Country terrine				
50.18	Charolais beef				
50.22	Chipolata sausages				
50.23	Crépinette sausage				
		L. mono egg products	Liquid egg	55°C, 25 min	0.88
52.21	Layer cake				
52.26	Gland vanilla				
53.13	Egg white				
		L. mono egg products	Liquid egg	55°C, 15 min	0.79
52.19	Raspberries				
52.20	Apple pie				
53.12	Hard-boiled eggs				
		L. mono egg products	Liquid egg	55°C, 15 min	0.78
52.8	Coconut pudding				
52.9	Chocolate mousse				
52.10	Crème brulée				
		L. mono milk	Raw milk	-18°C, 24h/55°C, 15 min	0.79
42.11	Goat cheese				
42.12	Goat cheese				
42.13	Goat cheese				
42.14	Goat cheese				
42.15	Goat cheese				
42.16	Goat cheese				
42.19	Chaource				
42.20	Gaperon				
42.22	Raclette cheese				

Ref. Matrix	Matrix	Strain used	Origin	Type of stress	delta log (selective medium/ non-selective medium)
		LM seafood	Smoked salmon	-18°C, 24h/55°C, 15 min	0.65
35.9	Salmon fillet				
35.10	Saithe fillet				
35.11	Perch fillet				
		L. mono egg products	Liquid egg	55°C, 15 min	0.81
52.11	Raspberry gratin				
52.12	Mangari				
52.13	Apricots				
53.4	Egg white				
53.5	Egg yolk				
53.6	Hard-boiled eggs				
		L. mono egg products	Liquid egg	55°C, 25 min	0.74
52.14	Chocolate-coated marshmallow treat				
52.15	Paris-Brest				
52.16	Gland				
52.17	Opéra café				
53.7	Egg white				
53.8	Egg yolk				
53.9	Hard-boiled eggs				
		LM vegetables	Salad	-18°C, 24h	0.78
41.1	Soft lamb's lettuce				
41.2	Frisée lettuce				
41.3	Head of lettuce				
41.4	Scarole				
41.5	Mixed salad				
41.9	Cooked lentil salad				
41.10	Cooked cubed beets				
		LM vegetables	Salad	-18°C, 24h/55°C, 15 min	0.88
41.8	Sliced red cabbage				
41.11	Steamed beetroot				
51.6	Vegetables for ratatouille				
51.7	Chopped spinach portions				
51.8	Vegetables with gourmet peas				
		LM vegetables	Salad	-18°C, 24h/55°C, 15 min	0.70
36.1	Green salad				
36.2	Fresh endives				
36.3	Mixed salad + carrots				

Ref. Matrix	Matrix	Strain used	Origin	Type of stress	delta log (selective medium/ non-selective medium)
		LM vegetables	Salad	-18°C, 24h	0.82
51.1	Extra fine peas				
51.2	Palets with vegetables				
51.3	Chopped spinach				
51.4	Green beans				
51.5	Soup vegetables				
		LM vegetables	Salad	-18°C, 24h/55°C, 15 min	0.56
40.3	Red cabbage				
		LM seafood	Smoked salmon	-18°C, 24h	0.58
47.10	Squid whites				
47.11	Cod fillet				
47.12	Salmon steak				
47.13	Back of cod				
47.14	Cod steak				
		LM seafood	Smoked salmon	-18°C, 24h/55°C, 15 min	0.69
48.8	Smoked herring fillet				
48.9	Greenland halibut				
48.10	Wild smoked tuna				
		L. mono milk	Raw milk	-18°C, 24h/55°C, 15 min	0.72
42.1	Goat cheese				
43.2	Goat milk				
43.3	Goat milk				
43.4	Goat milk				
43.5	Goat milk				
43.6	Goat milk				
43.7	Goat milk				
43.8	Goat milk				
43.9	Goat milk				
43.10	Goat milk				
		L. mono egg products	Liquid egg	-18°C, 24h/55°C, 15 min	0.60
46.6	Tartar sauce				
46.7	Aioli sauce				
		LM seafood	Smoked salmon	-18°C, 24h/55°C, 15 min	0.88
35.14	Salmon fillet				
35.15	Perch fillet				
48.11	Smoked Greenland halibut				
48.12	Wild smoked tuna				

Ref. Matrix	Matrix	Strain used	Origin	Type of stress	delta log (selective medium/ non-selective medium)
		L. mono egg products	Liquid egg	-18°C, 24h/55°C, 15 min	0.60
45.8	Large shell eggs				
45.9	Organic eggs				
45.6	Farm eggs				
45.5	Organic eggs				
		LM seafood	Smoked salmon	-18°C, 24h/55°C, 15 min	0.57
35.19	Trout steak				
35.20	Trout steak				
35.21	Haddock steak				
35.22	Haddock steak				
35.23	Sabre fillet				
35.24	Sabre fillet				
35.25	Trout steak				
47.18	Salmon steak				
47.19	Salmon steak				
47.20	Albacore tuna steak				
47.21	Albacore tuna steak				
47.22	Back of cod				
47.23	Back of cod				
47.24	Back of cod				
48.16	1st rate smoked salmon				
48.17	1st rate smoked salmon				
48.18	Wild smoked tuna				
48.19	Wild smoked tuna				
48.20	Haddock				
48.21	Haddock				

Artificial contamination by mixing with a naturally-contaminated product

Ref. Matrix	Matrix	Naturally-contaminated matrix used
49.9	Blood sausage	Liver pâté
49.10	Country pâté	Liver pâté
34.1	Pure pork rillettes	Liver pâté
34.2	Rillettes du Mans	Liver pâté
34.3	Poultry rillettes	Liver pâté
49.4	Caribbean blood sausage	Liver pâté
45.4	Large shell eggs	Liver pâté

Data on artificial contaminations of samples: *Listeria monocytogenes* 2012

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	Strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
16	SP2	Salmon steak	SP	12_IAA_897.2	*L. monocytogenes*	Salmon Maki	Freezing for 21 days at -18°C	**0.67**
19	SP5	Trout steak	SP	10_IAA_10599.2	*L. monocytogenes*	Cod brandade	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.54**
20	SP6	Filet of sole	SP	10_IAA_10599.2	*L. monocytogenes*	Cod brandade	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.54**
35	SP9	Smoked halibut	SP	11_IAA_4446.1	*L. monocytogenes*	Smoked salmon slices	Freezing for 21 days at -18°C	**0.65**
39	SP13	Fish nuggets	SP	11_IAA_1695.2	*L. monocytogenes*	Shrimp sushi	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
40	SP14	Pink prawns	SP	11_IAA_1695.2	*L. monocytogenes*	Shrimp sushi	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
43	SP17	Tarama	SP	11_IAA_11940.2	*L. monocytogenes*	Crayfish salad	Heating for 30 min at 55°C	**0.53**
45	SP19	Seafood mix	SP	12_IAA_897.2	*L. monocytogenes*	Salmon Maki	Freezing for 21 days at -18°C	**0.67**
53	DP17	White chocolate ice cream cone	DP	12_IAA_403.2	*L. monocytogenes*	Vanilla milk shake	Freezing for 24 hours at -18°C	**0.53**
59	PV2	Ratatouille mix	VEP	11_IAA_1203.8	*L. monocytogenes*	Organic leeks	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
61	PV3	Exotic fruit salad	VEP	10_IAA_1896.1	*L. monocytogenes*	Green salad	Freezing for 24 hours at -18°C	**0.52**
63	PV5	Couscous/vegetable mix	VEP	11_IAA_1203.8	*L. monocytogenes*	Organic leeks	Freezing for 24 hours at -18°C	**0.52**
64	SP24	Tuna pizza	SP	10_IAA_10599.2	*L. monocytogenes*	Cod brandade	Freezing for 24 hours at -18°C	**0.52**

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	Strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
65	PV6	Fried Perigourdine	VEP	11_IAA_1203.8	*L. monocytogenes*	Organic leeks	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
74	PV7	Strawberries	VEP	10_IAA_1896.1	*L. monocytogenes*	Green salad	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.55**
81	PV8	4th range mixed salad	VEP	10_IAA_1896.1	*L. monocytogenes*	Green salad	Freezing for 21 days at -18°C	**0.65**
84	PV10	Custard	VEP	11_IAA_6606.1	*L. monocytogenes*	Vanilla eclair	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
89	PV12	Egg cream	VEP	11_IAA_6606.1	*L. monocytogenes*	Vanilla eclair	Freezing for 21 days at -18°C	**0.66**
96	DP22	Pistachio Danette	DP	10_IAA_10883.2	*L. monocytogenes*	Fresh cow cheese	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.52**
97	DP23	Caramel Danette	DP	10_IAA_10883.2	*L. monocytogenes*	Fresh cow cheese	Freezing for 24 hours at -18°C	**0.51**
98	DP24	Vanilla pecan Sveltesse	DP	10_IAA_10883.2	*L. monocytogenes*	Fresh cow cheese	Freezing for 21 days at -18°C	**0.68**
125	ES2	Dairy cloth	ES	10_IAA_4027.3	*L. monocytogenes*	Slicing machine wipe	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
126	ES3	Working surface cleaning wipe	ES	12_IAA_1132.3	*L. monocytogenes*	Curved conveyor belt wipe, meat shop	Freezing for 24 hours at -18°C	**0.51**
127	ES4	Cutting floor wipe	ES	12_IAA_1132.3	*L. monocytogenes*	Curved conveyor belt wipe, meat shop	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.55**
142	ES11	Water in grinding shop, MP froz. refrigeration drain	ES	11_IAA_5027.20	*L. monocytogenes*	Rinsing water - churn	Freezing for 24 hours at -18°C	**0.52**
143	12_IAA_2496.21	Water in slaughterhouse drain	ES	11_IAA_5027.20	*L. monocytogenes*	Rinsing water - churn	Freezing for 24 hours at -18°C	**0.52**

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	Strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
146	12_IAA_2266-5	Goat milk	DP	11_IAA_1860.1	*L. monocytogenes*	Goat milk	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
147	12_IAA_2385-2	Goat milk	DP	11_IAA_4357.1	*L. monocytogenes*	Goat milk	Freezing for 21 days at -18°C	**0.67**
148	12_IAA_2300-2	Goat milk	DP	11_IAA_4357.1	*L. monocytogenes*	Goat milk	Freezing for 24 hours at -18°C	**0.52**
185	12_IAA_3114-1	Treaming	VC	12_IAA_24.2	*L. monocytogenes*	Raw hanger steak	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
186	12_IAA_3132-3	Heart	VC	11_IAA_11982.1	*L. monocytogenes*	Cubed bowels	Freezing for 21 days at -18°C	**0.54**
187	12_IAA_3132-1	Liver	VC	11_IAA_11982.1	*L. monocytogenes*	Cubed bowels	Freezing for 21 days at -18°C	**0.54**
188	12_IAA_3178-4	Pure pork rillettes	VC	11_IAA_11368.2	*L. monocytogenes*	Liver pâté	Freezing for 21 days at -18°C	**0.55**
191	SP33	Alaska pollock	SP	11_IAA_1695.2	*L. monocytogenes*	Shrimp sushi	Heating for 30 min at 55°C	**0.51**
193	SP35	Saithe fillet	SP	11_IAA_11940.2	*L. monocytogenes*	Crayfish salad	Heating for 30 min at 55°C	**0.53**
194	SP36	Breton hake	SP	10_IAA_10599.2	*L. monocytogenes*	Cod brandade	Freezing for 24 hours at -18°C	**0.52**
196	SP38	Smoked trout	SP	11_IAA_4446.1	*L. monocytogenes*	Smoked salmon slices	Freezing for 21 days at -18°C	**0.65**
197	PV19	Courgettes	VEP	11_IAA_3200.5	*L. monocytogenes*	Beetroot	Heating for 30 min at 55°C	**0.54**
198	PV20	Aubergine	VEP	11_IAA_3200.5	*L. monocytogenes*	Beetroot	Heating for 30 min at 55°C	**0.54**
199	PV21	Red bell pepper	VEP	11_IAA_3200.5	*L. monocytogenes*	Beetroot	Freezing for 24 hours at -18°C	**0.51**
200	PV22	Mayonnaise	VEP	10_IAA_1895.1	*L. monocytogenes*	Celery mayonnaise	Freezing for 24 hours at -18°C	**0.54**
201	PV23	Custard	VEP	11_IAA_11685.2	*L. monocytogenes*	Layer cake	Heating for 30 min at 55°C	**0.53**

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	Strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
202	DP32	Vanilla dairy dessert	DP	11_IAA_583.3	*L. monocytogenes*	Goat cheese	Freezing for 21 days at -18°C	**0.57**
203	DP33	Vanilla ice cream	DP	12_IAA_403.2	*L. monocytogenes*	Vanilla milk shake	Heating for 30 min at 55°C	**0.51**
204	DP34	Raw goat milk	DP	11_IAA_6104.3	*L. monocytogenes*	Goat milk	Freezing for 24 hours at -18°C	**0.52**
207	ES13	Tank water	ES	11_IAA_5027.20	*L. monocytogenes*	Rinsing water - churn	Heating for 30 min at 55°C	**0.58**
208	ES14	Rinsing water	ES	11_IAA_5027.20	*L. monocytogenes*	Rinsing water - churn	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.68**
209	ES15	CF evaporator swab	ES	11_IAA_5027.16	*L. monocytogenes*	Churn pipe door swab	Freezing for 21 days at -18°C	**0.53**
210	ES16	Grinder swab	ES	11_IAA_5027.16	*L. monocytogenes*	Churn pipe door swab	Freezing for 21 days at -18°C	**0.53**
212	PV22	Coffee creamer	VEP	11_IAA_11685.2	*L. monocytogenes*	Layer cake	Freezing for 21 days at -18°C	**0.59**
213	PV26	Frozen vegetable mix	VEP	11_IAA_3200.5	*L. monocytogenes*	Beetroot	Freezing for 21 days at -18°C	**0.55**
214	ES22	Rinsing water	ES	11_IAA_5027.20	*L. monocytogenes*	Rinsing water - churn	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.68**
215	ES23	Rinsing water	ES	11_IAA_5027.20	*L. monocytogenes*	Rinsing water - churn	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0,68**

* log N (non-selective medium) – log N (selective medium)

Key:

SP: Seafood products
DP: Dairy products
VEP: Vegetable and egg products
ES: Environmental samples

Data on artificial contaminations of samples: *Listeria spp.* 2012

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	Strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
33	SP7	Smoked Haddock	SP	SP8	*L. innocua*	Smoked trout	55°C, 30 min/-18°C, 24h	**0.57**
36	SP10	Smoked salmon	SP	SP8	*L. innocua*	Smoked trout	55°C, 30 min/-18°C, 24h	**0.57**
62a	PV4	Red berry mix	VEP	07_IAA_4015.6	*L. welshimeri*	Soya	-18°C, 24h	**0.53**
63	PV5	Couscous/vegetable mix	VEP	LIS 1.7	*L. innocua*	Broccoli	-18°C, 24h	**0.55**
63	PV5	Couscous/vegetable mix	VEP	11_IAA_1203.8	*L. monocytogenes*	Organic leeks	Freezing for 24 hours at -18°C	**0.52**
64	SP24	Tuna pizza	SP	SP8	*L. welshimeri*	Smoked trout	-18°C, 24h	**0.53**
64	SP24	Tuna pizza	SP	10_IAA_10599.2	*L. monocytogenes*	Cod brandade	Freezing for 24 hours at -18°C	**0.52**
65	PV6	Pan-fried Perigourdine	VEP	09_IAA_3236.1	*L. welshimeri*	Sprouted rice	-18°C, 24h	**0.53**
65	PV6	Fried Perigourdine	VEP	11_IAA_1203.8	*L. monocytogenes*	Organic leeks	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
67	PV7	Sand-grown carrots	VEP	09_IAA_5353.5	*L. innocua*	Leeks	55°C, 25 min	**0.51**
71	PV8	Radishes	VEP	11_IAA_11739.1	*L. ivanovii*	Cucumbers	Freezing for 21 days at -18°C	**0.60**
82	PV12	Organic cherry tomatoes	VEP	09_IAA_3236.1	*L. welshimeri*	Sprouted rice	-18°C, 24h	**0.53**

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	Strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
83	PV13	Custard pastry	VEP	06_46.6	*L. innocua*	Tartar sauce	55°C, 25 min	**0.51**
84	PV14	Custard	VEP	07_IAA_4477.3	*L. welshimeri*	Trefoil	-18°C, 24h	**0.53**
84	PV10	Custard	VEP	11_IAA_6606.1	*L. monocytogenes*	Vanilla eclair	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**
86	PV15	Mayonnaise	VEP	06_46.6	*L. innocua*	Tartar sauce	Freezing for 21 days at -18°C	**0.59**
91	PV17	Custard cream	VEP	12_IAA_4145.6	*L. ivanovii*	Mayonnaise	55°C, 30 min/-18°C, 24h	**0.54**
95	DP23	Chocolate yogurt	DP	12_IAA_4173.4	*L. ivanovii*	Raw goat milk	55°C, 25 min	**0.55**
96	DP24	Danette - pistachio cream	DP	10_IAA_6999.1	*L. ivanovii*	Goat cheese	Freezing for 21 days at -18°C	**0.56**
96	DP22	Pistachio Danette	DP	10_IAA_10883.2	*L. monocytogenes*	Fresh cow cheese	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.52**
97	DP25	Danette - caramel cream	DP	10_IAA_3223.1	*L. innocua*	Ash-covered goat cheese	55 °C, 30 min/-18°C, 24h	**0.57**
97	DP23	Caramel Danette	DP	10_IAA_10883.2	*L. monocytogenes*	Fresh cow cheese	Freezing for 24 hours at -18°C	**0.51**
99	PV24	Caramel flan	VEP	06_46.6	*L. innocua*	Tartar sauce	55°C, 25 min	**0.51**
125	12_IAA_2496.3	Slaughterhouse - Q3 slicing machine cleaning cloth	ES	11_IAA_4403.1	*L. welshimeri*	CF raw 1st	-18°C, 24h	**0.53**
125	ES2	Dairy cloth	ES	10_IAA_4027.3	*L. monocytogenes*	Slicing machine wipe	Heating for 30 min at 55°C + Freezing for 24h at -18°C	**0.56**

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	*Strain*	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
134	12_IAA_2496.12	Grinding shop, 2nd rate grinding stack swab	ES	11_IAA_2803.4	*L. welshimeri*	Packaging room swab	55.°C, 25 min	**0.55**
135	12_IAA_2496.13	Grinding shop, mixing stack swab	ES	11_IAA_2305.4	*L. innocua*	Siphon pasto molding swab	Freezing for 21 days at -18°C	**0.59**
141	12_IAA_2496.19	Water in grinding shop, Fresh raw materials refrigeration drain	ES	11_IAA_3454.5	*L. innocua*	Seed drain water	Freezing for 21 days at -18°C	**0.59**
143	12_IAA_2496.21	Water in slaughterhouse drain	ES	11_IAA_3454.5	*L. innocua*	Seed drain water	55°C, 25 min	**0.51**
143	12_IAA_2496.21	Water in slaughterhouse drain	ES	11_IAA_5027.20	*L. monocytogenes*	Rinsing water - churn	Freezing for 24 hours at -18°C	**0.52**
147	12_IAA_2385.2	Goat milk	DP	11_IAA_10092.2	*L. innocua*	Raw goat milk	-18°C, 24h	**0.53**
147	12_IAA_2385-2	Goat milk	DP	11_IAA_4357.1	*L. monocytogenes*	Goat milk	Freezing for 21 days at -18°C	**0.67**
148	12_IAA_2300.2	Goat milk	DP	11_IAA_10092.2	*L. innocua*	Raw goat milk	55°C, 30 min/-18°C, 24h	**0.57**
148	12_IAA_2300-2	Goat milk	DP	11_IAA_4357.1	*L. monocytogenes*	Goat milk	Freezing for 24 hours at -18°C	**0.52**
158	SP27	Pink prawns	SP	09_IAA_2673.1	*L. seeligeri*	Shrimps	Freezing for 21 days at -18°C	**0.56**
159	SP28	Accras de morue	SP	10_IAA_10028.1	*L. ivanovii*	Surimi	55°C, 30 min/-18°C, 24h	**0.54**
163	SP29	Smoked Haddock	SP	SP8	*L. welshimeri*	Smoked trout	Freezing for 21 days at -18°C	**0.56**

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	*Strain*	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
164	DP31	Raw cow's milk	DP	12_IAA_4173.4	*L. ivanovii*	Raw goat milk	55°C, 25 min	**0.52**
165	VC1	Smoked bacon and spaghetti	VC	10_IAA_1326.2	*L. welshimeri*	Lean veal	-18°C, 24h	**0.53**
169	ES21	Swab - cold room floor and handle	ES	10_IAA_6999.1	*L. ivanovii*	swab - cheese crate	55°C, 30 min/-18°C, 24h	**0.54**
170	SP40	Haddock	SP	10_IAA_852.5	*L. innocua*	Fresh salmon	55°C, 30 min/-18°C, 24h	**0.57**
171	SP30	Tropical Sole	SP	10_IAA_852.5	*L. innocua*	Fresh salmon	-18°C, 24h	**0.55**
173	SP32	Tropical Sole	SP	10_IAA_10028.1	*L. ivanovii*	Surimi	Freezing for 21 days at -18°C	**0.60**
174a	12_IAA_2969.1	Toulouse sausages	VC	10_IAA_1326.2	*L. welshimeri*	Lean veal	Freezing for 21 days at -18°C	**0.56**
176	12_IAA_2804.1	Cooked hamburger meat + sauce	VC	11_IAA_10151.1	*L. ivanovii*	Veal stuffing	Freezing for 21 days at -18°C	**0.60**
177	12_IAA_2820.2	Liver pâté	VC	10_IAA_224.5	*L. innocua*	Country pâté	Freezing for 21 days at -18°C	**0.56**
179a	12_IAA_2882.5	Mixed pork	VC	10_IAA_1326.2	*L. welshimeri*	Lean veal	55°C, 25 min	**0.55**
180	12_IAA_2394.4	Pork rillettes	VC	10_IAA_224.5	*L. innocua*	Country pâté	55°C, 25 min	**0.55**
181	SP39	Smoked Haddock	SP	SP8	*L. welshimeri*	Smoked trout	Freezing for 21 days at -18°C	**0.56**
217	SP41	Tuna/Surimi salad	SP	09_IAA_2673.1	*L. seeligeri*	Shrimps	Freezing for 21 days at -18°C	**0.56**

Internal pallet number	Sample ref.	Matrix	Category	Strain ref.	*Strain*	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)*
218	DP36	Cabri Blanc	DP	10_IAA_7693.1	*L. welshimeri*	Reblochon	Freezing for 21 days at -18°C	**0.56**
219	DP37	Sainte Maure de Touraine goat cheese	DP	10_IAA_7693.1	*L. welshimeri*	Reblochon	Freezing for 21 days at -18°C	**0.56**
220	ES24	Seed rinsing water	ES	11_IAA_2803.4	*L. welshimeri*	Packaging room swab	Freezing for 21 days at -18°C	**0.56**
221	ES25	Drainage water	ES	11_IAA_2803.4	*L. welshimeri*	Packaging room swab	Freezing for 21 days at -18 °C	**0.56**

* log N (non-selective medium) – log N (selective medium)

Key:

SP: Seafood products
VEP: Vegetable and egg products
DP: Dairy products
ES: Environmental samples

Data on artificial contaminations of samples: Continuation 2018

samp. no.	Category	Type	Matrix	Strain ref.	Contamination strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)
1	Dairy	Raw milk	Goat milk	no. IAA 168	*Listeria monocytogenes*	Milk	seeding 72 h 4°C	/
2	Meat	Processed meat products	Beef meatballs	no. AFNOR 2	*Listeria monocytogenes*	Cooked ham	seeding 72 h 4°C	/
3	Meat	Processed meat products	Chicken gratin	no. AFNOR 2	*Listeria monocytogenes*	Cooked ham	seeding 72 h 4°C	/
4	Meat	Cured product	Bacon	no. AFNOR 2	*Listeria monocytogenes*	Cooked ham	seeding 72 h 4°C	/
5	Vegetables	Fresh vegetables	Apricot	no. AFNOR 8	*Listeria monocytogenes*	Pea velouté	seeding 72 h 4°C	/
6	Vegetables	Processed vegetables	Mixed carrots	no. AFNOR 8	*Listeria monocytogenes*	Pea velouté	seeding 72 h 4°C	/
7	Vegetables	Processed vegetables	Fried potatoes	no. AFNOR 8	*Listeria monocytogenes*	Pea velouté	seeding 72 h 4°C	/
8	Vegetables	Processed vegetables	Green bean salad	no. AFNOR 8	*Listeria monocytogenes*	Pea velouté	seeding 72 h 4°C	/
9	Vegetables	Processed vegetables	Tomatoes with French dressing	no. AFNOR 8	*Listeria monocytogenes*	Pea velouté	seeding 72 h 4°C	/
10	Vegetables	Processed vegetables	Spinach purée	no. AFNOR 8	*Listeria monocytogenes*	Pea velouté	seeding 72 h 4°C	/
11	Composites	Cold catered dish	Quinoa and beet hummus	no. AFNOR 27	*Listeria monocytogenes*	Mixed salad	seeding 72 h 4°C	/
12	Composites	Cold catered dish	Mixed salad with tomatoes and eggs	no. AFNOR 27	*Listeria monocytogenes*	Mixed salad	seeding 72 h 4°C	/
13	Composites	Cold catered dish	Spring roll	no. AFNOR 27	*Listeria monocytogenes*	Mixed salad	seeding 72 h 4°C	/
14	Composites	Cold catered dish	Mixed salad	no. AFNOR 27	*Listeria monocytogenes*	Mixed salad	seeding 72 h 4°C	/
15	Composites	Cold catered dish	Tomato salad with bacon	no. AFNOR 27	*Listeria monocytogenes*	Mixed salad	seeding 72 h 4°C	/
16	Composites	Hot catered dish	Mediterranean quiche	no. AFNOR 22	*Listeria monocytogenes*	Pizza mozzarella	seeding 72 h 4°C	/
17	Composites	Hot catered dish	Tomato and pepper patties	no. AFNOR 22	*Listeria monocytogenes*	Pizza mozzarella	seeding 72 h 4°C	/
18	Composites	Hot catered dish	Fish with spinach	no. AFNOR 22	*Listeria monocytogenes*	Pizza mozzarella	seeding 72 h 4°C	/
19	Environment	Dust and residues	Working surface waste - bakery	no. IAA 296	*Listeria monocytogenes*	Work plan - wipes	seeding 72 h 4°C	/
20	Environment	Dust and residues	Waste from a sink - delicatessen	no. IAA 296	*Listeria monocytogenes*	Work plan - wipes	seeding 72 h 4°C	/
21	Environment	Dust and residues	working surface waste - bakery	no. IAA 296	*Listeria monocytogenes*	Work plan - wipes	seeding 72 h 4°C	/
22	Environment	Dust and residues	Waste from the floor - bakery	no. IAA 296	*Listeria monocytogenes*	Work plan - wipes	seeding 72 h 4°C	/
23	Environment	Dust and residues	Waste from the floor - delicatessen	no. IAA 296	*Listeria monocytogenes*	Work plan - wipes	seeding 72 h 4°C	/
24	Dairy	Raw milk	Cow's milk	no. IAA 228	*Listeria innocua*	Goat milk	seeding 72 h 4°C	/
25	Dairy	Ice cream and dairy dessert	Caramel cream	no. IAA 228	*Listeria innocua*	Goat milk	seeding 72 h 4°C	/
26	Dairy	Ice cream and dairy dessert	Chocolate cream	no. IAA 228	*Listeria innocua*	Goat milk	seeding 72 h 4°C	/
27	Meat	Processed meat products	Meatballs	no. AFNOR 6	*Listeria Welshimeri*	Duck breast	seeding 72 h 4°C	/
28	Meat	Processed meat products	Minced poultry	no. AFNOR 6	*Listeria Welshimeri*	Duck breast	seeding 72 h 4°C	/
29	Meat	Processed meat products	Beef meatball curry	no. AFNOR 6	*Listeria Welshimeri*	Duck breast	seeding 72 h 4°C	/
30	Meat	Cured product	Bacon	no. AFNOR 6	*Listeria Welshimeri*	Duck breast	seeding 72 h 4°C	/
31	Meat	Cured product	Pure pork slicing sausage	no. AFNOR 6	*Listeria Welshimeri*	Duck breast	seeding 72 h 4°C	/
32	Seafood	Raw fish	Raw hake fillet	no. AFNOR 23	*Listeria innocua*	Herring fillet	seeding 72 h 4°C	/
33	Seafood	Raw fish	Raw salmon steak	no. AFNOR 23	*Listeria innocua*	Herring fillet	seeding 72 h 4°C	/
34	Seafood	Cooked seafood products	Cod	no. AFNOR 23	*Listeria innocua*	Herring fillet	seeding 72 h 4°C	/
35	Seafood	Cooked seafood products	Salmon	no. AFNOR 23	*Listeria innocua*	Herring fillet	seeding 72 h 4°C	/
36	Vegetables	Fresh vegetables	Apricot	no. AFNOR 57	*Listeria innocua*	Provençal tomatoes	seeding 72 h 4°C	/
37	Vegetables	Fresh vegetables	Tomato	no. AFNOR 57	*Listeria innocua*	Provençal tomatoes	seeding 72 h 4°C	/

Data on artificial contaminations of samples: Continuation 2018

samp. no.	Category	Type	Matrix	Strain ref.	Contamination strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ log)
38	Vegetables	Frozen vegetables	Pieces of pumpkin and butternut squash	no. AFNOR 57	*Listeria innocua*	Provençal tomatoes	seeding 2 weeks - 20°C	/
39	Vegetables	Processed vegetables	Tomato purée	no. AFNOR 56	*Listeria Welshimeri*	Bulgur	seeding 72 h 4°C	/
40	Vegetables	Processed vegetables	Ratatouille	no. AFNOR 56	*Listeria Welshimeri*	Bulgur	seeding 72 h 4°C	/
41	Vegetables	Processed vegetables	Creamed mushrooms	no. AFNOR 56	*Listeria Welshimeri*	Bulgur	seeding 72 h 4°C	/
42	Vegetables	Processed vegetables	courgette gratin	no. AFNOR 56	*Listeria Welshimeri*	Bulgur	seeding 72 h 4°C	/
43	Vegetables	Processed vegetables	vegetable soup	no. AFNOR 56	*Listeria Welshimeri*	Bulgur	seeding 72 h 4°C	/
44	Composites	Cold catered dish	Mixed salad with rice	no. AFNOR 14	*Listeria Welshimeri*	Mixed salad	seeding 72 h 4°C	/
45	Composites	Cold catered dish	Nigerian salad	no. AFNOR 14	*Listeria Welshimeri*	Mixed salad	seeding 72 h 4°C	/
46	Composites	Cold catered dish	Mixed salad	no. AFNOR 14	*Listeria Welshimeri*	Mixed salad	seeding 72 h 4°C	/
47	Composites	Cold catered dish	Red cabbage and ham salad	no. AFNOR 14	*Listeria Welshimeri*	Mixed salad	seeding 72 h 4°C	/
48	Composites	Hot catered dish	Quiche	no. AFNOR 21	*Listeria innocua*	Pizza mozzarella	seeding 72 h 4°C	/
49	Composites	Hot catered dish	Quiche with bacon	no. AFNOR 21	*Listeria innocua*	Pizza mozzarella	seeding 72 h 4°C	/
50	Composites	Hot catered dish	Spring rolls with pork	no. AFNOR 21	*Listeria innocua*	Pizza mozzarella	seeding 72 h 4°C	/
51	Environment	Process water	composite watercress water	no. AFNOR 55	*Listeria innocua*	Composite water	seeding 72 h 4°C	/
52	Environment	Dust and residues	Working surface waste - bakery	no. IAA 246	*Listeria innocua*	- Wipes	seeding 72 h 4°C	/
53	Environment	Dust and residues	Waste from a sink - delicatessen	no. IAA 246	*Listeria innocua*	- Wipes	seeding 72 h 4°C	/
54	Environment	Dust and residues	working surface waste - bakery	no. IAA 246	*Listeria innocua*	- Wipes	seeding 72 h 4°C	/
55	Environment	Dust and residues	Waste from the floor - bakery	no. IAA 246	*Listeria innocua*	- Wipes	seeding 72 h 4°C	/
56	Environment	Dust and residues	Waste from the floor - delicatessen	no. IAA 246	*Listeria innocua*	- Wipes	seeding 72 h 4°C	/
57	Seafood	Processed sea products	Hake fillet, sauce éloise	no. AFNOR 23	*Listeria innocua*	Herring fillet	seeding 72 h 4°C	/
58	Vegetables	Fresh vegetables	Mixed carrots	no. AFNOR 57	*Listeria innocua*	Provençal tomatoes	seeding 72 h 4°C	/
59	Vegetables	Frozen vegetables	Pan-fried vegetables	no. AFNOR 57	*Listeria innocua*	Provençal tomatoes	seeding 2 weeks - 20°C	/
60	Dairy	Raw milk cheese	Goat cheese	no. IAA 228	*Listeria innocua*	Goat milk	seeding 72 h 4°C	/
61	Dairy	Raw milk cheese	Goat cheese	no. IAA 228	*Listeria innocua*	Goat milk	seeding 72 h 4°C	/
62	Environment	Surface	working surface wipes	no. IAA 237	*Listeria innocua*	-Wipes	seeding 72 h 4°C	/
63	Environment	Process water	drainage water	no. IAA 237	*Listeria innocua*	-Wipes	seeding 72 h 4°C	/
64	Meat	Processed meat products	Beef meatball	18IAA_4093.2	*Listeria monocytogenes*	Andouillette	thermal spiking 30 min 55°C	0.55
65	Meat	Processed meat products	Minced poultry	18IAA_4093.2	*Listeria monocytogenes*	Andouillette	thermal spiking 30 min 55°C	0.55
66	Meat	Processed meat products	Sautéed pork	18IAA_4093.2	*Listeria monocytogenes*	Andouillette	thermal spiking 30 min 55°C	0.55

Data on artificial contaminations of samples: Continuation 2018

samp. no.	Category	Type	Matrix	Strain ref.	Contamination strain	Origin of the strain	Type of stress	Evaluation of the stress (Δ_{log})
67	Seafood	Processed sea products	Sardines with tomatoes	18IAA_5554.1	*Listeria monocytogenes*	Raw salmon	thermal spiking 30 min 55°C	0.45
68	Seafood	Processed sea products	Saithe filet with carrots	18IAA_5554.1	*Listeria monocytogenes*	Raw salmon	thermal spiking 30 min 55°C	0.45
69	Seafood	Processed sea products	Surimi	18IAA_5554.1	*Listeria monocytogenes*	Raw salmon	thermal spiking 30 min 55°C	0.45
70	Seafood	Processed sea products	Breaded fish	18IAA_5554.1	*Listeria monocytogenes*	Raw salmon	thermal spiking 30 min 55°C	0.45
71	Seafood	Processed sea products	salmon steak with chives	18IAA_5554.1	*Listeria monocytogenes*	Raw salmon	thermal spiking 30 min 55°C	0.45
72	Environment	Surface	wipe	18IAA_4889.1	*Listeria monocytogenes*	Cheese wipes	thermal spiking 30 min 55°C	0.64
73	Environment	Surface	Slaughterhouse - carcass cleaning cloth	18IAA_4889.1	*Listeria monocytogenes*	Cheese wipes	thermal spiking 30 min 55°C	0.64
74	Environment	Surface	Meat grinder swab	18IAA_4889.1	*Listeria monocytogenes*	Cheese wipes	thermal spiking 30 min 55°C	0.64
75	Environment	Surface	Working surface cleaning cloth - delicatessen, butchery	18IAA_4889.1	*Listeria monocytogenes*	Cheese wipes	thermal spiking 30 min 55°C	0.64
76	Environment	Surface	Slicing machine wipe	18IAA_4889.1	*Listeria monocytogenes*	Cheese wipes	thermal spiking 30 min 55°C	0.64
77	Environment	Process water	composite water 7287.1	18IAA_4634.1	*Listeria monocytogenes*	Composite water	thermal spiking 30 min 55°C	0.21
78	Environment	Dust and residues	composite water - alfalfa	18IAA_4634.1	*Listeria monocytogenes*	Composite water	thermal spiking 30 min 55°C	0.21
79	Environment	Dust and residues	composite water 7265.3	18IAA_4634.1	*Listeria monocytogenes*	Composite water	thermal spiking 30 min 55°C	0.21
80	Environment	Dust and residues	drain water	18IAA_4634.1	*Listeria monocytogenes*	Composite water	thermal spiking 30 min 55°C	0.21
81	Environment	Dust and residues	rinsing water	18IAA_4634.1	*Listeria monocytogenes*	Composite water	thermal spiking 30 min 55°C	0.21
82	Environment	Dust and residues	Waste - bakery	18IAA_5350.11	*Listeria monocytogenes*	- Beetroot Wipes	thermal spiking 30 min 55°C	0.41
83	Dairy	Dairy dessert	vanilla cream	18IAA_6440.2	*Listeria monocytogenes*	Goat milk	thermal spiking 30 min 55°C	0.11
85	Vegetables	Fresh vegetables	broccoli	18IAA_5292.3	*Listeria monocytogenes*	Tuna and tomato salad	spiking thermique 30 min 55 °C	0.35
86	Vegetables	Fresh vegetables	tomatoes	18IAA_5292.3	*Listeria monocytogenes*	Tuna and tomato salad	spiking thermique 30 min 55 °C	0.35
87	Vegetables	Frozen vegetables	butternut squash soup	18IAA_5292.3	*Listeria monocytogenes*	Tuna and tomato salad	spiking thermique 30 min 55 °C	0.35
88	Vegetables	Frozen vegetables	pan-fried vegetables	18IAA_5292.3	*Listeria monocytogenes*	Tuna and tomato salad	spiking thermique 30 min 55 °C	0.35
89	Composites	Pastries	egg cream	18IAA_2069.1	*Listeria monocytogenes*	Chocolate éclair	spiking thermique 30 min 55 °C	0.21
90	Vegetables	Processed vegetables	Cooked beetroot	18IAA_5292.3	*Listeria monocytogenes*	Chocolate éclair	spiking thermique 30 min 55 °C	0.35

APPENDIX 4

Relative accuracy: Initial results *Listeria monocytogenes*

Appendix 4: Relative accuracy: *Listeria monocytogenes* ISO/Aloa Count surface inoculation

N°	Validation	Product (french name)	Cat	Type	Reference method : NF EN ISO 11290-2 #															Alternative method : ALOA COUNT surface									
					1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2						1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h									45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h					Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2													
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
42.12	2006	Fromage de chèvre GDS	L1	Raw milk cheese	10	100	0,1	38	40	2	4	3600	3,56	45	41	4	3	4200	100	1000	1	47	5	4700	3,67	/	43	4	4300
42.13	2006	Fromage de chèvre GDS	L1	Raw milk cheese	10	100	1	95	110	17	10	1000	3,00	102	110	13	15	1100	10	100	1	28	3	280	2,45	/	20	2	200
42.14	2006	Fromage de chèvre GDS	L1	Raw milk cheese	10	100	1	9	10	0	0	80 (NE)	1,90	13	12	1	1	130	10	100	1	12	1	120	2,08	/	8	0	80
42.15	2006	Fromage de chèvre	L1	Raw milk cheese	10	100	1	24	32	3	4	250	2,40	24	28	3	4	270	10	100	1	22	2	220	2,34	/	26	3	260
42.16	2006	Fromage de chèvre	L1	Raw milk cheese	10	100	1	39	44	7	3	420	2,62	38	48	4	7	440	10	100	1	51	5	510	2,71	/	46	5	460
42.17	2006	Fromage de chèvre	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.18	2006	Fromage de chèvre	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.19	2006	Chaource	L1	Raw milk cheese	10	100	1	135	139	12	18	1300	3,11	129	140	15	11	1300	10	100	1	131	13	1300	3,11	/	133	12	1300
42.2	2006	Brie au Raw milk	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.20	2006	Gaperon	L1	Raw milk cheese	10	100	1	17	12	1	1	160	2,20	13	14	2	0	140	10	100	1	11	1	110	2,04	/	6	0	60
42.21	2006	St Félicien	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.22	2006	Fromage à raclette	L1	Raw milk cheese	10	100	1	5	2	0	0	50 (NE)	1,70	7	1	0	1	40	10	100	1	1	0	10	1,00	/	3	0	30
42.23	2006	Mascarpone	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.3	2006	Tomme de Savoie	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.4	2006	Roquefort papillon	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.5	2006	Langres AOC affiné	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.6	2006	Reblochon fermier	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.7	2006	Petit camembert Isigny Ste mère	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.8	2006	Epoisses germain	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.9	2006	Morbier AOC	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.1	2006	Raw milk cheese (pièce)	L1	Raw milk cheese	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
42.10	2006	Fromage de chèvre GDS	L1	Raw milk cheese	10	100	1	7	5	0	0	60 (NE)	1,78	3	11	0	0	70	10	100	1	8	0	70 (NE)	1,85	/	9	1	90
42.11	2006	Fromage de chèvre GDS	L1	Raw milk cheese	10	100	1	>150	175	23	27	2300 (N')	3,36	168	175	24	23	1800	100	1000	1	18	1	1727	3,24	/	16	2	1600
43.1	2006	Lait de chèvre	L2	Raw milk	10	100	1	2	0	0	0	20	1,30	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
43.10	2006	Lait de chèvre	L2	Raw milk	10	100	1	20	15	2	2	200	2,30	13	14	3	2	140	10	100	1	6	0	60 (NE)	1,78	/	12	1	120
43.2	2006	Lait de chèvre	L2	Raw milk	10	100	1	1	1	0	0	10	1,00	2	1	0	0	15	10	100	1	2	0	20	1,30	/	2	0	20
43.3	2006	Lait de chèvre	L2	Raw milk	10	100	1	1	0	0	0	10	1,00	2	1	0	0	15	10	100	1	1	0	10	1,00	/	2	0	20
43.4	2006	lait de chèvre	L2	Raw milk	10	100	1	6	2	0	0	60 (NE)	1,78	8	3	0	0	55	10	100	1	4	0	40 (NE)	1,60	/	3	0	30
43.5	2006	Lait de chèvre	L2	Raw milk	10	100	1	5	8	0	0	50 (NE)	1,70	8	9	0	0	85	10	100	1	1	0	10	1,00	/	3	0	30
43.6	2006	Lait de chèvre	L2	Raw milk	10	100	1	26	14	1	1	250	2,40	15	11	1	0	120	10	100	1	13	1	130	2,11	/	9	0	90
43.7	2006	Lait de chèvre	L2	Raw milk	10	100	1	4	5	0	0	40 (NE)	1,60	7	6	0	0	65	10	100	1	4	0	40 (NE)	1,60	/	2	0	20

N°	Validation	Product (french name)	Cat	Type	Reference method : NF EN ISO 11290-2 #															Alternative method : ALOA COUNT surface									
					1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2						1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h									45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h					Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2													
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
43.8	2006	Lait de chèvre	L2	Raw milk	10	100	1	2	10	1	0	30	1,48	4	5	0	1	45	10	100	1	4	0	40 (NE)	1,60	/	1	0	10
43.9	2006	Lait de chèvre	L2	Raw milk	10	100	1	8	19	1	1	80 (NE)	1,90	7	10	1	2	85	10	100	1	9	1	90 (NE)	1,95	/	10	0	100
31.1	2006	Raw milk chèvre	L2	Raw milk	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.1	2006	Délice aux fruits rouges	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.10	2006	Iso Cup Vanille	L3	Desserts	10	100	1	11	14	1	3	110	2,04	12	12	1	4	120	10	100	1	13	1	130	2,11	/	14	0	140
38.11	2006	Iso Cup Vanille/ Fraise	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.12	2006	Bâtonnet Giga amande	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.13	2006	Glace familiale vanille	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.14	2006	Bâtonnet Giga blanc	L3	Desserts	10	100	1	3	3	0	0	30	1,48	2	1	1	0	15	10	100	1	3	0	30	1,48	/	5	0	50
38.15	2006	Glace familiale pistache	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.16	2006	Eclairs café	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.2	2006	Glace chocolat blanc	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.3	2006	glace caramel/vanille/pommes caramel	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.4	2006	cone crème glacée chocolat	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.5	2006	cone crème glacée vanille	L3	Desserts	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
38.6	2006	Bâtonnet sorbet citron	L3	Desserts	10	100	1	19	23	1	4	180	2,26	20	17	3	0	180	10	100	1	13	1	130	2,11	/	22	2	220
38.7	2006	Bâtonnet giga noir	L3	Desserts	10	100	1	6	12	1	0	60 (NE)	1,78	9	10	0	0	95	10	100	1	7	0	60 (NE)	1,78	/	12	1	120
38.8	2006	Piccola mini	L3	Desserts	10	100	1	7	2	1	1	70 (NE)	1,85	6	4	0	1	50	10	100	1	0	0	<10	<1	/	0	0	<10
38.9	2006	Euro Ice Cream	L3	Desserts	10	100	1	16	13	1	1	160	2,20	20	20	1	2	200	10	100	1	21	2	210	2,32	/	10	2	100
83	2018	Crème vanille	L3	Desserts	10	100	1	35	/	1	/	330	2,52	/	/	/	/	/	10	100	1	30	0	270	2,43		/	/	/
50.1	2006	Bifteak haché pur bœuf	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.10	2006	Avant-plat vache	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.11	2006	Joue dee bœuf (Viol)	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.12	2006	Panse	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.13	2006	poitrine de porc	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.14	2006	Matières premières	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.15	2006	Faux-filet	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.16	2006	plat de côte bœuf	C1	Raw meat	10	100	1	22	24	4	2	240	2,38	22	19	3	4	220	10	100	1	31	3	310	2,49	/	27	3	270
50.17	2006	Paleron de veau	C1	Raw meat	10	100	1	13	13	2	2	140	2,15	10	21	0	1	150	10	100	1	22	2	220	2,34	/	19	2	190
50.18	2006	Poire de Charolais	C1	Raw meat	10	100	1	13	22	2	2	140	2,15	25	24	3	1	240	10	100	1	25	2	250	2,40	/	25	3	250
50.19	2006	Collier d'agneau	C1	Raw meat	10	100	1	0	2	1	0	10	1,00	1	0	0	0	5	10	100	1	0	0	<10	<1	/	0	0	<10
50.2	2006	Steak haché Chanfrais	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.20	2006	Jumeaux	C1	Raw meat	10	100	1	1	0	0	0	10	1,00	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.21	2006	Rôti de veau	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.22	2006	Chipolatas	C1	Raw meat	10	100	1	5	1	0	1	50 (NE)	1,70	2	0	1	0	10	10	100	1	2	0	18	1,26	/	4	0	40
50.23	2006	Crépinette	C1	Raw meat	10	100	1	4	2	0	0	40 (NE)	1,60	0	1	0	1	10	10	100	1	4	0	40 (NE)	1,60	/	0	0	<10
50.24	2006	Plat de côte	C1	Raw meat	10	100	1	12	14	1	2	120	2,08	11	15	0	2	130	10	100	1	14	1	140	2,15	/	13	0	130

					Reference method : NF EN ISO 11290-2 #																*Alternative method : ALOA COUNT surface*								
N°	Validation	Product (french name)	Cat	Type	1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2					1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h								45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h				Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2												
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
50.25	2006	Plat de côte	C1	Raw meat	10	100	1	63	68	5	12	620	2,79	75	65	17	13	770	10	100	1	58	6	580	2,76	/	69	7	690
50.3	2006	Filet de dinde	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.4	2006	Epaule de porc	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.5	2006	Bifteak pour hacher	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.6	2006	Dessus de côte	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.7	2006	Matières premières de porc	C1	Raw meat	10	100	1	0	2	0	0	<10	<1	1	0	0	0	5	10	100	1	0	0	<10	<1	/	0	0	<10
50.8	2006	Viande bovine	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
50.9	2006	Demi-veau PAD	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
29.1	2006	Steak haché	C1	Raw meat	10	100	1	3	1	0	0	30	1,48	1	0	0	0	5	10	100	1	0	0	<10	<1	/	0	0	<10
29.10	2006	Steak haché	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	2	0	0	20	10	100	1	1	0	10	1,00	/	1	0	10
29.2	2006	Steak haché	C1	Raw meat	10	100	1	3	2	1	0	40	1,60	2	2	1	2	20	10	100	1	0	0	<10	<1	/	0	0	<10
29.3	2006	Steak haché	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
29.4	2006	Steak haché	C1	Raw meat	10	100	1	1	0	0	0	10	1,00	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
29.5	2006	steak haché	C1	Raw meat	10	100	1	21	12	0	7	190	2,28	14	14	2	2	140	10	100	1	13	0	120	2,08	/	15	0	150
29.6	2006	Steak haché	C1	Raw meat	10	100	1	2	0	0	0	20	1,30	1	2	0	0	15	10	100	1	1	0	10	1,00	/	0	0	<10
29.7	2006	Steak hach	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
29.8	2006	Stek haché	C1	Raw meat	10	100	1	27	32	5	7	280	2,45	26	43	4	1	340	10	100	1	4	0	40 (NE)	1,60	/	20	2	200
29.9	2006	Steak haché	C1	Raw meat	10	100	1	10	7	0	0	90	1,95	7	5	0	0	60	10	100	1	0	0	<10	<1	/	1	0	10
30.1	2006	Merlan (viande)	C1	Raw meat	10	100	1	1	0	0	0	10	1,00	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
30.2	2006	Steak	C1	Raw meat	10	100	1	6	6	1	1	60 (NE)	1,78	7	6	2	1	65	10	100	1	7	0	60 (NE)	1,78	/	7	0	70
30.3	2006	Steak	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
32.2	2006	Plat de cote beef	C1	Raw meat	10	100	1	8	0	0	0	70 (NE)	1,85	4	4	0	1	40	10	100	1	3	0	30	1,48	/	5	0	50
32.1	2006	Macreuse veau	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
37.1	2006	Sous noix de veau	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
37.2	2006	Epaule de porc	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
37.3	2006	Macreuse de cheval	C1	Raw meat	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
28.1	2006	Paté de foie	C2	Delicatessen	100	1000	0,1	13	12	2	1	14000	4,15	13	11	1	1	12000	100	1000	1	143	13	14000	4,15	/	128	14	13000
34.1	2006	Rillettes pur porc	C2	Delicatessen	10	100	1	>150	145	18	27	1800 (N')	3,26	145	140	19	15	1500	10	100	1	112	13	1100	3,04	/	117	13	1200
34.2	2006	Rillettes du Mans	C2	Delicatessen	10	100	1	148	149	13	15	1500	3,18	149	140	16	12	1400	10	100	1	142	13	1400	3,15	/	141	15	1400
34.3	2006	Rillettes de volailles	C2	Delicatessen	10	100	0,1	>150	999	>150	999	>150000	>5,18	999	999	999	999	999	10	100	1	>150	>150	>15000	>4,18	/	999	999	999
34.4	2006	Rillettes porc	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
34.5	2006	Rillettes de porc	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
34.6	2006	Pâté de campagne	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.1	2006	Andouillette pur porc 1er prix	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.10	2006	paté de campagne	C2	Delicatessen	10	100	1	28	36	6	7	310	2,49	34	30	3	6	330	10	100	1	23	2	230	2,36	/	26	3	260
49.11	2006	Pâté de foie de volailles	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.12	2006	Lardons cuits	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.13	2006	Rillettes	C2	Delicatessen	10	100	1	>150	190	23	25	2300 (N')	3,36	175	190	21	23	1900	10	100	1	>150	23	2300 (N')	3,36	/	170	20	1700

N°	Validation	Product (french name)	Cat	Type	Reference method : NF EN ISO 11290-2 #															Alternative method : ALOA COUNT surface									
					1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2						1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h									45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h					Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2													
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
49.14	2006	Terrine de campagne	C2	Delicatessen	10	100	1	45	49	11	4	510	2,71	47	42	6	4	450	10	100	1	48	5	480	2,68	/	44	4	440
49.2	2006	Boudins blancs pur volaille	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.3	2006	Boudin noir à l'ancienne	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.4	2006	boudins noirs antillais	C2	Delicatessen	10	100	1	130	130	18	14	1300	3,11	126	130	20	9	1300	10	100	1	122	8	1200	3,08	/	135	15	1400
49.5	2006	Andouillette pur porc 1er prix	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.6	2006	Paté de campagne	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.7	2006	Terrine de faisan	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.8	2006	Fromage de tête	C2	Delicatessen	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
49.9	2006	Boudin noir	C2	Delicatessen	10	100	1	19	20	4	2	210	2,32	20	22	0	2	200	10	100	1	15	2	160	2,20	/	24	2	240
2	2018	Boulettes de bœuf	C3	Processed foods	10	100	1	34	/	3	/	340	2,53	/	/	/	/	/	10	100	1	17	1	160	2,20	160	/	/	/
3	2018	Poulet gratiné	C3	Processed foods	10	100	1	21	/	1	/	200	2,30	/	/	/	/	/	10	100	1	22	0	200	2,30	200	/	/	/
64	2018	Boulette de bœuf	C3	Processed foods	10	100	1	52	/	3	/	500	2,70	/	/	/	/	/	10	100	1	34	6	360	2,56	360	/	/	/
65	2018	Emincé de volaille	C3	Processed foods	10	100	1	60	/	3	/	570	2,76	/	/	/	/	/	10	100	1	52	1	480	2,68	480	/	/	/
66	2018	Sauté de porc	C3	Processed foods	10	100	1	39	/	1	/	360	2,56	/	/	/	/	/	10	100	1	56	3	540	2,73	540	/	/	/
35.1	2006	Saumon frais	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.10	2006	Filet de lieu noir	P1	Raw fish	10	100	1	73	70	9	13	750	2,88	60	64	10	6	640	10	100	1	72	7	720	2,86	/	68	7	680
35.11	2006	Filet de perche	P1	Raw fish	10	100	0,1	>150	999	>150	999	>150000	>5,18	999	999	999	999	999	10	100	1	>150	>150	>15000	>4,18	/	999	999	999
35.12	2006	Filet de merlan	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.13	2006	Filet de moruette	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.14	2006	Filet de saumon	P1	Raw fish	10	100	1	7	8	0	0	60 (NE)	1,78	6	9	0	0	75	10	100	1	7	0	60 (NE)	1,78	/	7	0	70
35.15	2006	Filet de perche	P1	Raw fish	10	100	1	60	65	5	7	590	2,77	58	61	7	7	600	10	100	1	59	6	590	2,77	/	65	6	650
35.16	2006	Pavé de truite	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.17	2006	Pavé d'Eglefin	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.18	2006	Filet de sabre	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.19	2006	Pavé de truite	P1	Raw fish	10	100	1	2	2	1	0	30	1,48	2	2	0	0	20	10	100	1	2	0	20	1,30	/	2	0	20
35.2	2006	Perche du Nil	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.20	2006	Pavé de truite	P1	Raw fish	10	100	1	9	5	1	0	90 (NE)	1,95	7	5	1	0	60	10	100	1	12	1	120	2,08	/	10	1	100
35.21	2006	Pavé d'Eglefin	P1	Raw fish	10	100	1	15	14	2	1	160	2,20	15	10	0	1	120	10	100	1	15	2	160	2,20	/	14	1	140
35.22	2006	Pavé d'Eglefin	P1	Raw fish	10	100	1	15	17	3	3	160	2,20	20	19	2	2	200	10	100	1	20	2	200	2,30	/	14	1	140
35.23	2006	Filet de sabre	P1	Raw fish	10	100	1	20	22	2	0	200	2,30	23	26	2	3	250	10	100	1	25	2	250	2,40	/	26	3	260
35.24	2006	Filet de sabre	P1	Raw fish	10	100	1	77	79	6	8	760	2,88	78	71	9	8	750	10	100	1	77	8	770	2,89	/	78	8	780
35.25	2006	Pavé de truite	P1	Raw fish	10	100	1	120	115	10	15	1200	3,08	100	110	12	15	1100	10	100	1	106	13	1100	3,04	/	104	11	1000
35.3	2006	Tranche de cabillaud	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.4	2006	Filet Eiglefin	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.5	2006	Filet de cabillaud	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.6	2006	Filet de sandre	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10

N°	Validation	Product (french name)	Cat	Type	Reference method : NF EN ISO 11290-2 #															Alternative method : ALOA COUNT surface										
					1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2						1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h									45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h					Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2													
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
35.7	2006	Filet de grenadin	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.8	2006	Filet de lingre	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
35.9	2006	Filet de saumon	P1	Raw fish	10	100	1	1	0	0	0	10	1,00	1	0	0	0	5	10	100	1	1	0	10	1,00	/	2	0	20
47.10	2006	Blancs d'encornet	P1	Raw fish	10	100	1	37	39	4	8	370	2,57	30	35	4	6	340	10	100	1	42	4	420	2,62	/	42	4	420
47.11	2006	Filet de cabillaud sans arête	P1	Raw fish	10	100	1	9	16	1	1	90 (NE)	1,95	10	20	1	1	150	10	100	1	15	2	160	2,20	/	14	1	140
47.12	2006	Pavé de saumon	P1	Raw fish	10	100	1	8	9	1	0	80 (NE)	1,90	6	9	0	1	75	10	100	1	5	0	50 (NE)	1,70	/	6	0	60
47.13	2006	Dos de cabillaud	P1	Raw fish	10	100	1	5	7	1	0	60 (NE)	1,78	3	6	2	2	45	10	100	1	14	1	140	2,15	/	3	0	30
47.14	2006	Pavé de cabillaud sans arête	P1	Raw fish	10	100	1	12	11	2	3	130	2,11	10	13	1	1	120	10	100	1	12	1	120	2,08	/	18	2	180
47.15	2006	Pavé de Saumon	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.16	2006	Steak thon albacore	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.17	2006	Dos de cabillaud	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.18	2006	Pavé de saumon	P1	Raw fish	10	100	1	116	95	15	10	1200	3,08	100	112	13	12	1100	10	100	1	113	12	1100	3,04	/	105	11	1100
47.19	2006	Pavé de saumon	P1	Raw fish	10	100	1	>150	196	20	15	2000 (N')	3,30	187	179	22	25	1900	100	1000	1	16	2	1600	3,20	/	18	1	1700
47.2	2006	Filets de cabillaud sans arête	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.20	2006	Steak thon albacore	P1	Raw fish	10	100	1	>150	205	22	25	2200 (N')	3,34	186	192	22	20	1900	100	1000	1	19	2	1900	3,28	/	20	1	1900
47.21	2006	Steak de thon albacore	P1	Raw fish	10	100	0,1	33	43	2	3	3200	3,51	32	42	3	2	3600	100	1000	1	36	4	3600	3,56	/	38	4	3800
47.22	2006	Dos de cabillaud	P1	Raw fish	10	100	0,1	44	60	5	9	4500	3,65	66	60	15	11	6900	100	1000	1	59	6	5900	3,77	/	65	7	6500
47.23	2006	Dos de cabillaud	P1	Raw fish	10	100	0,1	61	57	5	12	6000	3,78	51	60	2	10	5600	100	1000	1	62	6	6200	3,79	/	62	6	6200
47.24	2006	Dos de cabillaud	P1	Raw fish	10	100	0,1	83	103	10	20	8500	3,93	90	102	13	14	10000	100	1000	1	95	10	9500	3,98	/	95	9	9500
47.3	2006	Pavé de saumon (1er prix)	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.4	2006	Dos de cabillaud	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.5	2006	Pavé de cabillaud sans arête	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.6	2006	Steak e thon albacore	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.7	2006	Pavé de saumon Kéta	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.8	2006	Cœur de filet thon albacore	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.9	2006	Marmite du pêcheur	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
47.1	2006	Blancs d'encornets Loligo	P1	Raw fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.14	2006	Thon fumé sauvage	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.1	2006	Filets de harengs fumés doux	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.10	2006	Thon fumé sauvage	P2	Smocked fish	10	100	1	5	1	0	0	50 (NE)	1,70	5	5	0	0	50	10	100	1	4	0	40 (NE)	1,60	/	0	0	<10
48.11	2006	Flétan noir fumé	P2	Smocked fish	10	100	1	130	135	15	14	1300	3,11	135	142	14	13	1400	10	100	1	140	15	1400	3,15	/	135	15	1400
48.12	2006	Thon fumé sauvage	P2	Smocked fish	10	100	1	5	4	0	0	50 (NE)	1,70	6	5	0	0	55	10	100	1	4	0	40 (NE)	1,60	/	6	0	60
48.13	2006	Saumon fumé 1er prix	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.15	2006	Haddock	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.16	2006	Saumon fumé 1er prix	P2	Smocked fish	10	100	0,1	140	132	12	10	14000	4,15	140	132	22	16	14000	100	1000	1	139	12	14000	4,15	/	145	16	15000
48.17	2006	Saumon fumé 1er prix	P2	Smocked fish	10	100	0,1	>150	187	30	20	30000 (N')	4,48	191	195	17	24	19000	1000	10000	1	20	2	20000	4,30	/	21	1	20000

					Reference method : NF EN ISO 11290-2 #																Alternative method : ALOA COUNT surface									
N°	Validation	Product (french name)	Cat	Type	1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2					1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h								45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h				Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2												
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
48.18	2006	Thon fumé sauvage	P2	Smocked fish	100	1000	0,1	43	42	10	6	48000	4,68	43	43	6	5	44000	1000	10000	1	38	4	38000	4,58	/	42	4	42000
48.19	2006	Thon fumé sauvage	P2	Smocked fish	100	1000	0,1	90	88	4	6	85000	4,93	61	72	8	7	67000	1000	10000	1	63	6	63000	4,80	/	63	6	63000
48.2	2006	Flétan noir	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.20	2006	Haddock	P2	Smocked fish	100	1000	0,1	>150	148	21	11	210000 (N')	5,32	143	148	25	13	150000	1000	10000	1	145	16	150000	5,18	/	150	16	150000
48.21	2006	Haddock	P2	Smocked fish	10	100	0,1	>150	999	>150	999	>150000	>5,18	999	999	999	999	999	100	1000	1	>150	>150	>150000	>5,18	/	999	999	999
48.3	2006	Thon fumé sauvage	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.4	2006	Truite fumée Auchan	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.5	2006	Allumettes de saumon fumé	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.6	2006	Saumon fumé 1er prix	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.7	2006	Filets de maquereaux fumés	P2	Smocked fish	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
48.8	2006	Filet de hareng fumé doux	P2	Smocked fish	10	100	0,1	85	82	8	9	8500	3,93	87	86	7	8	8500	100	1000	1	89	9	8900	3,95	/	82	8	8200
48.9	2006	Flétan noir fumé	P2	Smocked fish	10	100	0,1	60	59	7	6	6100	3,79	61	58	8	6	6000	100	1000	1	51	5	5100	3,71	/	52	5	5200
67	2018	Sardine aux tomates	P3	Processed seafood	10	100	1	62	/	8	/	640	2,81	/	/	/	/	/	10	100	1	53	5	530	2,72	530	/	/	/
68	2018	Filet de lieu noir carottes	P3	Processed seafood	10	100	1	49	/	5	/	490	2,69	/	/	/	/	/	10	100	1	53	5	530	2,72	530	/	/	/
69	2018	Surimi	P3	Processed seafood	10	100	1	68	/	8	/	690	2,84	/	/	/	/	/	10	100	1	49	2	460	2,66	460	/	/	/
70	2018	Poisson pané	P3	Processed seafood	10	100	1	60	/	4	/	580	2,76	/	/	/	/	/	10	100	1	71	3	670	2,83	670	/	/	/
71	2018	steack saumon ciboulette	P3	Processed seafood	10	100	1	70	/	5	/	680	2,83	/	/	/	/	/	10	100	1	70	2	660	2,82	660	/	/	/
27.1	2006	chou vert	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.10	2006	Maches	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.11	2006	Persil	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.12	2006	Aneth	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.2	2006	Betterave crue	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.3	2006	Chou Bruxelles	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.4	2006	Poireaux	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.5	2006	Céleri branche	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.6	2006	Courgettes	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.7	2006	Salsifis crus	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.8	2006	Epinards	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
27.9	2006	Navets	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
36.1	2006	Salade verte	V1	Fresh vegetables	10	100	1	6	5	1	1	60 (NE)	1,78	4	7	0	0	55	10	100	1	2	0	20	1,30	/	4	0	40
36.2	2006	Endives fraiches	V1	Fresh vegetables	10	100	1	10	10	1	3	100	2,00	5	7	3	0	60	10	100	1	6	0	60 (NE)	1,78	/	9	0	90
36.3	2006	Salade mélange + carottes	V1	Fresh vegetables	10	100	1	>150	999	>150	999	>15000	>4,18	999	999	999	999	999	10	100	1	>150	>150	>15000	>4,18	/	999	999	999

					Reference method : NF EN ISO 11290-2 #															*Alternative method : ALOA COUNT surface*									
N°	Validation	Product (french name)	Cat	Type	1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2					1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h								45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h				Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2												
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
33.1	2006	Blanc de poireau	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
33.2	2006	Vert de poireau	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
33.3	2006	Salade	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
39.1	2006	Scarole de jardin	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
39.2	2006	Chou frisé	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
39.3	2006	Vert de poireau	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
39.4	2006	Scorsonère jardin	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
39.5	2006	maches jardin	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
39.6	2006	Feuilles de chou de Bruxelles	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
39.7	2006	Epinards jardin	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
40.1	2006	Radis noir	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
40.2	2006	Radis roses	V1	Fresh vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
40.3	2006	Chou rouge	V1	Fresh vegetables	10	100	1	1	6	0	1	10	1,00	2	7	1	0	45	10	100	1	1	0	10	1,00	/	2	0	20
41.1	2006	Mâche tendre	V1	Fresh vegetables	10	100	1	4	2	0	0	40 (NE)	1,60	4	2	0	0	30	10	100	1	6	1	60 (NE)	1,78	/	5	0	50
37	2018	Tomate	V1	Fresh vegetables	10	100	1	18	/	2	/	180	2,26	/	/	/	/	/	10	100	1	30	4	310	2,49	310	/	/	/
85	2018	brocolis	V1	Fresh vegetables	10	100	1	46	/	5	/	460	2,66	/	/	/	/	/	10	100	1	40	1	370	2,57	370	/	/	/
86	2018	tomates	V1	Fresh vegetables	10	100	1	37	/	6	/	390	2,59	/	/	/	/	/	10	100	1	49	4	480	2,68	480	/	/	/
51.1	2006	Petits pois extra fins	V2	Frozen vegetables	10	100	1	3	4	1	1	40	1,60	5	1	0	0	30	10	100	1	3	0	30	1,48	/	0	0	<10
51.2	2006	Palets aux petits légumes	V2	Frozen vegetables	10	100	1	7	8	0	0	60 (NE)	1,78	6	5	1	0	55	10	100	1	12	1	120	2,08	/	10	1	100
51.3	2006	Epinards en branche portions	V2	Frozen vegetables	10	100	1	13	10	2	0	140	2,15	10	14	2	1	120	10	100	1	26	3	260	2,41	/	22	2	220
51.4	2006	Haricots verts très fins 1er prix	V2	Frozen vegetables	10	100	1	28	18	2	3	270	2,43	23	23	2	2	230	10	100	1	29	3	290	2,46	/	27	3	270
51.5	2006	Légumes pour potage	V2	Frozen vegetables	10	100	1	3	7	0	1	30	1,48	3	8	0	1	55	10	100	1	10	0	90	1,95	/	10	1	100
51.6	2006	Légumes pour ratatouille	V2	Frozen vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
51.7	2006	Epinards hachés portions	V2	Frozen vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
51.8	2006	Légumes aux pois gourmands	V2	Frozen vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
87	2018	velouté potiron butternut	V2	Frozen vegetables	10	100	1	43	/	4	/	430	2,63	/	/	/	/	/	10	100	1	33	5	350	2,54	350	/	/	/
88	2018	poelée de légumes	V2	Frozen vegetables	10	100	1	29	/	4	/	300	2,48	/	/	/	/	/	10	100	1	35	6	370	2,57	370	/	/	/
41.11	2006	Betteraves cuites vapeur	V3	Processed vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
41.2	2006	Cœur de frisée croquant	V3	Processed vegetables	10	100	1	0	2	0	0	<10	<1	2	0	0	0	10	10	100	1	2	0	20	1,30	/	1	0	10
41.3	2006	Cœur de laitue tendre	V3	Processed vegetables	10	100	1	26	28	1	2	250	2,40	34	30	3	3	320	10	100	1	35	4	360	2,56	/	18	2	180

N°	Validation	Product (french name)	Cat	Type	Reference method : NF EN ISO 11290-2 #															Alternative method : ALOA COUNT surface									
					1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2						1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h									45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h					Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2													
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
41.4	2006	Cœur de scarole croquant	V3	Processed vegetables	10	100	1	18	16	3	2	190	2,28	18	17	2	2	180	10	100	1	16	2	160	2,20	/	18	2	180
41.5	2006	Salade mélangée	V3	Processed vegetables	10	100	1	57	50	7	7	580	2,76	50	62	8	7	580	10	100	1	53	5	530	2,72	/	51	5	510
41.6	2006	Salade mêlée	V3	Processed vegetables	10	100	1	26	18	2	0	260	2,41	23	28	1	4	250	10	100	1	25	2	250	2,40	/	25	3	250
41.7	2006	Salade d'épinard frais	V3	Processed vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
41.8	2006	Chou rouge émincé	V3	Processed vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
41.9	2006	salade de lentilles cuites	V3	Processed vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
41.10	2006	Betteraves cubes cuites	V3	Processed vegetables	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
90	2018	Betterave cuite	V3	Processed vegetables	10	100	1	78	/	6	/	760	2,88	/	/	/	/	/	10	100	1	84	7	830	2,92	830	/	/	/
46.1	2006	Mayonnaise aux œufs frais	T1	RTE and RTRH	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
46.2	2006	Mayonnaise aux œufs frais	T1	RTE and RTRH	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
46.3	2006	Mayonnaise Covinor	T1	RTE and RTRH	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
46.4	2006	Sauce bourguignonne	T1	RTE and RTRH	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
46.5	2006	Sauce béarnaise	T1	RTE and RTRH	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
46.6	2006	Sauce tartare	T1	RTE and RTRH	10	100	1	8	7	0	1	70 (NE)	1,85	6	7	1	1	65	10	100	1	2	0	20	1,30	/	1	0	10
46.7	2006	sauce aïoli	T1	RTE and RTRH	10	100	1	0	1	0	0	<10	<1	0	2	0	0	20	10	100	1	1	0	10	1,00	/	1	0	10
46.8	2006	Quenelles lyonnaises nature	T1	RTE and RTRH	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
12	2018	Salade composée œufs tomates	T1	RTE and RTRH	10	100	0,1	54	/	2	/	5100	3,71	/	/	/	/	/	10	100	0,1	50	8	5300	3,72	5300	/	/	/
13	2018	Rouleau de printemps	T1	RTE and RTRH	10	100	0,1	30	/	2	/	2900	3,46	/	/	/	/	/	10	100	0,1	19	1	1800	3,26	1800	/	/	/
14	2018	Quiche méditeranéenne	T1	RTE and RTRH	10	100	1	46	/	2	/	440	2,64	/	/	/	/	/	10	100	1	33	3	3300	3,52	3300	/	/	/
15	2018	Salade composée	T1	RTE and RTRH	10	100	0,1	26	/	2	/	2500	3,40	/	/	/	/	/	10	100	0,1	30	1	2800	3,45	2800	/	/	/
16	2018	Salade tomates aux lardons	T1	RTE and RTRH	10	100	0,1	54	/	7	/	5500	3,74	/	/	/	/	/	10	100	0,1	49	4	4800	3,68	4800	/	/	/
52.1	2006	Financier	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.10	2006	Crème brulée	T2	Pastries	10	100	1	10	8	0	1	90	1,95	12	8	1	0	100	10	100	1	17	2	170	2,23	/	16	2	160
52.11	2006	Gratin de framboises	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.12	2006	Mangari	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.13	2006	Abricotier	T2	Pastries	10	100	1	2	1	1	0	30	1,48	4	1	1	0	25	10	100	1	1	0	10	1,00	/	2	0	20
52.14	2006	Tête de nègre	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.15	2006	Paris-Brest	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.16	2006	Gland	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.17	2006	Opéra café	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.19	2006	Framboisier	T2	Pastries	10	100	1	5	7	0	0	50 (NE)	1,70	5	8	0	0	65	10	100	1	8	0	70 (NE)	1,85	/	7	0	70
52.2	2006	Eclair au café	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.20	2006	Tarte aux pommes	T2	Pastries	10	100	1	6	5	0	0	60 (NE)	1,78	4	6	1	0	50	10	100	1	4	0	40 (NE)	1,60	/	4	0	40
52.21	2006	Mille-feuille	T2	Pastries	10	100	1	34	38	3	0	340	2,53	37	35	1	2	340	10	100	1	38	4	380	2,58	/	40	4	400
52.23	2006	Gland vanille	T2	Pastries	10	100	1	89	95	11	12	910	2,96	85	98	9	13	930	10	100	1	92	9	920	2,96	/	90	9	900

N°	Validation	Product (french name)	Cat	Type	Reference method : NF EN ISO 11290-2 #															Alternative method : ALOA COUNT surface										
					1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2						1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h									45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h					Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2													
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
52.3	2006	Moka café	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.4	2006	Mousse framboise	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.5	2006	Tartelette framboise	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.6	2006	Délice à l'orange	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.7	2006	Tartelette à la cerise	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.8	2006	Flan coco	T2	Pastries	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
52.9	2006	Mousse au chocolat	T2	Pastries	10	100	1	4	6	0	0	40 (NE)	1,60	3	2	0	1	25	10	100	1	7	0	60 (NE)	1,78	/	3	0	30
45.1	2006	Œufs bio Auchan	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
45.2	2006	œufs de basse cour	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
45.3	2006	Œufs label rouge	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
45.4	2006	Gros œufs coques Lustucru	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	1	0	0	0	5	10	100	1	0	0	<10	<1	/	0	0	<10
45.5	2006	Œufs bio	T3	Raw and cooked eggs	10	100	1	>150	143	20	17	2000 (N')	3,30	149	147	17	16	1500	10	100	1	139	15	1400	3,15	/	150	14	1500
45.6	2006	Œufs de basse-cour	T3	Raw and cooked eggs	10	100	1	60	55	8	6	620	2,79	62	60	9	9	640	10	100	1	59	6	590	2,77	/	65	7	650
45.8	2006	Œufs gros coques	T3	Raw and cooked eggs	10	100	1	3	4	0	0	30	1,48	3	5	1	0	40	10	100	1	3	0	30	1,48	/	8	0	80
45.9	2006	Œufs bio	T3	Raw and cooked eggs	10	100	1	9	9	0	1	80 (NE)	1,90	16	8	2	1	120	10	100	1	12	1	120	2,08	/	10	0	100
53.1	2006	Blanc d'œuf	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
53.12	2006	Œufs durs	T3	Raw and cooked eggs	10	100	1	5	4	0	0	50 (NE°	1,70	4	4	0	0	40	10	100	1	4	0	40 (NE)	1,60	/	3	0	30
53.13	2006	Blanc d'œuf	T3	Raw and cooked eggs	10	100	1	1	2	0	0	10	1,00	1	3	0	0	20	10	100	1	3	0	30	1,48	/	2	0	20
53.2	2006	Jaune d'œuf	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
53.3	2006	œufs durs	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
53.4	2006	Blanc d'œuf	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
53.5	2006	Jaune d'œuf	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
53.6	2006	Œufs durs	T3	Raw and cooked eggs	10	100	1	0	2	0	0	<10	<1	1	1	0	0	10	10	100	1	3	0	30	1,48	/	0	0	<10
53.7	2006	Blanc d'œuf	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
53.8	2006	Jaune d'œuf	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
53.9	2006	Œufs durs	T3	Raw and cooked eggs	10	100	1	0	0	0	0	<10	<1	0	0	0	0	<10	10	100	1	0	0	<10	<1	/	0	0	<10
89	2018	Œuf mollet	T3	Raw and cooked eggs	10	100	1	44	/	6	/	460	2,66	/	/	/	/	/	10	100	1	24	1	230	2,36	230	/	/	/
72	2018	chiffo	E1	Surface	10	100	1	46	/	4	/	460	2,66	/	/	/	/	/	10	100	1	45	5	460	2,66	460	/	/	/
73	2018	Chiffonnette abattoir carcasse	E1	Surface	10	100	1	22	/	2	/	220	2,34	/	/	/	/	/	10	100	1	34	3	340	2,53	340	/	/	/
74	2018	Ecouvillon broyeur viande hachée	E1	Surface	10	100	1	13	/	0	/	120	2,08	/	/	/	/	/	10	100	1	12	3	140	2,15	140	/	/	/
75	2018	Chiffonnette plan de travail charcuterie boucherie	E1	Surface	10	100	1	23	/	1	/	220	2,34	/	/	/	/	/	10	100	1	35	0	320	2,51	320	/	/	/

N°	Validation	Product (french name)	Cat	Type	Reference method : NF EN ISO 11290-2 #															Alternative method : ALOA COUNT surface									
					1st dilution	2nd dilution	Volume	Repetition 1						Repetition 2						1st dilution	2nd dilution	Volume	Repetition 1					Répétition 2		
								48h						48h									45h				72h	45h		
								1st dilution		2nd dilution		Result 48h		1ère dilution		2ème dilution		Rés. 48h					Nbre col. dil.1	Nbre col. dil.2	Result 45h		Result after 72h 5°C	Nbre col. dil.1	Nbre col. dil.2	Rés. 45h
								Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2			Nbre col. boîte 1	Nbre col. boîte 2	Nbre col. boîte 1	Nbre col. boîte 2													
							V mL	m1	m'1	m2	m'2	CFU/g	log CFU/g	m1	m'1	m2	m'2	CFU/g			V mL	m1	m2	CFU/g	log CFU/g	CFU/g	m1	m2	CFU/g
76	2018	Chiffonnette trancheuse	E1	Surface	10	100	1	19	/	3	/	200	2,30	/	/	/	/	/	10	100	1	13	1	130	2,11	130	/	/	/
77	2018	eau composite 7287.1	E2	Process water	10	100	1	27	/	3	/	270	2,43	/	/	/	/	/	10	100	1	21	1	200	2,30	200	/	/	/
78	2018	eau composite alafafa	E2	Process water	10	100	1	24	/	2	/	240	2,38	/	/	/	/	/	10	100	1	36	3	360	2,56	360	/	/	/
79	2018	eau composite 7265,3	E2	Process water	10	100	1	41	/	3	/	400	2,60	/	/	/	/	/	10	100	1	28	4	290	2,46	290	/	/	/
80	2018	eau de drain	E2	Process water	10	100	1	16	/	1	/	160	2,20	/	/	/	/	/	10	100	1	18	1	170	2,23	170	/	/	/
81	2018	eau de rinçage	E2	Process water	10	100	1	19	/	5	/	220	2,34	/	/	/	/	/	10	100	1	13	0	1220	3,09	1220	/	/	/
19	2018	déchets plan de travail boulangerie	E3	Dust/residues	10	100	0,1	25	/	3	/	2500	3,40	/	/	/	/	/	10	100	0,1	18	0	1600	3,20	1600	/	/	/
20	2018	déchets evier charcuterie	E3	Dust/residues	10	100	0,1	43	/	2	/	4100	3,61	/	/	/	/	/	10	100	0,1	43	4	4300	3,63	4300	/	/	/
21	2018	déchets sol boulangerie	E3	Dust/residues	10	100	0,1	46	/	2	/	4400	3,64	/	/	/	/	/	10	100	0,1	34	4	3500	3,54	3500	/	/	/
22	2018	déchets sol charcuterie	E3	Dust/residues	10	100	0,1	35	/	3	/	3500	3,54	/	/	/	/	/	10	100	0,1	26	3	2600	3,41	2600	/	/	/
82	2018	Déchets boulangerie	E3	Dust/residues	10	100	1	20	/	6	/	240	2,38	/	/	/	/	/	10	100	1	18	0	160	2,20	160	/	/	/

Appendix 4: Relative accuracy: *Listeria monocytogenes* ISO/Aloa Count pour-plating inoculation

				Reference method : ISO 11290-2 #																Alternative method : ALOA COUNT / EPT -DEPTH																			
							Repetition 1							Répétition 2										Repetition 1									Répétition 2							
							24h			48h				24h			48h							24h			45h				72h	24h			45h			72h	
Validation	Product (french name)	Cat.	Type	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48 h	Result 48 h	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48h	Conf. Col.	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 45 h		Reslt after 72h 5°C	1ère dil.	2ème dil.	Résult 24 h	1ère dil.	2ème dil.	Résult 45 h	Réslt après 72h 5°C	Conf. Col.
							Nb col	Nb col.	ufc/g	Nb col	Nb col	ufc/g	log ufc/g	Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g					Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g	log ufc/g		Nb col	Nb col	ufc/g	Nb col	Nb col	ufc/g		
						V (mL)	n1	n2		m1	m2			n1	n2		m1	m2					V (mL)	n1	n2	ufc/g	m1	m2	ufc/g	log ufc/g	CFU/g	n1	n2	ufc/g	m1	m2	ufc/g	CFU/g	
2012	Fromage chèvre	L1	Raw milh cheese	10	100	1	15	0	140	15	1	150	2,18	19	2	191	19	2	191	yes	10	100	1	13	1	130	13	1	130	2,11	130	12	1	118	12	1	118	120	Yes
2012	Fromage chèvre	L1	Raw milh cheese	10	100	1	42	5	430	42	5	430	2,63	40	4	400	40	4	400	yes	10	100	1	34	3	340	34	3	340	2,53	340	28	3	282	30	3	300	300	yes
2012	Fromage chèvre	L1	Raw milh cheese	10	100	1	74	4	710	74	4	710	2,85	77	7	764	77	7	764	yes	10	100	1	79	10	810	79	10	810	2,91	810	63	6	627	63	6	627	630	yes
2012	Fromage chèvre	L1	Raw milh cheese	10	100	1	80	6	780	80	6	790	2,90	82	7	809	82	7	809	yes	10	100	1	75	8	760	83	9	840	2,92	840	62	6	618	71	7	709	710	yes
2012	Fromage chèvre	L1	Raw milh cheese	10	100	0,1	12	1	1200	12	1	1200	3,08	14	2	1455	14	2	1455	yes	10	100	1	116	7	120	126	9	1200	3,08	1200	74	4	709	131	5	1236	1200	yes
2012	Lait de chèvre	L2	Raw milk	10	100	0,1	16	3	1700	22	3	2300	3,36	14	1	1364	19	4	2091	yes	10	100	1	153	5	1400	>150	10	1000 (N')	3,00	1000	160	13	1573	999	19	1900	1900	yes
2012	Lait de chèvre	L2	Raw milk	10	100	1	4	0	40	4	0	40 (Ne)	1,60	5	0	50	5	0	50	yes	10	100	1	1	0	10	1	0	10	1,00	10	2	0	20	2	0	20	< 40	yes
2012	Lait de chèvre	L2	Raw milk	10	100	1	8	1	80	8	1	80 (Ne)	1,90	17	1	164	17	1	164	yes	10	100	1	10	1	100	10	1	100	2,00	100	19	2	191	19	3	200	200	yes
2012	Lait cru de chèvre	L2	Raw milk	100	1000	0,1	10	2	11000	10	2	11000	4,04	11	0	10000	13	1	12727	yes	1000	10000	1	9	0	9000	10	1	10000	4,00	10000	7	1	7000	9	1	9000	9000	yes
2006	Lait cru	L2	Raw milk	10	100	1	/	/	/	20	2	200	2,30	/	/	/	13	3	150	yes	10	100	1	/	/	/	19	2	190	2,28	/				16	2	160	/	yes
2006	Lait cru	L2	Raw milk	10	100	1	/	/	/	26	1	250	2,40	/	/	/	15	1	150	yes	10	100	1	/	/	/	9	1	90 (NE)	1,95	/				13	1	130	/	yes
2012	Glace noisette	L3	Dessert	10	100	1	8	0	80	9	0	90 (Ne)	1,95	0	0	0	0	0	0	yes	10	100	1	0	0	<10	0	0	<10	<1	<10	0	0	0	0	0	0	< 10	-
2012	Glace vanille	L3	Dessert	10	100	1	0	0	<10	0	0	<10	<1	0	0	0	0	0	0	-	10	100	1	0	0	<10	0	0	<10	<1	<10	0	0	0	0	0	0	< 10	-
2012	Glace chocolat blanc	L3	Dessert	10	100	1	34	5	360	75	6	740	2,87	51	5	509	81	7	800	yes	10	100	1	51	5	510	75	6	740	2,87	740	42	4	418	66	5	645	650	yes
2012	Danette pistache	L3	Dessert	10	100	1	31	3	310	34	3	340	2,53	36	4	364	44	4	436	yes	10	100	1	26	2	260	29	4	300	2,48	300	23	6	264	32	6	345	350	yes
2012	Danette caramel	L3	Dessert	10	100	1	17	1	160	18	1	170	2,23	24	2	236	27	2	264	yes	10	100	1	18	1	170	19	1	180	2,26	180	26	2	255	27	3	273	270	yes
2012	Sveltesse vanille pécan	L3	Dessert	10	100	1	12	1	120	13	1	130	2,11	14	1	136	15	1	145	yes	10	100	1	10	0	90	10	0	90	1,95	90	17	1	164	17	1	164	160	yes
2012	Dessert lacté vanille	L3	Dessert	100	1000	0,1	35	3	35000	36	3	35000	4,54	27	9	32727	30	9	35455	yes	1000	10000	1	32	3	32000	35	4	35000	4,54	35000	26	1	24545	33	2	31818	32000	yes
2012	Glace vanille	L3	Dessert	10	100	1	33	3	330	72	7	720	2,86	24	2	236	63	6	627	yes	10	100	1	27	3	270	54	6	550	2,74	550	23	2	227	55	4	536	540	yes
2012	Chair crue bœuf/veau	C1	Raw meat	10	100	1	0	0	<10	0	0	<10	<1	0	0	0	0	0	0	-	10	100	1	0	0	<10	0	0	<10	<1	<10	0	0	0	0	0	0	< 10	-
2012	Soubressade	C1	Raw meat	10	100	1	3	0	30	3	0	30	1,48	4	0	40	4	1	40	yes	10	100	1	1	0	10	1	0	10	1,00	10	1	0	10	1	0	10	< 40	yes
2012	Onglet cru	C1	Raw meat	10	100	1	18	2	180	18	2	180	2,26	12	1	118	12	1	118	yes	10	100	1	19	1	180	19	1	180	2,26	180	21	2	209	21	2	209	210	yes
2012	Steak tendre	C1	Raw meat	10	100	1	5	0	50	5	0	50 (Ne)	1,70	10	0	91	10	0	91	yes	10	100	1	9	0	90	9	0	90 (Ne)	1,95	90	10	0	91	10	1	100	100	yes
2012	Saucisse de Toulouse	C1	Raw meat	10	100	1	0	0	<10	0	0	<10	<1	0	0	0	0	0	0	-	10	100	1	0	0	<10	0	0	<10	<1	<10	2	0	20	2	0	20	< 40	yes
2012	Steak haché	C1	Raw meat	10	100	1	2	0	20	2	0	20	1,30	4	0	40	4	0	40	yes	10	100	1	6	1	60	6	1	60 (Ne)	1,78	60	3	0	30	4	0	40	40	yes
2012	Steak haché	C1	Raw meat	10	100	1	43	3	420	44	3	430	2,63	45	1	418	45	3	436	yes	10	100	1	38	1	360	38	1	360	2,56	360	30	2	291	30	2	291	290	yes
2012	Steak haché	C1	Raw meat	10	100	1	128	9	1200	128	9	1200	3,08	130	10	1273	130	11	1282	yes	10	100	1	91	13	950	92	13	960	2,98	960	94	16	1000	94	16	1000	1000	yes

				Reference method : ISO 11290-2 #																Alternative method : ALOA COUNT / EPT -DEPTH																	
							Repetition 1							Répétition 2									Repetition 1									Répétition 2						
							24h			48h				24h			48h						24h			45h				72h	24h			45h			72h	
Validation	Product (french name)	Cat.	Type	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48 h	Result 48 h	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48h	Conf. Col.	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 45 h		Reslt after 72h 5°C	1ère dil.	2ème dil.	Résult 24 h	1ère dil.	2ème dil.	Résult 45 h	Réslt après 72h 5°C	Conf. Col.
							Nb col	Nb col.	ufc/g	Nb col	Nb col	ufc/g	log ufc/g	Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g					Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g	log ufc/g		Nb col	Nb col	ufc/g	Nb col	Nb col	ufc/g		
						V (mL)	n1	n2		m1	m2			n1	n2		m1	m2					V (mL)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
2012	Treaming	C1	Raw meat	10	100	0,1	48	3	4600	56	3	5400	3,73	52	4	5091	54	4	5273	yes	100	1000	1	40	4	4000	42	4	4200	3,62	4200	47	3	4545	47	4	4636	4600	yes
2012	Cœur	C1	Raw meat	10	100	0,1	50	5	5000	50	5	5000	3,70	51	5	5091	51	5	5091	yes	100	1000	1	39	4	3900	43	4	4300	3,63	4300	50	3	4818	54	5	5364	5400	yes
2012	Foie	C1	Raw meat	100	1000	0,1	54	4	53000	54	4	53000	4,72	54	5	53636	54	5	53636	yes	1000	10000	1	37	3	36000	39	3	38000	4,58	38000	38	3	37273	40	3	39091	39000	yes
2012	Rillettes de canard	C2	Delicatessen	10	100	0,1	>150	>150	>150000	>150	>150	>150000	>5,18	>150	>150	>150000	>150	>150	>150000	yes	10	100	1	>150	>150	>150000	>150	>150	>15000	>4,18	>15000	999	999	99900	999	999	99900	> 15000	yes
2012	Rillettes de porc	C2	Delicatessen	10	100	0,1	29	4	3000	29	4	3000	3,48	25	5	2727	26	5	2818	yes	10	100	1	>150	19	1900	>150	21	2100 (N')	3,32	2100	99	20	2000	99	22	2200	2200	yes
2012	Rillettes pur porc	C2	Delicatessen	10	100	0,1	36	4	3600	36	4	3600	3,56	34	3	3364	34	3	3364	yes	100	1000	1	21	3	2200	22	3	2300	3,36	2300	25	4	2636	26	4	2727	2700	yes
2012	Rillettes de porc	C2	Delicatessen	10	100	1	35	4	360	43	5	440	2,64	42	5	427	51	6	518	yes	10	100	1	44	1	410	49	2	460	2,66	460	45	2	427	46	3	445	450	yes
2006	Paté de foie	C2	Delicatessen	100	1000	0,1	/	/	/	13	2	14000	4,15	/	/	/	13	1	13000	yes	100	1000	1	/	/	/	135	14	14000	4,15	/	/	/	/	120	12	12000	/	yes
2006	Rillettes pur porc	C2	Delicatessen	10	100	1	/	/	/	148	13	1500	3,18	/	/	/	149	16	1500	yes	10	100	1	/	/	/	146	15	1500	3,18	/	/	/	/	139	14	1400	/	yes
2012	Poulet mariné	C3	Processed foods	10	100	1	23	1	220	24	1	230	2,36	31	3	309	32	3	318	yes	10	100	1	22	2	220	24	2	240	2,38	240	21	1	200	21	2	209	210	yes
2012	Bœuf cuit	C3	Processed foods	10	100	1	4	0	40	5	0	50 (Ne)	1,70	7	1	70	8	1	80	yes	10	100	1	1	0	10	1	0	10	1,00	10	2	0	20	2	0	20	< 40	yes
2012	Sauté de porc	C3	Processed foods	10	100	1	16	1	160	16	1	160	2,20	12	1	118	12	1	118	yes	10	100	1	11	1	110	11	1	110	2,04	110	12	1	118	12	1	118	120	yes
2018	Boulette de bœuf	C3	Processed foods	10	100	1	45	3	440	52	3	500	2,70	/	/	/	/	/	/	yes	10	100	1	55	1	510	55	1	510	2,71	510	/	/	/	/	/	/	/	yes
2018	Emincé de volaille	C3	Processed foods	10	100	1	48	3	460	60	3	570	2,76	/	/	/	/	/	/	yes	10	100	1	41	4	410	43	5	440	2,64	440	/	/	/	/	/	/	/	yes
2018	Sauté de porc	C3	Processed foods	10	100	1	25	0	230	39	1	360	2,56	/	/	/	/	/	/	yes	10	100	1	36	5	370	37	7	400	2,60	400	/	/	/	/	/	/	/	yes
2012	Pavé de saumon	P1	Raw fish	10	100	1	30	5	320	30	5	320	2,51	26	4	273	26	4	273	yes	10	100	1	33	3	330	33	3	330	2,52	330	23	2	227	23	2	227	230	yes
2012	Pavé truite	P1	Raw fish	10	100	1	6	0	60	7	0	70 (Ne)	1,85	7	2	70	7	2	70	yes	10	100	1	5	0	50	6	0	60 (Ne)	1,78	60	4	0	40	5	0	50	50	yes
2012	Filet de sole	P1	Raw fish	10	100	1	50	5	500	50	5	500	2,70	50	2	473	50	2	473	yes	10	100	1	45	4	4450	45	4	450	2,65	450	38	4	382	38	4	382	380	yes
2012	Colin d'Alaska	P1	Raw fish	10	100	0,1	41	3	4000	41	4	4100	3,61	42	2	4000	42	2	4000	yes	100	1000	1	29	3	2900	30	3	3000	3,48	3000	24	3	2455	24	3	2455	2500	yes
2012	Filet lieu noir	P1	Raw fish	10	100	1	60	6	600	90	10	910	2,96	50	3	482	109	10	1082	yes	10	100	1	40	1	370	89	8	880	2,94	880	59	7	600	113	11	1127	1100	yes
2012	Haddock fumé	P2	Smocked fish	10	100	1	8	1	80	8	1	80 (Ne)	1,90	10	1	100	10	1	100	yes	10	100	1	6	0	60	6	0	60 (Ne)	1,78	60	10	0	91	10	0	91	91	yes
2012	Flétan fumé	P2	Smocked fish	10	100	0,1	26	2	2500	26	3	2600	3,41	30	3	3000	31	3	3091	yes	10	100	1	>150	25	2500	>150	25	2500 (N')	3,40	2500	999	26	2600	999	26	2600	2600	yes
2012	Saumon fumé	P2	Smocked fish	10	100	1	58	6	580	88	7	860	2,93	50	4	491	90	6	873	yes	10	100	1	52	8	550	70	10	730	2,86	730	36	4	364	64	8	655	650	yes
2012	Truite fumée	P2	Smocked fish	10	100	1	66	5	64	72	7	720	2,86	62	4	600	66	6	655	yes	10	100	1	58	4	560	58	5	570	2,76	570	84	4	800	84	4	800	800	yes
2006	Flétan noir fumé	P2	Smocked fish	10	100	1	/	/	/	130	15	1400	3,15	/	/	/	135	14	1400	yes	10	100	1	/	/	/	140	16	1400	3,15	/	/	/	/	139	12	1400	/	yes
2012	Nuggets de poisson	P3	Processed seafood	100	1000	1	50	5	5000	55	5	5500	3,74	52	6	5273	54	6	5455	yes	100	1000	1	34	4	3500	34	4	3500	3,54	3500	40	3	3909	40	3	3909	3900	yes
2012	Crevettes roses	P3	Processed seafood	10	100	1	71	4	68	71	4	680	2,83	50	5	500	50	5	500	yes	10	100	1	45	5	460	45	5	460	2,66	460	40	3	391	40	4	400	400	yes
2012	Tarama	P3	Processed seafood	1000	10000	1	45	6	46000	60	8	62000	4,79	40	4	40000	57	7	58182	yes	1000	10000	1	32	3	32000	40	4	40000	4,60	40000	33	4	33636	43	4	42727	43000	yes
2012	Mélange fruits de mer	P3	Processed seafood	10	100	1	18	2	180	19	2	190	2,28	6	1	60	7	1	70	yes	10	100	1	7	0	70	7	0	70 (Ne)	1,85	70	13	1	127	13	1	127	130	yes
2012	Colin à la bretonne	P3	Processed seafood	100	1000	0,1	18	1	17000	20	1	19000	4,28	15	2	15455	21	3	21818	yes	1000	10000	1	15	1	15000	21	1	20000	4,30	20000	14	2	14545	16	4	18182	18000	yes

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							Repetition 1							Répétition 2										Repetition 1									Répétition 2							
							24h			48h				24h			48h							24h			45h				72h	24h			45h			72h	
Validation	Product (french name)	Cat.	Type	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48 h	Result 48 h	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48h	Conf. Col.	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 45 h		Reslt after 72h 5°C	1ère dil.	2ème dil.	Résult 24 h	1ère dil.	2ème dil.	Résult 45 h	Réslt après 72h 5°C	Conf. Col.
							Nb col	Nb col.	ufc/g	Nb col	Nb col	ufc/g	log ufc/g	Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g					Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g	log ufc/g		Nb col	Nb col	ufc/g	Nb col	Nb col	ufc/g		
						V (mL)	n1	n2		m1	m2			n1	n2		m1	m2					V (mL)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
2012	Fraise	V1	Fresh vegetables	10	100	0,1	11	2	1200	19	2	1900	3,28	15	1	1455	21	2	2091	yes	10	100	1	125	8	1200	150	8	1500	3,18	1500	113	5	1073	133	5	1255	1300	yes
2012	Mélange salade 4ème gamme	V1	Fresh vegetables	10	100	1	10	0	90	10	0	90	1,95	6	0	60	6	0	60	yes	10	100	1	6	1	60	8	1	80 (Ne)	1,90	80	7	0	70	7	0	70	70	yes
2012	Aubergine	V1	Fresh vegetables	100	1000	0,1	27	2	26000	27	2	26000	4,41	22	1	20909	22	1	20909	yes	1000	10000	1	17	1	16000	17	1	16000	4,20	16000	13	3	14545	13	3	14545	15000	yes
2012	Poivron rouge	V1	Fresh vegetables	10	100	1	80	8	800	94	8	930	2,97	80	6	782	104	7	1009	yes	10	100	1	46	4	460	62	5	610	2,79	610	56	8	582	68	8	691	690	yes
2006	Endives fraiches	V1	Fresh vegetables	10	100	1	/	/	/	10	1	100	2,00	/	/	/	5	3	60	yes	10	100	1	/	/	/	9	1	90 (Ne)	1,95	/	/	/	/	9	0	80	/	yes
2012	Mélange ratatouille	V2	Frozen vegetables	10	100	1	20	2	200	20	2	200	2,30	29	2	282	29	2	282	yes	10	100	1	21	2	210	21	2	210	2,32	210	21	1	200	21	1	200	200	yes
2012	Salade de fruits exotiques	V2	Frozen vegetables	10	100	1	43	8	460	75	11	780	2,89	46	9	500	80	11	827	yes	10	100	1	53	5	530	59	3	560	2,75	560	44	4	436	57	4	555	550	yes
2012	Mélange légumes couscous	V2	Frozen vegetables	10	100	1	71	6	700	110	13	1100	3,04	75	7	745	126	13	1264	yes	10	100	1	74	6	730	81	8	810	2,91	810	77	7	764	89	9	891	890	yes
2012	Poëlée Périgourdine	V2	Frozen vegetables	10	100	1	10	1	100	10	1	100	2,00	10	0	91	10	0	91	yes	10	100	1	9	0	90	9	1	90 (Ne)	1,95	90	11	1	109	12	1	118	120	yes
2012	Courgettes	V2	Frozen vegetables	10	100	1	29	3	290	80	6	780	2,89	18	2	182	69	6	682	yes	10	100	1	29	2	280	59	6	590	2,77	590	32	3	318	70	6	691	690	yes
2012	Mélange légumes surgelés	V2	Frozen vegetables	100	1000	0,1	10	0	9100	11	0	10000	4,00	11	1	10909	11	1	10909	yes	1000	10000	1	8	2	8000	9	2	9000 (Ne)	3,95	9000	9	1	9000	9	1	9000	9000	yes
2006	Cœur de laitue tendre	V3	Processed vegetables	10	100	1	/	/	/	26	1	250	2,40	/	/	/	34	3	340	yes	10	100	1	/	/	/	25	3	250	2,40	/	/	/	/	24	2	240	/	yes
2006	Cœur de scarole croquant	V3	Processed vegetables	10	100	1	/	/	/	18	3	190	2,28	/	/	/	18	2	190	yes	10	100	1	/	/	/	13	1	130	2,11	/	/	/	/	15	2	150	/	yes
2006	Salade mélangée	V3	Processed vegetables	10	100	1	/	/	/	57	7	580	2,76	/	/	/	50	8	530	yes	10	100	1	/	/	/	58	6	580	2,76	/	/	/	/	56	6	560	/	yes
2006	Salade mêlée	V3	Processed vegetables	10	100	1	/	/	/	26	2	250	2,40	/	/	/	23	1	220	yes	10	100	1	/	/	/	17	2	170	2,23	/	/	/	/	23	2	230	/	yes
2018	Betterave cuite	V3	Processed vegetables	10	100	1	70	6	690	78	6	760	2,88	/	/	/	/	/	/	yes	10	100	1	80	7	790	84	7	830	2,92	830	/	/	/	/	/	/	/	yes
2012	Pizza au thon	T1	RTE and RTRH	10	100	1	19	2	190	19	2	190	2,28	15	0	136	15	0	136	yes	10	100	1	17	0	160	17	0	160	2,20	160	16	2	164	16	2	164	160	yes
2012	Mayonnaise	T1	RTE and RTRH	10	100	1	0	0	<10	0	0	<10	<1	0	0	0	0	0	0	-	10	100	1	0	0	<10	0	0	<10	<1	<10	0	0	0	0	0	0	< 10	-
2012	Mayonnaise	T1	RTE and RTRH	100	1000	0,1	17	2	17000	24	3	25000	4,40	20	2	20000	25	3	25455	yes	1000	10000	1	14	3	15000	20	4	22000	4,34	22000	13	1	12727	19	1	18182	18000	yes
2018	Salade composée œufs tomates	T1	RTE and RTRH	10	100	0,1	26	1	2500	54	2	5100	3,71	/	/	/	/	/	/	yes	100	1000	1	37	3	3600	42	5	4300	3,63	4300	/	/	/	/	/	/	/	yes
2018	Rouleau de printemps	T1	RTE and RTRH	10	100	0,1	10	1	1000	30	2	2900	3,46	/	/	/	/	/	/	yes	100	1000	1	12	2	1300	25	2	2500	3,40	2500	/	/	/	/	/	/	/	yes
2018	Quiche méditéranée	T1	RTE and RTRH	10	100	1	40	2	380	46	2	440	2,64	/	/	/	/	/	/	yes	10	100	1	31	2	300	34	2	330	2,52	330	/	/	/	/	/	/	/	yes
2012	Crème anglaise	T2	Pastries	10	100	1	39	4	390	81	7	800	2,90	31	3	309	60	5	591	yes	10	100	1	41	6	430	57	6	570	2,76	570	38	3	373	54	5	536	540	yes
2012	Crème aux œufs	T2	Pastries	10	100	1	20	2	200	20	2	200	2,30	22	3	227	22	3	227	yes	10	100	1	29	3	290	29	3	290	2,46	290	17	2	173	17	2	173	170	yes

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							24h			48h				24h			48h							24h			45h				72h	24h			45h			72h	
Validation	Product (french name)	Cat.	Type	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48 h	Result 48 h	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48h	Conf. Col.	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 45 h		Reslt after 72h 5°C	1ère dil.	2ème dil.	Résult 24 h	1ère dil.	2ème dil.	Résult 45 h	Réslt après 72h 5°C	Conf. Col.
							Nb col	Nb col.	ufc/g	Nb col	Nb col	ufc/g	log ufc/g	Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g					Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g	log ufc/g		Nb col	Nb col	ufc/g	Nb col	Nb col	ufc/g		
						V (mL)	n1	n2		m1	m2			n1	n2		m1	m2					V (mL)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
2012	Crème anglaise	T2	Pastries	10	100	0,1	10	1	1000	24	2	2400	3,38	11	1	1091	30	3	3000	yes	100	1000	1	13	1	1300	39	4	3900	3,59	3900	8	2	800	26	4	2727	2700	yes
2012	Crème café	T2	Pastries	100	1000	0,1	11	1	11000	11	1	11000	4,04	12	1	11818	12	1	11818	yes	1000	10000	1	10	1	10000	11	1	11000	4,04	11000	9	1	9000	10	1	10000	10000	yes
2006	Mille feuille	T2	Pastries	10	100	1	/	/	/	34	3	340	2,53	/	/	/	37	1	350	yes	10	100	1	/	/	/	37	4	370	2,57	/	/	/	/	39	4	390	/	yes
2006	Œuf bio	T3	Raw and cooked eggs	10	100	1	/	/	/	>150	20	2000 (N')	3,30	/	/	/	149	17	1500	yes	10	100	1	/	/	/	148	16	1500	3,18	/	/	/	/	148	17	1500	/	yes
2006	Œuf de basse cour	T3	Raw and cooked eggs	10	100	1	/	/	/	60	8	620	2,79	/	/	/	62	9	650	yes	10	100	1	/	/	/	61	6	610	2,79	/	/	/	/	59	6	590	/	yes
2006	Œuf bio	T3	Raw and cooked eggs	10	100	1	/	/	/	9	0	80 (Ne)	1,90	/	/	/	16	2	160	yes	10	100	1	/	/	/	9	0	90	1,95	/	/	/	/	10	1	100	/	yes
2006	Œuf dur	T3	Raw and cooked eggs	10	100	1	/	/	/	5	0	50 (Ne)	1,70	/	/	/	4	0	40	yes	10	100	1	/	/	/	4	0	40 (Ne)	1,60	/	/	/	/	6	0	60	/	yes
2018	Œuf mollet	T3	Raw and cooked eggs	10	100	1	24	3	250	44	6	460	2,66	/	/	/	/	/	/	yes	10	100	1	30	1	280	36	2	350	2,54	350	/	/	/	/	/	/	/	yes
2012	Chiffonnette abattoir carcasse Q3	E1	surface	10	100	1	50	5	500	75	6	740	2,87	44	4	436	64	6	636	yes	10	100	1	51	5	510	69	7	690	2,84	690	43	3	418	64	4	618	620	yes
2012	Chiffonnette abattoir carcasse Q4	E1	surface	10	100	1	24	2	240	25	2	250	2,40	29	3	291	30	3	300	yes	10	100	1	17	1	160	20	2	200	2,30	200	21	1	200	22	1	209	210	yes
2012	Chiffonnette abattoir carcasse Q5	E1	surface	10	100	1	41	4	410	41	4	410	2,61	48	5	482	48	5	482	yes	10	100	1	49	5	490	49	5	490	2,69	490	39	4	391	39	4	391	390	yes
2012	Chiffonnette découpe tapis AR	E1	surface	10	100	1	0	0	<10	0	0	<10	<1	0	0	0	1	0	10	yes	10	100	1	0	0	<10	0	0	<10	<1	<10	0	0	0	0	0	0	< 10	-
2012	Chiffonnette découpe tapis AVT	E1	surface	10	100	1	1	0	10	1	0	10	1,00	3	0	30	3	0	30	yes	10	100	1	2	0	20	2	0	20	1,30	20	1	0	10	1	0	10	< 40	yes
2012	Ecouvillon atelier haché, cheminé broyeur 2nd frais	E1	surface	10	100	1	0	0	<10	0	0	<10	<1	0	0	0	0	0	0	-	10	100	1	1	0	10	2	0	20	1,30	20	2	0	20	2	0	20	< 40	yes
2012	Ecouvillon atelier haché, cheminée mélangeur	E1	surface	10	100	1	11	0	100	11	0	100	2,00	17	1	164	17	1	164	yes	10	100	1	11	1	110	11	1	110	2,04	110	15	0	136	15	0	136	140	yes
2012	Ecouvillon atelier haché, roue transpalet	E1	surface	10	100	0,1	68	18	7800	77	18	8600	3,93	81	7	8000	89	8	8818	yes	10	100	1	>150	62	6200	>150	65	6500 (N')	3,81	6500	999	70	7000	999	74	7400	7400	yes

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							24h			48h				24h			48h							24h			45h				72h	24h			45h			72h	
Validation	Product (french name)	Cat.	Type	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48 h	Result 48 h	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 48h	Conf. Col.	1st dilution	2nd dilution	Vol	1 dil	2 dil	Reslt 24 h	1 dil	2 dil	Reslt 45 h		Reslt after 72h 5°C	1ère dil.	2ème dil.	Résult 24 h	1ère dil.	2ème dil.	Résult 45 h	Réslt après 72h 5°C	Conf. Col.
							Nb col	Nb col.	ufc/g	Nb col	Nb col	ufc/g	log ufc/g	Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g					Nbr col.	Nbr col.	ufc/g	Nbr col.	Nbr col.	ufc/g	log ufc/g		Nb col	Nb col	ufc/g	Nb col	Nb col	ufc/g		
						V (mL)	n1	n2		m1	m2			n1	n2		m1	m2					V (mL)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
	te électrique																																						
2012	Ecouvillon évaporateur CF	E1	surface	100	1000	0,1	61	6	61000	61	6	61000	4,79	52	6	52727	52	6	52727	yes	1000	10000	1	59	6	59000	59	6	59000	4,77	59000	49	3	47273	49	3	47273	47000	yes
2012	Ecouvillon hachoir	E1	surface	100	1000	1	117	13	12000	117	13	12000	4,08	131	12	13000	131	12	13000	yes	100	1000	1	133	8	13000	133	9	13000	4,11	13000	129	13	12909	129	13	12909	13000	yes
2012	Chiffonnette plan de travail	E1	surface	10	100	0,1	>150	26	26000	>150	26	26000 (N')	4,41	999	30	30000	999	30	30000	yes	100	1000	1	>150	25	25000	>150	25	25000 (N')	4,40	25000	999	25	25000	999	25	25000	25000	yes
2012	Eau atelier haché, égout frigo MP surg.	E2	Process water	10	100	1	12	1	120	12	1	120	2,08	8	0	80	8	0	80	yes	10	100	1	9	0	90	10	0	90	1,95	90	11	1	109	13	1	127	130	yes
2012	Eau abattoir égout	E2	eau de process	10	100	1	22	1	210	22	1	210	2,32	16	0	145	16	0	145	yes	10	100	1	16	2	160	16	2	160	2,20	160	12	2	127	12	2	127	130	yes
2012	Eau citerne	E2	eau de process	100	1000	1	29	2	2800	88	8	8700	3,94	18	1	1727	86	8	8545	yes	100	1000	1	24	2	2400	80	8	8000	3,90	8000	25	2	2455	79	8	7909	7900	yes
2012	Eau de rinçage	E2	eau de process	100	1000	1	>150	62	62000	>150	62	62000 (N')	4,79	999	67	67000	999	67	67000	yes	100	1000	1	>150	49	49000	>150	49	49000 (N')	4,69	49000	999	55	55000	999	55	55000	55000	yes
2012	Eau rinçage	E2	eau de process	10	100	0,1	17	2	1700	18	2	1800	3,26	19	2	1909	20	2	2000	yes	100	1000	1	17	1	1600	17	1	1600	3,20	1600	18	2	1818	18	2	1818	1800	yes
2012	Eau de rinçage	E2	eau de process	10	100	0,1	22	2	2200	22	2	2200	3,34	20	2	2000	20	2	2000	yes	100	1000	1	17	2	1700	18	2	1800	3,26	1800	19	2	1909	19	2	1909	1900	yes
2018	déchets plan de travail boulangerie	E3	Poussières et résidus	10	100	0,1	24	3	2500	25	3	2500	3,40	/	/	/	/	/	/	yes	100	1000	1	22	0	2000	22	0	2000	3,30	2000	/	/	/	/	/	/	/	yes
2018	déchets evier charcuterie	E3	Poussières et résidus	10	100	0,1	43	2	4100	43	2	4100	3,61	/	/	/	/	/	/	yes	100	1000	1	37	4	3700	38	5	3900	3,59	3900	/	/	/	/	/	/	/	yes
2018	déchets sol boulangerie	E3	Poussières et résidus	10	100	0,1	45	2	4300	46	2	4400	3,64	/	/	/	/	/	/	yes	100	1000	1	23	0	2100	25	0	2300	3,36	2300	/	/	/	/	/	/	/	yes
2018	déchets sol charcuterie	E3	Poussières et résidus	10	100	0,1	34	3	3400	35	3	3500	3,54	/	/	/	/	/	/	yes	100	1000	1	21	1	2000	21	1	2000	3,30	2000	/	/	/	/	/	/	/	yes
2018	Déchets boulangerie	E3	Poussières et résidus	10	100	1	20	3	210	20	6	240	2,38	/	/	/	/	/	/	yes	10	100	1	26	3	260	27	5	290	2,46	290	/	/	/	/	/	/	/	yes

APPENDIX 5

Relative accuracy: Statistical calculations *Listeria monocytogenes*

Statistical calculations: *Listeria monocytogenes*-Surface inoculation

Incubation 45h-surface							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Dairy products	L1	42.12	2006	3.56	3.67	3.61	0.12
	L1	42.13	2006	3.00	2.45	2.72	-0.55
	L1	42.14	2006	1.90	2.08	1.99	0.18
	L1	42.15	2006	2.40	2.34	2.37	-0.06
	L1	42.16	2006	2.62	2.71	2.67	0.08
	L1	42.19	2006	3.11	3.11	3.11	0.00
	L1	42.20	2006	2.20	2.04	2.12	-0.16
	L1	42.10	2006	1.78	1.85	1.82	0.07
	L1	42.11	2006	3.36	3.24	3.30	-0.12
	L2	43.10	2006	2.30	1.78	2.04	-0.52
	L2	43.4	2006	1.78	1.60	1.69	-0.18
	L2	43.6	2006	2.40	2.11	2.26	-0.29
	L2	43.7	2006	1.60	1.60	1.60	0.00
	L2	43.9	2006	1.90	1.95	1.93	0.05
	L3	38.10	2006	2.04	2.11	2.08	0.07
	L3	38.6	2006	2.26	2.11	2.19	-0.15
	L3	38.7	2006	1.78	1.78	1.78	0.00
	L3	38.9	2006	2.20	2.32	2.26	0.12
	L3	83	2018	2.52	2.43	2.48	-0.09
	Category average						-0.08
	Category standard deviation						0.20
Meat products	C1	50.16	2006	2.38	2.49	2.44	0.11
	C1	50.17	2006	2.15	2.34	2.24	0.20
	C1	50.18	2006	2.15	2.40	2.27	0.25
	C1	50.23	2006	1.60	1.60	1.60	0.00
	C1	50.24	2006	2.08	2.15	2.11	0.07
	C1	50.25	2006	2.79	2.76	2.78	-0.03
	C1	29.5	2006	2.28	2.08	2.18	-0.20
	C1	29.8	2006	2.45	1.60	2.03	-0.85
	C1	30.2	2006	1.78	1.78	1.78	0.00
	C2	28.1	2006	4.15	4.15	4.15	0.00
	C2	34.1	2006	3.26	3.04	3.15	-0.21
	C2	34.2	2006	3.18	3.15	3.16	-0.03
	C2	49.10	2006	2.49	2.36	2.43	-0.13
	C2	49.13	2006	3.36	3.36	3.36	0.00
	C2	49.14	2006	2.71	2.68	2.70	-0.03
	C2	49.4	2006	3.11	3.08	3.10	-0.03
	C2	49.9	2006	2.32	2.20	2.26	-0.12
	C3	2	2018	2.53	2.20	2.37	-0.33
	C3	3	2018	2.30	2.30	2.30	0.00
	C3	64	2018	2.70	2.56	2.63	-0.14
	C3	65	2018	2.76	2.68	2.72	-0.07
	C3	66	2018	2.56	2.73	2.64	0.18
	Category average						-0.06
	Category standard deviation						0.22

Statistical calculations: *Listeria monocytogenes*-Surface inoculation

Incubation 45h-surface							
Seafood products	P1	35.10	2006	2.88	2.86	2.87	-0.02
	P1	35.14	2006	1.78	1.78	1.78	0.00
	P1	35.15	2006	2.77	2.77	2.77	0.00
	P1	35.20	2006	1.95	2.08	2.01	0.13
	P1	35.21	2006	2.20	2.20	2.20	0.00
	P1	35.22	2006	2.20	2.30	2.25	0.10
	P1	35.23	2006	2.30	2.40	2.35	0.10
	P1	35.24	2006	2.88	2.89	2.88	0.01
	P1	35.25	2006	3.08	3.04	3.06	-0.04
	P1	47.10	2006	2.57	2.62	2.60	0.06
	P1	47.11	2006	1.95	2.20	2.08	0.25
	P1	47.12	2006	1.90	1.70	1.80	-0.20
	P1	47.13	2006	1.78	2.15	1.96	0.37
	P1	47.14	2006	2.11	2.08	2.10	-0.03
	P1	47.18	2006	3.08	3.04	3.06	-0.04
	P1	47.19	2006	3.30	3.20	3.25	-0.10
	P1	47.20	2006	3.34	3.28	3.31	-0.06
	P1	47.21	2006	3.51	3.56	3.53	0.05
	P1	47.22	2006	3.65	3.77	3.71	0.12
	P1	47.23	2006	3.78	3.79	3.79	0.01
	P1	47.24	2006	3.93	3.98	3.95	0.05
	P2	48.10	2006	1.70	1.60	1.65	-0.10
	P2	48.11	2006	3.11	3.15	3.13	0.03
	P2	48.12	2006	1.70	1.60	1.65	-0.10
	P2	48.16	2006	4.15	4.15	4.15	0.00
	P2	48.17	2006	4.48	4.30	4.39	-0.18
	P2	48.18	2006	4.68	4.58	4.63	-0.10
	P2	48.19	2006	4.93	4.80	4.86	-0.13
	P2	48.20	2006	5.32	5.18	5.25	-0.14
	P2	48.8	2006	3.93	3.95	3.94	0.02
	P2	48.9	2006	3.79	3.71	3.75	-0.08
	P3	67	2018	2.81	2.72	2.77	-0.08
	P3	68	2018	2.69	2.72	2.71	0.03
	P3	69	2018	2.84	2.66	2.75	-0.18
	P3	70	2018	2.76	2.83	2.79	0.06
	P3	71	2018	2.83	2.82	2.83	-0.01
	Category average						-0.01
	Category standard deviation						0.12
Vegetable products	V1	36.2	2006	2.00	1.78	1.89	-0.22
	V1	41.1	2006	1.60	1.78	1.69	0.18
	V1	37	2018	2.26	2.49	2.37	0.24
	V1	85	2018	2.66	2.57	2.62	-0.09
	V1	86	2018	2.59	2.68	2.64	0.09
	V2	51.2	2006	1.78	2.08	1.93	0.30
	V2	51.3	2006	2.15	2.41	2.28	0.27
	V2	51.4	2006	2.43	2.46	2.45	0.03
	V2	87	2018	2.63	2.53	2.58	-0.10
	V2	88	2018	2.48	2.57	2.52	0.09
	V3	41.3	2006	2.40	2.56	2.48	0.16
	V3	41.4	2006	2.28	2.20	2.24	-0.07
	V3	41.5	2006	2.76	2.72	2.74	-0.04
	V3	41.6	2006	2.41	2.40	2.41	-0.02
	V3	90	2018	2.88	2.92	2.90	0.04
	Category average						0.06
	Category standard deviation						0.15

Statistical calculations: *Listeria monocytogenes*-Surface inoculation

Incubation 45h-surface							
Composite foods	T1	12	2018	3.71	3.72	3.72	0.02
	T1	13	2018	3.46	3.26	3.36	-0.21
	T1	14	2018	2.64	3.52	3.08	0.88
	T1	15	2018	3.40	3.45	3.42	0.05
	T1	16	2018	3.74	3.68	3.71	-0.06
	T2	52.10	2006	1.95	2.23	2.09	0.28
	T2	52.19	2006	1.70	1.85	1.78	0.15
	T2	52.20	2006	1.78	1.60	1.69	-0.18
	T2	52.21	2006	2.53	2.58	2.56	0.05
	T2	52.23	2006	2.96	2.96	2.96	0.00
	T2	52.9	2006	1.60	1.78	1.69	0.18
	T3	45.5	2006	3.30	3.15	3.23	-0.15
	T3	45.6	2006	2.79	2.77	2.78	-0.02
	T3	45.9	2006	1.90	2.08	1.99	0.18
	T3	53.12	2006	1.70	1.60	1.65	-0.10
	T3	89	2018	2.66	2.36	2.51	-0.30
	Category average						0.07
	Category standard deviation						0.26
Environment	E1	72	2018	2.66	2.66	2.66	0.00
	E1	73	2018	2.34	2.53	2.44	0.19
	E1	74	2018	2.08	2.15	2.11	0.07
	E1	75	2018	2.34	2.51	2.42	0.16
	E1	76	2018	2.30	2.11	2.21	-0.19
	E2	77	2018	2.43	2.30	2.37	-0.13
	E2	78	2018	2.38	2.56	2.47	0.18
	E2	79	2018	2.60	2.46	2.53	-0.14
	E2	80	2018	2.20	2.23	2.22	0.03
	E2	81	2018	2.34	3.09	2.71	0.74
	E3	19	2018	3.40	3.20	3.30	-0.19
	E3	20	2018	3.61	3.63	3.62	0.02
	E3	21	2018	3.64	3.54	3.59	-0.10
	E3	22	2018	3.54	3.41	3.48	-0.13
	E3	82	2018	2.38	2.20	2.29	-0.18
	Category average						0.02
	Category standard deviation						0.24

Statistical calculations: *Listeria monocytogenes*-Surface inoculation

Incubation 45h-depth							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Average - All categories							-0.01
Standard deviation - All categories							0.20

n=	123
β=	95%
T(0.025.122)=	1.98

Lower confidence limit	Upper confidence limit
-0.41	0.39

Samples excluded from the statistical analysis

				incubation 45h-depth			
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
L	L1	42.17	2006	0.00	0.00	0.00	0.00
	L1	42.18	2006	0.00	0.00	0.00	0.00
	L1	42.2	2006	0.00	0.00	0.00	0.00
	L1	42.21	2006	0.00	0.00	0.00	0.00
	L1	42.22	2006	1.70	1.00	1.35	-0.70
	L1	42.23	2006	0.00	0.00	0.00	0.00
	L1	42.3	2006	0.00	0.00	0.00	0.00
	L1	42.4	2006	0.00	0.00	0.00	0.00
	L1	42.5	2006	0.00	0.00	0.00	0.00
	L1	42.6	2006	0.00	0.00	0.00	0.00
	L1	42.7	2006	0.00	0.00	0.00	0.00
	L1	42.8	2006	0.00	0.00	0.00	0.00
	L1	42.9	2006	0.00	0.00	0.00	0.00
	L1	42.1	2006	0.00	0.00	0.00	0.00
	L2	43.1	2006	1.30	0.00	0.65	-1.30
	L2	43.2	2006	1.00	1.30	1.15	0.30
	L2	43.3	2006	1.00	1.00	1.00	0.00
	L2	43.5	2006	1.70	1.00	1.35	-0.70
	L2	43.8	2006	1.48	1.60	1.54	0.12
	L2	31.1	2006	0.00	0.00	0.00	0.00
	L3	38.1	2006	0.00	0.00	0.00	0.00
	L3	38.11	2006	0.00	0.00	0.00	0.00
	L3	38.12	2006	0.00	0.00	0.00	0.00
	L3	38.13	2006	0.00	0.00	0.00	0.00
	L3	38.14	2006	1.48	1.48	1.48	0.00
	L3	38.15	2006	0.00	0.00	0.00	0.00
	L3	38.16	2006	0.00	0.00	0.00	0.00
	L3	38.2	2006	0.00	0.00	0.00	0.00
	L3	38.3	2006	0.00	0.00	0.00	0.00
	L3	38.4	2006	0.00	0.00	0.00	0.00
	L3	38.5	2006	0.00	0.00	0.00	0.00
	L3	38.8	2006	1.85	0.00	0.93	-1.85

Samples excluded from the statistical analysis

Category	Type	Sample ref.	Date of analysis	Incubation 45h-surface log cfu/g Ref. method	Incubation 45h-surface log cfu/g Altern. method	Average	Difference
C	C1	50.1	2006	0.00	0.00	0.00	0.00
	C1	50.10	2006	0.00	0.00	0.00	0.00
	C1	50.11	2006	0.00	0.00	0.00	0.00
	C1	50.12	2006	0.00	0.00	0.00	0.00
	C1	50.13	2006	0.00	0.00	0.00	0.00
	C1	50.14	2006	0.00	0.00	0.00	0.00
	C1	50.15	2006	0.00	0.00	0.00	0.00
	C1	50.19	2006	1.00	0.00	0.50	-1.00
	C1	50.2	2006	0.00	0.00	0.00	0.00
	C1	50.20	2006	1.00	0.00	0.50	-1.00
	C1	50.21	2006	0.00	0.00	0.00	0.00
	C1	50.22	2006	1.70	1.26	1.48	-0.44
	C1	50.3	2006	0.00	0.00	0.00	0.00
	C1	50.4	2006	0.00	0.00	0.00	0.00
	C1	50.5	2006	0.00	0.00	0.00	0.00
	C1	50.6	2006	0.00	0.00	0.00	0.00
	C1	50.7	2006	0.00	0.00	0.00	0.00
	C1	50.8	2006	0.00	0.00	0.00	0.00
	C1	50.9	2006	0.00	0.00	0.00	0.00
	C1	29.1	2006	1.48	0.00	0.74	-1.48
	C1	29.10	2006	0.00	1.00	0.50	1.00
	C1	29.2	2006	1.60	0.00	0.80	-1.60
	C1	29.3	2006	0.00	0.00	0.00	0.00
	C1	29.4	2006	1.00	0.00	0.50	-1.00
	C1	29.6	2006	1.30	1.00	1.15	-0.30
	C1	29.7	2006	0.00	0.00	0.00	0.00
	C1	29.9	2006	1.95	0.00	0.98	-1.95
	C1	30.1	2006	1.00	0.00	0.50	-1.00
	C1	30.3	2006	0.00	0.00	0.00	0.00
	C1	32.2	2006	1.85	1.48	1.67	-0.37
	C1	32.1	2006	0.00	0.00	0.00	0.00
	C1	37.1	2006	0.00	0.00	0.00	0.00
	C1	37.2	2006	0.00	0.00	0.00	0.00
	C1	37.3	2006	0.00	0.00	0.00	0.00
	C2	34.3	2006	6.18	5.18	5.68	-1.00
	C2	34.4	2006	0.00	0.00	0.00	0.00
	C2	34.5	2006	0.00	0.00	0.00	0.00
	C2	34.6	2006	0.00	0.00	0.00	0.00
	C2	49.1	2006	0.00	0.00	0.00	0.00
	C2	49.11	2006	0.00	0.00	0.00	0.00
	C2	49.12	2006	0.00	0.00	0.00	0.00
	C2	49.2	2006	0.00	0.00	0.00	0.00
	C2	49.3	2006	0.00	0.00	0.00	0.00
	C2	49.5	2006	0.00	0.00	0.00	0.00
	C2	49.6	2006	0.00	0.00	0.00	0.00
	C2	49.7	2006	0.00	0.00	0.00	0.00
	C2	49.8	2006	0.00	0.00	0.00	0.00

Samples excluded from the statistical analysis

Category	Type	Sample ref.	Date of analysis	Incubation 45h-surface log cfu/g Ref. method	Incubation 45h-surface log cfu/g Altern. method	Average	Difference
P	P1	35.1	2006	0.00	0.00	0.00	0.00
	P1	35.11	2006	6.18	5.18	5.68	-1.00
	P1	35.12	2006	0.00	0.00	0.00	0.00
	P1	35.13	2006	0.00	0.00	0.00	0.00
	P1	35.16	2006	0.00	0.00	0.00	0.00
	P1	35.17	2006	0.00	0.00	0.00	0.00
	P1	35.18	2006	0.00	0.00	0.00	0.00
	P1	35.19	2006	1.48	1.30	1.39	-0.18
	P1	35.2	2006	0.00	0.00	0.00	0.00
	P1	35.3	2006	0.00	0.00	0.00	0.00
	P1	35.4	2006	0.00	0.00	0.00	0.00
	P1	35.5	2006	0.00	0.00	0.00	0.00
	P1	35.6	2006	0.00	0.00	0.00	0.00
	P1	35.7	2006	0.00	0.00	0.00	0.00
	P1	35.8	2006	0.00	0.00	0.00	0.00
	P1	35.9	2006	1.00	1.00	1.00	0.00
	P1	47.15	2006	0.00	0.00	0.00	0.00
	P1	47.16	2006	0.00	0.00	0.00	0.00
	P1	47.17	2006	0.00	0.00	0.00	0.00
	P1	47.2	2006	0.00	0.00	0.00	0.00
	P1	47.3	2006	0.00	0.00	0.00	0.00
	P1	47.4	2006	0.00	0.00	0.00	0.00
	P1	47.5	2006	0.00	0.00	0.00	0.00
	P1	47.6	2006	0.00	0.00	0.00	0.00
	P1	47.7	2006	0.00	0.00	0.00	0.00
	P1	47.8	2006	0.00	0.00	0.00	0.00
	P1	47.9	2006	0.00	0.00	0.00	0.00
	P1	47.1	2006	0.00	0.00	0.00	0.00
	P2	48.14	2006	0.00	0.00	0.00	0.00
	P2	48.1	2006	0.00	0.00	0.00	0.00
	P2	48.13	2006	0.00	0.00	0.00	0.00
	P2	48.15	2006	0.00	0.00	0.00	0.00
	P2	48.2	2006	0.00	0.00	0.00	0.00
	P2	48.21	2006	6.18	6.18	6.18	0.00
	P2	48.3	2006	0.00	0.00	0.00	0.00
	P2	48.4	2006	0.00	0.00	0.00	0.00
	P2	48.5	2006	0.00	0.00	0.00	0.00
	P2	48.6	2006	0.00	0.00	0.00	0.00
	P2	48.7	2006	0.00	0.00	0.00	0.00
V	V1	27.1	2006	0.00	0.00	0.00	0.00
	V1	27.10	2006	0.00	0.00	0.00	0.00
	V1	27.11	2006	0.00	0.00	0.00	0.00
	V1	27.12	2006	0.00	0.00	0.00	0.00
	V1	27.2	2006	0.00	0.00	0.00	0.00
	V1	27.3	2006	0.00	0.00	0.00	0.00
	V1	27.4	2006	0.00	0.00	0.00	0.00
	V1	27.5	2006	0.00	0.00	0.00	0.00
	V1	27.6	2006	0.00	0.00	0.00	0.00
	V1	27.7	2006	0.00	0.00	0.00	0.00
	V1	27.8	2006	0.00	0.00	0.00	0.00
	V1	27.9	2006	0.00	0.00	0.00	0.00
	V1	36.1	2006	1.78	1.30	1.54	-0.48
	V1	36.3	2006	5.18	5.18	5.18	0.00
	V1	33.1	2006	0.00	0.00	0.00	0.00
	V1	33.2	2006	0.00	0.00	0.00	0.00
	V1	33.3	2006	0.00	0.00	0.00	0.00
	V1	39.1	2006	0.00	0.00	0.00	0.00
	V1	39.2	2006	0.00	0.00	0.00	0.00
	V1	39.3	2006	0.00	0.00	0.00	0.00
	V1	39.4	2006	0.00	0.00	0.00	0.00
	V1	39.5	2006	0.00	0.00	0.00	0.00
	V1	39.6	2006	0.00	0.00	0.00	0.00
	V1	39.7	2006	0.00	0.00	0.00	0.00
	V1	40.1	2006	0.00	0.00	0.00	0.00
	V1	40.2	2006	0.00	0.00	0.00	0.00
	V1	40.3	2006	1.00	1.00	1.00	0.00
	V2	51.1	2006	1.60	1.48	1.54	-0.12
	V2	51.5	2006	1.48	1.95	1.72	0.47
	V2	51.6	2006	0.00	0.00	0.00	0.00
	V2	51.7	2006	0.00	0.00	0.00	0.00
	V2	51.8	2006	0.00	0.00	0.00	0.00
	V3	41.11	2006	0.00	0.00	0.00	0.00
	V3	41.2	2006	0.00	1.30	0.65	1.30
	V3	41.7	2006	0.00	0.00	0.00	0.00
	V3	41.8	2006	0.00	0.00	0.00	0.00
	V3	41.9	2006	0.00	0.00	0.00	0.00
	V3	41.10	2006	0.00	0.00	0.00	0.00

Samples excluded from the statistical analysis

Category	Type	Sample ref.	Date of analysis	Incubation 45h-surface log cfu/g Ref. method	Incubation 45h-surface log cfu/g Altern. method	Average	Difference
T	T1	46.1	2006	0.00	0.00	0.00	0.00
	T1	46.2	2006	0.00	0.00	0.00	0.00
	T1	46.3	2006	0.00	0.00	0.00	0.00
	T1	46.4	2006	0.00	0.00	0.00	0.00
	T1	46.5	2006	0.00	0.00	0.00	0.00
	T1	46.6	2006	1.85	1.30	1.58	-0.55
	T1	46.7	2006	0.00	1.00	0.50	1.00
	T1	46.8	2006	0.00	0.00	0.00	0.00
	T2	52.1	2006	0.00	0.00	0.00	0.00
	T2	52.11	2006	0.00	0.00	0.00	0.00
	T2	52.12	2006	0.00	0.00	0.00	0.00
	T2	52.13	2006	1.48	1.00	1.24	-0.48
	T2	52.14	2006	0.00	0.00	0.00	0.00
	T2	52.15	2006	0.00	0.00	0.00	0.00
	T2	52.16	2006	0.00	0.00	0.00	0.00
	T2	52.17	2006	0.00	0.00	0.00	0.00
	T2	52.2	2006	0.00	0.00	0.00	0.00
	T2	52.3	2006	0.00	0.00	0.00	0.00
	T2	52.4	2006	0.00	0.00	0.00	0.00
	T2	52.5	2006	0.00	0.00	0.00	0.00
	T2	52.6	2006	0.00	0.00	0.00	0.00
	T2	52.7	2006	0.00	0.00	0.00	0.00
	T2	52.8	2006	0.00	0.00	0.00	0.00
	T3	45.1	2006	0.00	0.00	0.00	0.00
	T3	45.2	2006	0.00	0.00	0.00	0.00
	T3	45.3	2006	0.00	0.00	0.00	0.00
	T3	45.4	2006	0.00	0.00	0.00	0.00
	T3	45.8	2006	1.48	1.48	1.48	0.00
	T3	53.1	2006	0.00	0.00	0.00	0.00
	T3	53.13	2006	1.00	1.48	1.24	0.48
	T3	53.2	2006	0.00	0.00	0.00	0.00
	T3	53.3	2006	0.00	0.00	0.00	0.00
	T3	53.4	2006	0.00	0.00	0.00	0.00
	T3	53.5	2006	0.00	0.00	0.00	0.00
	T3	53.6	2006	0.00	1.48	0.74	1.48
	T3	53.7	2006	0.00	0.00	0.00	0.00
	T3	53.8	2006	0.00	0.00	0.00	0.00
	T3	53.9	2006	0.00	0.00	0.00	0.00

Statistical calculations: *Listeria monocytogenes*-Pour-plating inoculation

Incubation 45h-depth							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Dairy products	L1	21	2012	2.18	2.11	2.15	-0.06
	L1	22	2012	2.63	2.53	2.58	-0.10
	L1	24	2012	2.85	2.91	2.88	0.06
	L1	25	2012	2.90	2.92	2.91	0.03
	L1	205	2012	3.08	3.08	3.08	0.00
	L2	146	2012	3.36	3.00	3.18	-0.36
	L2	148	2012	1.90	2.00	1.95	0.10
	L2	204	2012	4.04	4.00	4.02	-0.04
	L2	43.10	2006	2.30	2.28	2.29	-0.02
	L2	43.6	2006	2.40	1.95	2.17	-0.45
	L3	53	2012	2.87	2.87	2.87	0.00
	L3	96	2012	2.53	2.48	2.50	-0.05
	L3	97	2012	2.23	2.26	2.24	0.02
	L3	98	2012	2.11	1.95	2.03	-0.16
	L3	202	2012	4.54	4.54	4.54	0.00
	L3	203	2012	2.86	2.74	2.80	-0.12
	Category average						-0.07
	Category standard deviation						0.15
Meat products	C1	49	2012	2.26	2.26	2.26	0.00
	C1	51	2012	1.70	1.95	1.83	0.25
	C1	183	2012	2.63	2.56	2.59	-0.08
	C1	184	2012	3.08	2.98	3.03	-0.10
	C1	185	2012	3.73	3.62	3.68	-0.11
	C1	186	2012	3.70	3.63	3.67	-0.07
	C1	187	2012	4.72	4.58	4.65	-0.14
	C2	154	2012	3.48	3.32	3.40	-0.16
	C2	188	2012	3.56	3.36	3.46	-0.19
	C2	190	2012	2.64	2.66	2.65	0.02
	C2	28.1	2006	4.15	4.15	4.15	0.00
	C2	34.2	2006	3.18	3.18	3.18	0.00
	C3	1	2012	2.36	2.38	2.37	0.02
	C3	50	2012	2.20	2.04	2.12	-0.16
	C3	64	2018	2.70	2.71	2.70	0.01
	C3	65	2018	2.76	2.64	2.70	-0.11
	C3	66	2018	2.56	2.60	2.58	0.05
	Category average						-0.05
	Category standard deviation						0.11
Seafood products	P1	16	2012	2.51	2.52	2.51	0.01
	P1	19	2012	1.85	1.78	1.82	-0.07
	P1	20	2012	2.70	2.65	2.68	-0.05
	P1	191	2012	3.61	3.48	3.54	-0.14
	P1	193	2012	2.96	2.94	2.95	-0.01
	P2	33	2012	1.90	1.78	1.84	-0.12
	P2	35	2012	3.41	3.40	3.41	-0.01
	P2	195	2012	2.93	2.86	2.90	-0.07
	P2	196	2012	2.86	2.76	2.81	-0.10
	P2	48.11	2006	3.15	3.15	3.15	0.00
	P3	39	2012	3.74	3.54	3.64	-0.20
	P3	40	2012	2.83	2.66	2.75	-0.17
	P3	43	2012	4.79	4.60	4.70	-0.19
	P3	45	2012	2.28	1.85	2.06	-0.43
	P3	194	2012	4.28	4.30	4.29	0.02
	Category average						-0.10
	Category standard deviation						0.12

Statistical calculations: *Listeria monocytogenes*-Pour-plating inoculation

Incubation 45h-depth							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Vegetable products	V1	74	2012	3.28	3.18	3.23	-0.10
	V1	81	2012	1.95	1.90	1.93	-0.05
	V1	198	2012	4.41	4.20	4.31	-0.21
	V1	199	2012	2.97	2.79	2.88	-0.18
	V1	36.2	2006	2.00	1.95	1.98	-0.05
	V2	59	2012	2.30	2.32	2.31	0.02
	V2	61	2012	2.89	2.75	2.82	-0.14
	V2	63	2012	3.04	2.91	2.97	-0.13
	V2	65	2012	2.00	1.95	1.98	-0.05
	V2	197	2012	2.89	2.77	2.83	-0.12
	V2	213	2012	4.00	3.95	3.98	-0.05
	V3	41.3	2006	2.40	2.40	2.40	0.00
	V3	41.4	2006	2.28	2.11	2.20	-0.16
	V3	41.5	2006	2.76	2.76	2.76	0.00
	V3	41.6	2006	2.40	2.23	2.31	-0.17
	V3	90	2018	2.88	2.92	2.90	0.04
	Category average						-0.09
	Category standard deviation						0.08
Composite foods	T1	64	2012	2.28	2.20	2.24	-0.08
	T1	200	2012	4.40	4.34	4.37	-0.06
	T1	12	2018	3.71	3.63	3.67	-0.07
	T1	13	2018	3.46	3.40	3.43	-0.06
	T1	14	2018	2.64	2.52	2.58	-0.12
	T2	84	2012	2.90	2.76	2.83	-0.15
	T2	89	2012	2.30	2.46	2.38	0.16
	T2	201	2012	3.38	3.59	3.49	0.21
	T2	212	2012	4.04	4.04	4.04	0.00
	T2	52.21	2006	2.53	2.57	2.55	0.04
	T3	45.5	2006	3.30	3.18	3.24	-0.12
	T3	45.6	2006	2.79	2.79	2.79	-0.01
	T3	45.9	2006	1.90	1.95	1.93	0.05
	T3	53.12	2006	1.70	1.60	1.65	-0.10
	T3	89	2018	2.66	2.54	2.60	-0.12
	Category average						-0.02
	Category standard deviation						0.11
Environment	E1	125	2012	2.87	2.84	2.85	-0.03
	E1	126	2012	2.40	2.30	2.35	-0.10
	E1	127	2012	2.61	2.69	2.65	0.08
	E1	135	2012	2.00	2.04	2.02	0.04
	E1	136	2012	3.93	3.81	3.87	-0.12
	E1	209	2012	4.79	4.77	4.78	-0.01
	E1	210	2012	4.08	4.11	4.10	0.03
	E1	211	2012	4.41	4.40	4.41	-0.01
	E2	142	2012	2.08	1.95	2.02	-0.12
	E2	143	2012	2.32	2.20	2.26	-0.12
	E2	207	2012	3.94	3.90	3.92	-0.04
	E2	208	2012	4.79	4.69	4.74	-0.10
	E2	214	2012	3.26	3.20	3.23	-0.05
	E2	215	2012	3.34	3.26	3.30	-0.09
	E3	19	2018	3.40	3.30	3.35	-0.10
	E3	20	2018	3.61	3.59	3.60	-0.02
	E3	22	2018	3.64	3.36	3.50	-0.28
	E3	23	2018	3.54	3.30	3.42	-0.24
	E3	82	2018	2.38	2.46	2.42	0.08
	Category average						-0.06
	Category standard deviation						0.10

Statistical calculations: *Listeria monocytogenes*-Pour-plating inoculation

Incubation 45h-depth							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Average - All categories							-0.07
Standard deviation - All categories							0.11

n=	98
β=	95%
T(0.025.97)=	1.98

Lower confidence limit	Upper confidence limit
-0.29	0.15

Samples excluded from the statistical analysis

				incubation 45h-depth			
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
L	L2	147	2012	1.60	1.00	1.30	-0.60
	L3	12	2012	1.95	0.00	0.98	-1.95
	L3	13	2012	0	0.00	0.00	0.00
C	C1	5	2012	0	0.00	0.00	0.00
	C1	8	2012	1.48	1.00	1.24	-0.48
	C1	153	2012	0.00	0.00	0.00	0.00
	C1	182	2012	1.30	1.78	1.54	0.48
	C2	3	2012	6.18	5.18	5.68	-1.00
	C3	6	2012	1.70	1.00	1.35	-0.70
T	T1	86	2012	0.00	0.00	0.00	0.00
E	E1	128	2012	0.00	0.00	0.00	0.00
	E1	129	2012	1.00	1.30	1.15	0.30
	E1	134	2012	0.00	1.30	0.65	1.30

APPENDIX 6

Relative accuracy: Initial results *Listeria spp.*

Appendix 6: Relative accuracy: *Listeria spp.*-ISO method

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	ISO 11290-2 # method																	Conf. Col.
									Vol. seeded	Repetition 1								Repetition 2						
										24 h			48 h					24 h			48 h			
					Artificial contam. (Y / N)?	Listeria species				1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	Result: 48 h	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	
										No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g	No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	
									V (ml)	n1	n2		m1	m2			n1	n2		m1	m2		
21	2012	Goat cheese	L1	Raw milk cheese	N	*L. mono*	10	100	1	15	0	140	15	1	150	2.16	19	2	190	19	2	190	yes
161	2012	White cheese	L1	Raw milk cheese	N	*L. spp*	10	100	1	1	0	10	1	0	10	1.00	3	0	30	3	0	30	yes
205	2012	Goat cheese	L1	Raw milk cheese	N	*L. mono*	10	100	1	125	11	1200	132	12	1300	3.12	106	10	1100	115	11	1100	yes
218	2012	Cabri Blanc	L1	Raw milk cheese	Y	*L. welshimeri*	10	100	1	10	1	100	10	1	100	2.00	6	0	60	6	0	60	yes
219	2012	Sainte Maure de Touraine goat cheese	L1	Raw milk cheese	Y	*L. welshimeri*	10	100	1	5	0	50	6	0	60 (NE)	1.74	6	0	60	6	0	60	yes
60	2018	Goat cheese	L1	Raw milk cheese	Y	*L. innocua*	10	100	1	16	1	160	17	2	170	2.24							yes
61	2018	Goat cheese	L1	Raw milk cheese	Y	*L. innocua*	10	100	1	17	2	170	24	2	240	2.37							yes
147	2012	Goat milk	L2	Raw milk	Y	*L. mono + L. innocua*	10	100	1	16	1	160	16	1	160	2.19	17	1	160	17	1	160	yes
148	2012	Goat milk	L2	Raw milk	Y	*L. mono + L. innocua*	10	100	1	30	3	300	40	3	390	2.59	38	3	370	52	4	510	yes
162	2012	Raw cow's milk	L2	Raw milk	N	*L. spp*	10	100	1	27	3	270	27	3	270	2.44	30	3	300	30	3	300	yes
164	2012	Raw cow's milk	L2	Raw milk	Y	*L. ivanovii*	10	100	1	4	0	40	5	0	50 (NE)	1.66	2	0	20	2	0	20	yes
1	2018	Goat milk	L2	Raw milk	Y	*L. mono*	10	100	1	19	2	190	30	4	310	2.49							yes
24	2018	Raw cow's milk	L2	Raw milk	Y	*L. innocua*	10	100	1	34	4	350	34	4	350	2.54							yes
95	2012	Chocolate Yoghurt	L3	dairy dessert	Y	*L. ivanovii*	10	100	1	6	0	55	16	1	160	2.19	10	0	90	17	3	180	yes
96	2012	Danette - pistachio cream	L3	dairy dessert	Y	*L. mono + L. ivanovii*	10	100	1	33	3	330	36	3	360	2.55	36	4	360	44	4	440	yes
97	2012	Danette - caramel cream	L3	dairy dessert	Y	*L. mono + L. innocua*	10	100	1	53	4	520	64	5	630	2.80	80	8	800	93	8	920	yes
25	2018	Caramel cream	L3	dairy dessert	Y	*L. innocua*	10	100	1	25	0	230	25	0	230	2.36							yes
26	2018	Chocolate cream	L3	dairy dessert	Y	*L. innocua*	10	100	1	28	2	270	29	2	290	2.45							yes
49	2012	Raw hanger steak	C1	raw meat	N	*L. mono + L. spp*	10	100	1	20	2	200	20	2	200	2.30	12	1	120	12	1	120	yes
152	2012	Hamburger meat	C1	raw meat	N	*L. spp*	10	100	1	12	0	110	14	1	140	2.13	15	0	140	15	1	150	yes
153	2012	Sausage	C1	raw meat	N	*L. mono*	10	100	1	0	0	<10	0	0	<10	<1	0	0	<10	0	0	<10	-
174 bis	2012	Toulouse sausages	C1	raw meat	Y	*L. welshimeri*	10	100	1	21	2	210	21	2	210	2.32	25	2	250	25	2	250	yes
179 bis	2012	Mixed pork	C1	raw meat	Y	*L. welshimeri*	10	100	1	3	0	27	38	3	370	2.57	9	0	80	47	4	460	yes
184	2012	Hamburger meat	C1	raw meat	N	*L. mono*	10	100	1	128	9	1200	128	9	1200	3.10	130	10	1300	130	11	1300	yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	ISO 11290-2 # method																Conf. Col.
									Vol. seeded	Repetition 1								Repetition 2						
										24 h			48 h					24 h			48 h			
										1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	Result: 48 h	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	
					Artificial contam. (Y / N)?	Listeria species				No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g	No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	
									V (ml)	n1	n2		m1	m2			n1	n2		m1	m2		
2	2012	Country pâté	C2	deli foods and salting	N	*L. spp*	10	100	1	0	0	<10	0	0	<10	<1	0	0	<10	0	0	<10	-
177	2012	Liver pâté	C2	deli foods and salting	Y	*L. innocua*	10	100	0.1	47	6	4800	47	6	4800	3.68	55	7	5600	55	7	5600	yes
180	2012	Pork rillettes	C2	deli foods and salting	Y	*L. ivanovii* + *L. innocua*	10	100	0.1	30	3	3000	32	3	3200	3.50	28	1	2600	30	2	2900	yes
190	2012	Pork rillettes	C2	deli foods and salting	N	*L. mono*	10	100	1	35	4	360	43	5	440	2.64	42	5	430	51	6	520	yes
30	2018	Bacon	C2	deli foods and salting	Y	*L. welshimeri*	10	100	0.1	25	2	2500	45	5	4500	3.66							yes
31	2018	Pure pork slicing sausage	C2	deli foods and salting	Y	*L. welshimeri*	10	100	0.1	18	2	1800	25	3	2500	3.41							yes
1	2012	Marinated chicken	C3	Processed meats	N	*L. mono* + *L. spp*	10	100	1	25	1	240	27	2	260	2.42	32	3	320	34	3	340	yes
176	2012	Cooked hamburger meat + sauce	C3	Processed meats	Y	*L. ivanovii*	10	100	1	96	0	870	106	12	1100	3.03	92	0	840	102	11	1000	yes
27	2018	Meatballs	C3	Processed meats	Y	*L. welshimeri*	10	100	0.1	93	8	9200	117	12	12000	4.07							yes
28	2018	Minced poultry	C3	Processed meats	Y	*L. welshimeri*	10	100	0.1	57	3	5500	94	10	9500	3.98							yes
29	2018	Beef meatball curry	C3	Processed meats	Y	*L. welshimeri*	10	100	0.1	131	15	13000	>150	20	2000 (N')	3.30							yes
170	2012	Haddock	P1	raw fish	Y	*L. innocua*	10	100	1	93	8	920	124	12	1200	3.09	75	9	760	117	20	1300	yes
171	2012	Tropical Sole	P1	raw fish	Y	*L. innocua*	10	100	1	23	2	230	24	2	240	2.37	21	1	200	21	2	210	yes
173	2012	Tropical Sole	P2	raw fish	Y	*L. ivanovii*	100	1000	0.1	148	17	150000	>150	17	170000 (N')	5.23	148	18	150000	999	19	190000	yes
32	2018	Hake fillet	P1	raw fish	Y	*L. innocua*	10	100	0.1	75	8	7600	75	8	7500	3.88							yes
33	2018	Salmon steak	P1	raw fish	Y	*L. innocua*	10	100	0.1	105	10	10000	111	16	12000	4.06							yes
33	2012	Smoked haddock	P2	smoked fish	N / Y	*L. mono* + *L. innocua*	10	100	0.1	29	3	2900	38	3	37000	3.57	36	4	3600	38	4	3800	yes
34	2012	Smoked trout	P2	smoked fish	N	*L. spp*	10	100	1	8	1	80	8	1	80 (NE)	1.91	10	1	100	10	1	100	yes
36	2012	Smoked salmon	P2	smoked fish	Y	*L. innocua*	10	100	0.1	48	4	4700	65	5	6400	3.80	47	3	4500	54	6	5500	yes
163	2012	Smoked haddock	P2	smoked fish	Y	*L. welshimeri*	10	100	1	12	1	120	12	1	120	2.07	11	0	100	11	0	100	yes
181	2012	Smoked haddock	P2	smoked fish	Y	*L. welshimeri*	10	100	1	9	0	80	9	1	90 (NE)	1.96	6	0	60	6	0	55	yes
158	2012	Pink prawns	P3	Processed fish	Y	*L. ivanovii* + *L. seeligeri*	10	100	1	5	0	50	5	0	50 (NE)	1.66	2	0	20	2	0	20	yes
159	2012	Accras de morue	P3	Processed fish	Y	*L. ivanovii* + *L. innocua*	10	100	1	2	0	20	18	2	180	2.26	2	0	20	14	0	130	yes
216	2012	Tuna balls	P3	Processed fish	N	*L. spp*	1000	10000	1	22	2	22000	22	2	22000	4.34	21	2	21000	21	2	21000	yes
34	2018	Cod	P3	Processed fish	Y	*L. innocua*	10	100	0.1	95	12	9700	141	15	14000	4.15							yes
35	2018	Salmon	P3	Processed fish	Y	*L. innocua*	10	100	0.1	101	10	10000	136	16	14000	4.14							yes
57	2018	Hake fillet, sauce eloise	P3	Processed fish	Y	*L. innocua*	10	100	1	54	6	550	59	7	600	2.78							yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Vol. seeded	ISO 11290-2 # method													Conf. Col.
										Repetition 1							Repetition 2						
										24 h			48 h				24 h			48 h			
					Artificial contam. (Y / N)?	Listeria species				1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	Result: 48 h	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	
										No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g	No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	
									V (ml)	n1	n2		m1	m2			n1	n2		m1	m2		
67	2012	Sand-grown carrots	V1	fresh vegetables	Y	*L. innocua*	10	100	1	5	0	50	18	1	170	2.24	8	1	80	19	1	180	yes
71	2012	Radishes	V1	fresh vegetables	Y	*L. welshimeri* + *L. ivanovii*	10	100	1	8	0	70	12	1	120	2.07	8	0	70	20	0	180	yes
82	2012	Organic cherry tomatoes	V1	fresh vegetables	Y	*L. welshimeri*	10	100	1	36	3	360	38	3	370	2.57	28	2	270	30	2	290	yes
36	2018	Apricots	V1	fresh vegetables	Y	*L. innocua*	10	100	1	0	0	<10	0	0	<10	<1							
37	2018	Tomatoes	V1	fresh vegetables	Y	*L. innocua*	10	100	1	17	1	160	18	2	180	2.26							yes
58	2018	Carrots	V1	fresh vegetables	Y	*L. innocua*	10	100	1	17	1	160	30	1	280	2.45							yes
61 bis	2012	Exotic fruit salad	V2	frozen vegetables	N	*L. spp*	10	100	1	0	0	<10	0	0	<10	<1	0	0	<10	2	0	18	yes
62 bis	2012	Red berry mix	V2	frozen vegetables	Y	*L. welshimeri*	10	100	1	18	1	170	19	2	190	2.28	21	2	210	22	3	230	yes
63	2012	Couscous/vegetable mix	V2	frozen vegetables	Y	*L. mono* + *L. innocua*	10	100	1	99	10	990	138	13	1400	3.14	84	8	840	136	14	1400	yes
65	2012	Pan-fried Perigourdine	V2	frozen vegetables	Y	*L. mono* + *L. welshimeri*	10	100	1	24	2	240	24	2	240	2.37	23	1	220	23	2	230	yes
38	2018	Pieces of pumpkin and butternut squash	V2	frozen vegetables	Y	*L. innocua*	10	100	1	24	1	230	25	1	240	2.37							yes
59	2018	Pan-fried vegetables	V2	frozen vegetables	Y	*L. innocua*	10	100	1	51	5	510	74	7	740	2.87							yes
39	2018	Tomato purée	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	30	3	3000	34	3	3400	3.53							yes
40	2018	Ratatouille	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	62	4	6000	66	4	6400	3.80							yes
41	2018	Creamed mushrooms	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	7	0	640	9	0	820 (NE)	2.91							yes
42	2018	Courgette gratin	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	94	11	95000	131	14	13000	4.12							yes
43	2018	Vegetable soup	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	100	10	10000	104	10	10000	4.02							yes
165	2012	Smoked bacon and spaghetti	T1	Hot foods	Y	*L. ivanovii* + *L. welshimeri*	10	100	1	56	6	560	57	6	570	2.76	37	2	360	41	3	400	yes
64	2012	Tuna pizza	T1	Hot foods	Y	*L. mono* + *L. welshimeri*	10	100	1	26	2	260	27	2	260	2.42	26	0	240	26	0	240	yes
48	2018	Quiche	T1	Hot foods	Y	*L. innocua*	10	100	0.1	0	0	<10	7	1	730 (NE)	2.86							yes
49	2018	Quiche with bacon	T1	Hot foods	Y	*L. innocua*	10	100	0.1	0	0	<10	5	0	460 (NE)	2.66							yes
50	2018	Spring rolls with pork	T1	Hot foods	Y	*L. innocua*	10	100	0.1	4	0	360	8	1	820 (NE)	2.91							yes
217	2012	Tuna / surimi salad	T2	Cold foods	Y	*L. seeligeri*	100	1000	0.1	25	3	25000	25	3	25000	4.41	21	2	21000	21	2	21000	yes
44	2018	Mixed salad with rice	T2	Cold foods	Y	*L. welshimeri*	10	100	1	30	3	300	30	3	300	2.48							yes
45	2018	Nigerian salad	T2	Cold foods	Y	*L. welshimeri*	10	100	1	42	6	440	57	8	590	2.77							yes
46	2018	Mixed salad	T2	Cold foods	Y	*L. welshimeri*	10	100	1	51	4	500	76	8	760	2.88							yes
47	2018	Red cabbage / ham	T2	Cold foods	Y	*L. welshimeri*	10	100	1	40	0	360	40	1	370	2.57							yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Vol. seeded	ISO 11290-2 # method													Conf. Col.
										Repetition 1							Repetition 2						
										24 h			48 h				24 h			48 h			
					Artificial contam. (Y / N)?	Listeria species				1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	Result: 48 h	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 48 h	
										No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g	No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	
									V (ml)	n1	n2		m1	m2			n1	n2		m1	m2		
83	2012	Custard pastry	T3	egg product	Y	*L. ivanovii + L. innocua*	10	100	1	34	4	350	48	4	470	2.67	30	3	300	40	3	390	yes
84	2012	Custard	T3	egg product	Y	*L. mono + L. welshimeri*	10	100	1	43	4	430	86	7	850	2.93	40	4	400	69	6	680	yes
86	2012	Mayonnaise	T3	egg product	N / Y	*L. mono + L. innocua*	10	100	1	1	0	10	2	0	20	1.26	2	0	20	3	0	30	yes
91	2012	Custard cream	T3	egg product	Y	*L. ivanovii*	10	100	1	17	2	170	21	2	210	2.32	13	1	130	17	1	160	yes
94	2012	Chocolate mousse	T3	egg product	N	*L. spp*	10	100	1	50	5	500	50	5	500	2.70	62	6	620	62	6	620	yes
99	2012	Caramel flan	T3	egg product	Y	*L. innocua*	10	100	0.1	>150	35	35000	>150	48	48000 (N')	4.68	999	41	41000	999	55	55000	yes
124	2012	Slaughterhouse - Q2 slicing machine cleaning cloth	E1	surface sample	N	*L. spp*	10	100	1	10	0	90	10	0	90	1.96	8	0	70	8	0	70	yes
125	2012	Slaughterhouse - Q3 slicing machine cleaning cloth	E1	surface sample	Y	*L. mono + L. welshimeri*	10	100	1	64	6	640	89	7	870	2.94	47	4	460	69	6	680	yes
134	2012	Grinding shop, 2nd rate grinding stack swab	E1	surface sample	N / Y	*L. mono + L. welshimeri*	10	100	1	3	0	30	3	0	30	1.44	1	0	10	3	0	30	yes
135	2012	Grinding shop, mixing stack swab	E1	surface sample	N / Y	*L. mono + L. innocua*	10	100	1	21	0	190	22	0	200	2.30	27	2	260	28	1	260	yes
156	2012	CL3 belt cutting floor wipe - production environment	E1	surface sample	N	*L. spp*	10	100	0.1	>150	14	1400	>150	20	2000 (N')	3.30	>150	12	1200	>150	16	1600	yes
166	2012	Working surface cleaning wipe	E1	surface sample	N	*L. spp*	10	100	1	0	0	<10	0	0	<10	<1	0	0	<10	0	0	<10	-
168	2012	Swab - cold storage room shelves	E1	surface sample	N	*L. spp*	10	100	1	1	0	10	1	0	10	1.00	1	0	10	1	0	10	yes
169	2012	Swab - cold room floor and handle	E1	surface sample	Y	*L. ivanovii*	10	100	1	4	0	40	10	1	100	2.00	4	0	40	8	0	70	yes
62	2018	Working surface cleaning wipe	E1	surface sample	Y	*L. innocua*	10	100	1	53	8	560	91	13	950	2.98							yes
141	2012	Water in grinding shop, Fresh raw materials refrigeration drain	E2	process water	Y	*L. innocua*	10	100	1	3	0	30	3	0	30	1.44	8	0	70	8	0	70	yes
143	2012	Water in slaughterhouse drain	E2	process water	Y	*L. mono + L. innocua*	10	100	1	33	1	310	40	1	370	2.57	31	2	300	37	2	360	yes
220	2012	Seed rinsing water	E2	process water	Y	*L. welshimeri*	100	1000	1	43	4	4300	43	4	4300	3.63	33	3	3300	33	3	3300	yes
221	2012	Drainage water	E2	process water	Y	*L. welshimeri*	100	1000	1	41	3	4000	41	3	4000	3.60	47	4	4600	47	4	4600	yes
51	2018	Composite watercress water	E2	process water	Y	*L. innocua*	10	100	0.1	9	0	820	13	1	1300	3.10							yes
63	2018	Drainage water	E2	process water	Y	*L. innocua*	10	100	1	59	4	570	70	7	700	2.85							yes
52	2018	Waste - bakery	E3	Dust and residues	Y	*L. innocua*	10	100	1	9	0	80	9	0	80 (NE)	1.91							yes
53	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	17	0	160	21	2	210	2.32							yes
54	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	0	0	<10	9	1	90 (NE)	1.96							yes
55	2018	Waste - bakery	E3	Dust and residues	Y	*L. innocua*	10	100	1	69	3	660	74	6	730	2.86							yes
56	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	28	1	260	30	1	280	2.45							yes

Appendix 6: Relative accuracy: *Listeria spp.*-Aloa Count method Surface inoculation

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALOA COUNT / EPT (no revivification) - Surface																			Conf. Col.
									Vol. swabes	Repetition 1									Repetition 2								
										24 h			45 h						24 h			45 h					
										1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h	Result after 72 h (cold storage)	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result after 72 h (cold storage)		
					Artificial contam. (Y / N)?	Listeria species				No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g		No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g			
									V (ml)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g		
21	2012	Goat cheese	L1	Raw milk cheese	N	*L. mono*	10	100	1	17	1	160	17	1	160	2.21	160	12	1	120	12	1	120	120	yes
161	2012	White cheese	L1	Raw milk cheese	N	*L. spp*	10	100	1	2	0	20	2	0	20	1.26	20	1	0	10	1	0	10	10	Yes
205	2012	Goat cheese	L1	Raw milk cheese	N	*L. mono*	10	100	1	110	6	1100	127	9	1200	3.09	1200	98	4	930	105	8	1000	1000	Yes
218	2012	Cabri Blanc	L1	Raw milk cheese	Y	*L. welshimeri*	10	100	1	7	0	60	7	0	70 (NE)	1.80	70 (NE)	4	0	40	4	0	40	40 (NE)	Yes
219	2012	Sainte Maure de Touraine goat cheese	L1	Raw milk cheese	Y	*L. welshimeri*	10	100	1	8	0	70	8	0	80 (NE)	1.86	80 (NE)	9	0	80	9	0	80	90 (NE)	Yes
60	2018	Goat cheese	L1	Raw milk cheese	Y	*L. innocua*	10	100	1	10	1	100	11	1	110	2.04	110								Yes
61	2018	Goat cheese	L1	Raw milk cheese	Y	*L. innocua*	10	100	1	11	1	110	25	2	250	2.39	250								Yes
147	2012	Goat milk	L2	Raw milk	Y	*L. mono + L. innocua*	10	100	1	17	1	160	18	1	170	2.24	170	20	2	200	21	2	210	210	Yes
148	2012	Goat milk	L2	Raw milk	Y	*L. mono + L. innocua*	10	100	1	33	3	330	47	3	460	2.66	460	32	2	310	47	3	460	450	Yes
162	2012	Raw cow's milk	L2	Raw milk	N	*L. spp*	10	100	1	19	2	190	32	2	310	2.49	310	23	2	230	24	2	240	240	Yes
164	2012	Raw cow's milk	L2	Raw milk	Y	*L. ivanovii*	10	100	1	3	0	30	3	0	30	1.44	< 40	5	0	50	8	1	80	80 (NE)	Yes
1	2018	Goat milk	L2	Raw milk	Y	*L. mono*	10	100	1	18	2	180	32	3	320	2.50	320								Yes
24	2018	Raw cow's milk	L2	Raw milk	Y	*L. innocua*	10	100	1	25	1	240	25	1	240	2.37	240								Yes
95	2012	Chocolate Yoghurt	L3	dairy dessert	Y	*L. ivanovii*	10	100	1	4	0	40	12	1	120	2.07	120	3	0	30	11	1	110	110	Yes
96	2012	Danette - pistachio cream	L3	dairy dessert	Y	*L. mono + L. ivanovii*	10	100	1	28	2	270	35	2	340	2.53	340	31	4	320	42	4	420	420	Yes
97	2012	Danette - caramel cream	L3	dairy dessert	Y	*L. mono + L. innocua*	10	100	1	58	5	570	50	6	510	2.71	510	75	5	730	83	8	830	830	Yes
25	2018	Caramel cream	L3	dairy dessert	Y	*L. innocua*	10	100	1	32	4	330	34	4	350	2.54	350								Yes
26	2018	Chocolate cream	L3	dairy dessert	Y	*L. innocua*	10	100	1	24	0	220	26	0	240	2.37	240								Yes
49	2012	Raw hanger steak	C1	raw meat	N	*L. mono + L. spp*	10	100	1	15	1	150	15	1	150	2.16	150	23	2	230	23	2	230	230	Yes
152	2012	Hamburger meat	C1	raw meat	N	*L. spp*	10	100	1	17	0	160	19	1	180	2.26	180	11	0	100	11	1	110	110	Yes
153	2012	Sausage	C1	raw meat	N	*L. mono*	10	100	1	0	0	<10	0	0	<10	<1	< 10	0	0	<10	0	0	<10	< 10	-
174 bis	2012	Toulouse sausages	C1	raw meat	Y	*L. welshimeri*	10	100	1	17	1	160	18	1	170	2.24	170	22	1	210	22	1	210	210	Yes
179 bis	2012	Mixed pork	C1	raw meat	Y	*L. welshimeri*	10	100	1	3	0	30	37	3	360	2.56	360	4	0	40	35	3	350	350	Yes
184	2012	Hamburger meat	C1	raw meat	N	*L. mono*	10	100	1	100	11	1000	100	11	1000	3.00	1000	98	10	980	98	10	980	980	Yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALOA COUNT / EPT (no revivification) - Surface																			Conf. Col.
										Repetition 1									Repetition 2									
										24 h			45 h						24 h			45 h						
										1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h	Result after 72 h (cold storage)	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result after 72 h (cold storage)			
					Artificial contam. (Y / N)?	Listeria species				No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g		No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g				
									V (ml)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g			
2	2012	Country pâté	C2	deli foods and salting	N	*L. spp*	10	100	1	0	0	<10	0	0	<10	<1	< 10	0	0	<10	0	0	<10	< 10	-			
177	2012	Liver pâté	C2	deli foods and salting	Y	*L. innocua*	10	100	0.1	35	5	3600	38	5	3900	3.59	3900	43	4	4300	43	4	4300	4300	Yes			
180	2012	Pork rillettes	C2	deli foods and salting	Y	*L. ivanovii + L. innocua*	10	100	0.1	23	0	2100	27	2	2600	3.42	2600	20	0	1800	26	1	2500	2500	Yes			
190	2012	Pork rillettes	C2	deli foods and salting	N	*L. mono*	10	100	1	42	4	420	54	5	540	2.73	540	44	2	420	53	4	520	520	Yes			
30	2018	Bacon	C2	deli foods and salting	Y	*L. welshimeri*	10	100	0.1	25	2	2500	41	6	4300	3.63	4300								Yes			
31	2018	Pure pork slicing sausage	C2	deli foods and salting	Y	*L. welshimeri*	10	100	0.1	22	1	2100	24	1	2300	3.36	2300								Yes			
1	2012	Marinated chicken	C3	Hot foods	N	*L. mono + L. spp*	10	100	1	30	2	290	30	2	290	2.46	290	20	1	190	20	1	190	190	Yes			
176	2012	Cooked hamburger meat + sauce	C3	Hot foods	Y	*L. ivanovii*	10	100	1	78	8	780	103	7	1000	3.00	1000	83	8	830	133	10	1300	1300	Yes			
27	2018	Meatballs	C3	Processed meats	Y	*L. welshimeri*	10	100	0.1	90	12	9300	126	14	13000	4.10	13000								Yes			
28	2018	Minced poultry	C3	Processed meats	Y	*L. welshimeri*	10	100	0.1	58	4	5600	109	13	11000	4.04	11000								Yes			
29	2018	Beef meatball curry	C3	Processed meats	Y	*L. welshimeri*	10	100	0.1	148	18	15000	>150	24	2400 (N')	3.38	24000 (N')								Yes			
170	2012	Haddock	P1	raw fish	Y	*L. innocua*	10	100	1	100	8	980	125	11	1200	3.09	1200	82	7	810	109	10	1100	1100	Yes			
171	2012	Tropical Sole	P1	raw fish	Y	*L. innocua*	10	100	1	20	1	190	20	2	200	2.30	200	28	2	270	29	2	280	280	Yes			
173	2012	Tropical Sole	P1	raw fish	Y	*L. ivanovii*	100	1000	0.1	111	17	120000	128	17	130000	5.12	130000	153	18	180000	999	18	18000	180000	Yes			
32	2018	Hake fillet	P1	raw fish	Y	*L. innocua*	10	100	0.1	72	4	6900	72	4	6900	3.84	6900								Yes			
33	2018	Salmon steak	P1	raw fish	Y	*L. innocua*	10	100	0.1	99	11	10000	122	13	12000	4.09	12000								Yes			
33	2012	Smoked haddock	P2	smoked fish	N / Y	*L. mono + L. innocua*	10	100	0.1	31	3	3100	39	4	3900	3.59	3900	32	2	3100	39	3	3800	3800	Yes			
34	2012	Smoked trout	P2	smoked fish	N	*L. spp*	10	100	1	12	1	120	12	1	120	2.07	120	12	0	110	12	1	120	120	Yes			
36	2012	Smoked salmon	P2	smoked fish	Y	*L. innocua*	10	100	0.1	29	4	3000	46	5	4600	3.67	4600	59	4	5700	74	6	7300	7300	Yes			
163	2012	Smoked haddock	P2	smoked fish	Y	*L. welshimeri*	10	100	1	8	0	70	8	0	80 (NE)	1.86	80 (NE)	10	0	90	10	1	100	100	Yes			
181	2012	Smoked haddock	P2	smoked fish	Y	*L. welshimeri*	10	100	1	4	0	40	5	0	50 (NE)	1.66	50 (NE)	5	0	50	5	0	50	50 (NE)	Yes			
158	2012	Pink prawns	P3	Processed fish	Y	*L. ivanovii + L. seeligeri*	10	100	1	2	0	20	2	0	20	1.26	< 40	0	0	<10	1	0	10	< 40	Yes			
159	2012	Accras de morue	P3	Processed fish	Y	*L. ivanovii + L. innocua*	10	100	1	1	0	10	17	1	160	2.21	160	0	0	<10	16	0	150	150	Yes			
216	2012	Tuna balls	P3	Processed fish	N	*L. spp*	1000	10000	1	20	2	200	20	2	20000	4.30	20000	19	2	190	19	2	190	19000	Yes			
34	2018	Cod	P3	Processed fish	Y	*L. innocua*	10	100	0.1	95	9	9500	123	14	12000	4.10	12000								Yes			
35	2018	Salmon	P3	Processed fish	Y	*L. innocua*	10	100	0.1	106	12	11000	140	13	14000	4.14	14000								Yes			
57	2018	Hake fillet, sauce eloise	P3	Processed fish	Y	*L. innocua*	10	100	1	55	4	540	57	4	560	2.74	560								Yes			

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALOA COUNT / EPT (no revivification) - Surface																	Conf. Col.
									Vol. seeded	Repetition 1								Repetition 2							
										24 h			45 h					24 h			45 h				
										1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h	Result after 72 h (cold storage)	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result after 72 h (cold storage)	
					Artificial contam. (Y / N)?	Listeria species				No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g		No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g		
									V (ml)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
67	2012	Sand-grown carrots	V1	fresh vegetables	Y	*L. innocua*	10	100	1	11	1	110	20	2	200	2.30	200	12	1	120	25	1	240	240	Yes
71	2012	Radishes	V1	fresh vegetables	Y	*L. welshimeri + L. ivanovii*	10	100	1	9	0	80	15	1	150	2.16	150	7	0	60	9	0	90	90 (NE)	Yes
82	2012	Organic cherry tomatoes	V1	fresh vegetables	Y	*L. welshimeri*	10	100	1	34	3	340	34	3	340	2.53	340	21	2	210	21	2	210	210	Yes
36	2018	Apricots	V1	fresh vegetables	Y	*L. innocua*	10	100	1	0	0	<10	1	0	10	1.00	10								Yes
37	2018	Tomatoes	V1	fresh vegetables	Y	*L. innocua*	10	100	1	28	4	290	30	4	310	2.49	310								Yes
58	2018	Carrots	V1	fresh vegetables	Y	*L. innocua*	10	100	1	30	0	270	43	2	410	2.61	410								Yes
61 bis	2012	Exotic fruit salad	V2	frozen vegetables	N	*L. spp*	10	100	1	0	0	<10	0	0	<10	<1	< 10	0	0	<10	0	0	<10	< 10	-
62 bis	2012	Red berry mix	V2	frozen vegetables	Y	*L. welshimeri*	10	100	1	25	2	250	27	2	260	2.42	260	28	1	260	29	2	280	280	Yes
63	2012	Couscous/vegetable mix	V2	frozen vegetables	Y	*L. mono + L. innocua*	10	100	1	116	9	1100	>150	16	1600 (N')	3.20	1600 (N')	94	8	930	999	17	1700	1700	Yes
65	2012	Pan-fried Perigourdine	V2	frozen vegetables	Y	*L. mono + L. welshimeri*	10	100	1	28	1	260	28	2	270	2.44	270	16	0	150	17	0	160	150	Yes
38	2018	Pieces of pumpkin and butternut squash	V2	frozen vegetables	Y	*L. innocua*	10	100	1	20	0	180	20	0	180	2.26	180								Yes
59	2018	Pan-fried vegetables	V2	frozen vegetables	Y	*L. innocua*	10	100	1	41	4	410	80	10	820	2.91	820								Yes
39	2018	Tomato purée	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	43	3	4200	43	4	4300	3.63	4300								Yes
40	2018	Ratatouille	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	50	1	4600	50	1	4600	3.67	4600								Yes
41	2018	Creamed mushrooms	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	7	1	730	8	1	820 (NE)	2.91	820 (NE)								Yes
42	2018	courgette gratin	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	106	10	11000	139	15	14000	4.15	14000								Yes
43	2018	Vegetable soup	V3	processed vegetables	Y	*L. welshimeri*	10	100	0.1	113	9	11000	113	10	11000	4.05	11000								Yes
165	2012	Smoked bacon and spaghetti	T1	Hot foods	Y	*L. ivanovii + L. welshimeri*	10	100	1	52	5	520	59	5	580	2.76	580	36	1	340	42	2	400	400	Yes
64	2012	Tuna pizza	T1	Cold foods	Y	*L. mono + L. welshimeri*	10	100	1	26	0	240	26	0	240	2.37	240	22	1	210	24	1	230	230	Yes
48	2018	Quiche	T1	Hot foods	Y	*L. innocua*	10	100	0.1	2	0	180	6	1	640 (NE)	2.80	640 (NE)								Yes
49	2018	Quiche with bacon	T1	Hot foods	Y	*L. innocua*	10	100	0.1	7	0	640	9	1	910 (NE)	2.96	910 (NE)								Yes
50	2018	Spring rolls with pork	T1	Hot foods	Y	*L. innocua*	10	100	0.1	1	0	90	5	0	460 (NE)	2.66	460 (NE)								Yes
217	2012	Tuna / surimi salad	T2	Cold foods	Y	*L. seeligeri*	100	1000	0.1	24	2	24000	24	2	24000	4.37	24000	25	3	25000	25	3	25000	25000	Yes
44	2018	Mixed salad with rice	T2	Cold foods	Y	*L. welshimeri*	10	100	1	26	2	260	29	2	280	2.45	280								Yes
45	2018	Nigerian salad	T2	Cold foods	Y	*L. welshimeri*	10	100	1	53	5	530	77	9	780	2.89	780								Yes
46	2018	Mixed salad	T2	Cold foods	Y	*L. welshimeri*	10	100	1	46	6	470	54	6	550	2.74	550								Yes
47	2018	Red cabbage / ham	T2	Cold foods	Y	*L. welshimeri*	10	100	1	33	1	310	36	2	350	2.54	350								Yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALDA COUNT / EPT (no revivification) - Surface																	Conf. Col.
										Repetition 1									Repetition 2							
										24 h			45 h					24 h			45 h				
					Artificial contam. (Y / N)?	Listeria species			Vol. seeded	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h	Result after 72 h (cold storage)	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result after 72 h (cold storage)	
										No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g		No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g		
									V (ml)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
83	2012	Custard pastry	T3	egg product	Y	*L. ivanovii + L. innocua*	10	100	1	42	2	400	51	3	490	2.69	490	31	2	300	39	2	370	370	Yes
84	2012	Custard	T3	egg product	Y	*L. mono + L. welshimeri*	10	100	1	32	3	320	81	5	780	2.89	780	31	3	310	65	6	650	650	Yes
86	2012	Mayonnaise	T3	egg product	N / Y	*L. mono + L. innocua*	10	100	1	7	0	70	7	0	70 (NE)	1.80	70 (NE)	6	0	60	6	0	60	60 (NE)	Yes
91	2012	Custard cream	T3	egg product	Y	*L. ivanovii*	10	100	1	14	1	140	18	2	180	2.26	180	22	2	220	24	3	250	250	Yes
94	2012	Chocolate mousse	T3	egg product	N	*L. spp*	10	100	1	50	5	500	51	6	520	2.71	520	45	4	450	45	4	450	450	Yes
99	2012	Caramel flan	T3	egg product	Y	*L. innocua*	10	100	0.1	>150	41	41000	>150	57	57000 (N')	4.76	57000 (N')	>150	36	3600	>150	46	46000	46000	Yes
124	2012	Slaughterhouse - Q2 slicing machine cleaning cloth	E1	surface sample	N	*L. spp*	10	100	1	7	1	70	7	1	70 (NE)	1.86	70 (NE)	4	0	40	4	0	40	40 (NE)	Yes
125	2012	Slaughterhouse - Q3 slicing machine cleaning cloth	E1	surface sample	Y	*L. mono + L. welshimeri*	10	100	1	73	7	730	97	6	940	2.97	940	58	4	560	77	6	760	750	Yes
134	2012	Grinding shop, 2nd rate grinding stack swab	E1	surface sample	N / Y	*L. mono + L. welshimeri*	10	100	1	3	0	30	7	0	70 (NE)	1.80	70 (NE)	4	0	40	7	0	64	70 (NE)	yes
135	2012	Grinding shop, mixing stack swab	E1	surface sample	N / Y	*L. mono + L. innocua*	10	100	1	21	1	200	21	1	200	2.30	200	23	1	220	23	1	220	220	yes
156	2012	CL3 belt cutting floor wipe - production environment	E1	surface sample	N	*L. spp*	10	100	0.1	>150	18	1800	>150	20	2000 (N')	3.30	2000 (N')	>150	18	1800	>150	23	2300	23000	Yes
166	2012	Working surface cleaning wipe	E1	surface sample	N	*L. spp*	10	100	1	2	0	20	3	0	30	1.44	< 40	1	0	10	1	0	10	< 40	Yes
168	2012	Swab - cold storage room shelves	E1	surface sample	N	*L. spp*	10	100	1	1	0	10	1	0	10	1.00	< 40	1	0	10	1	0	10	< 40	Yes
169	2012	Swab - cold room floor and handle	E1	surface sample	Y	*L. ivanovii*	10	100	1	10	1	100	12	1	120	2.07	120	8	0	70	12	1	120	120	Yes
62	2018	Working surface cleaning wipe	E1	surface sample	Y	*L. innocua*	10	100	1	48	3	460	60	5	590	2.77	590								Yes
141	2012	Water in grinding shop, Fresh raw materials refrigeration drain	E2	process water	Y	*L. innocua*	10	100	1	10	1	100	11	0	100	2.00	100	13	0	120	14	0	130	130	Yes
143	2012	Water in slaughterhouse drain	E2	process water	Y	*L. mono + L. innocua*	10	100	1	22	1	210	32	2	310	2.49	310	27	2	260	34	2	330	330	Yes
220	2012	Seed rinsing water	E2	process water	Y	*L. welshimeri*	100	1000	1	44	4	4400	45	4	4500	3.65	4500	47	3	4500	47	3	4500	4500	Yes
221	2012	Drainage water	E2	process water	Y	*L. welshimeri*	100	1000	1	41	4	4000	41	4	4100	3.61	4100	38	3	3700	38	3	3700	3700	Yes
51	2018	Composite watercress water	E2	process water	Y	*L. innocua*	10	100	0.1	11	1	1100	12	2	1300	3.10	1300								Yes
63	2018	Drainage water	E2	process water	Y	*L. innocua*	10	100	1	53	2	500	63	3	600	2.78	600								Yes
52	2018	Waste - bakery	E3	Dust and residues	Y	*L. innocua*	10	100	1	8	0	70	11	1	110	2.04	110								Yes
53	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	11	1	110	18	1	170	2.24	170								Yes
54	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	0	0	<10	8	0	70 (NE)	1.86	70 (NE)								Yes
55	2018	Waste - bakery	E3	Dust and residues	Y	*L. innocua*	10	100	1	61	2	570	70	5	680	2.83	680								Yes
56	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	28	2	270	30	2	290	2.46	290								Yes

Appendix 6: Relative accuracy: *Listeria spp*-Aloa Count method Pour-plating inoculation

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALOA COUNT / EPT (no revivification) - Depth																	Conf. Col.
										Repetition 1									Repetition 2							
										24 h			45 h					24 h			45 h				
										1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h	Result after 72 h (cold storage)	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result after 72 h (cold storage)	
					Artificial contam. (Y / N)?	Listeria species				No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g		No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g		
									V (ml)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
21	2012	Goat cheese	L1	Raw milk cheese	N	*L. mono*	10	100	1	13	1	130	13	1	130	2.10	130	12	1	120	12	1	120	120	Yes
161	2012	White cheese	L1	Raw milk cheese	N	*L. spp*	10	100	1	2	0	20	2	0	20	1.26	20	4	0	40	4	0	40	40 (NE)	Yes
205	2012	Goat cheese	L1	Raw milk cheese	N	*L. mono*	10	100	1	116	7	1100	126	9	1200	3.09	1200	74	4	710	131	5	1200	1200	Yes
218	2012	Cabri Blanc	L1	Raw milk cheese	Y	*L. welshimeri*	10	100	1	3	1	40	3	1	40	1.56	40	6	0	60	6	0	60	60 (NE)	Yes
219	2012	Sainte Maure de Touraine goat cheese	L1	Raw milk cheese	Y	*L. welshimeri*	10	100	1	9	1	90	10	1	100	2.00	100	5	0	50	7	1	70 (NE)	70 (NE)	Yes
60	2018	Goat cheese	L1	Raw milk cheese	Y	*L. innocua*	10	100	1	14	1	140	16	1	160	2.19	160								Yes
61	2018	Goat cheese	L1	Raw milk cheese	Y	*L. innocua*	10	100	1	21	2	210	22	2	220	2.34	220								Yes
147	2012	Goat milk	L2	Raw milk	Y	*L. mono + L. innocua*	10	100	1	15	1	150	16	1	160	2.19	160	13	1	130	13	1	130	130	Yes
148	2012	Goat milk	L2	Raw milk	Y	*L. mono + L. innocua*	10	100	1	32	2	310	41	3	400	2.60	400	42	3	410	48	5	480	480	Yes
162	2012	Raw cow's milk	L2	Raw milk	N	*L. spp*	10	100	1	19	1	180	21	1	200	2.30	200	21	5	240	22	5	250	250	Yes
164	2012	Raw cow's milk	L2	Raw milk	Y	*L. ivanovii*	10	100	1	3	0	30	6	0	60 (NE)	1.74	60 (NE)	1	0	<10	3	0	< 40	< 40	Yes
1	2018	Goat milk	L2	Raw milk	Y	*L. mono*	10	100	1	24	8	290	36	8	400	2.60	400								Yes
24	2018	Raw cow's milk	L2	Raw milk	Y	*L. innocua*	10	100	1	37	6	390	37	7	400	2.60	400								Yes
95	2012	Chocolate Yoghurt	L3	ice cream and dairy dessert	Y	*L. ivanovii*	10	100	1	11	0	100	18	1	170	2.24	170	4	0	40	14	0	130	130	Yes
96	2012	Danette - pistachio cream	L3	ice cream and dairy dessert	Y	*L. mono + L. ivanovii*	10	100	1	26	2	260	29	4	300	2.48	300	26	7	300	36	7	390	390	Yes
97	2012	Danette - caramel cream	L3	ice cream and dairy dessert	Y	*L. mono + L. innocua*	10	100	1	49	3	470	65	3	620	2.79	620	67	5	660	83	8	830	830	Yes
25	2018	Caramel cream	L3	dairy dessert	Y	*L. innocua*	10	100	1	18	0	160	18	0	160	2.21	160								Yes
26	2018	Chocolate cream	L3	dairy dessert	Y	*L. innocua*	10	100	1	25	3	260	25	3	260	2.41	260								Yes
49	2012	Raw hanger steak	C1	raw meat	N	*L. mono + L. spp*	10	100	1	19	1	180	19	1	180	2.26	180	21	2	210	21	2	210	210	Yes
152	2012	Hamburger meat	C1	raw meat	N	*L. spp*	10	100	1	11	1	110	13	1	130	2.10	130	16	0	150	16	0	150	150	Yes
153	2012	Sausage	C1	raw meat	N	*L. mono*	10	100	1	0	0	<10	0	0	<10	<1	< 10	2	0	<10	2	0	< 40	< 40	Yes
174 bis	2012	Toulouse sausages	C1	raw meat	Y	*L. welshimeri*	10	100	1	23	1	220	23	1	220	2.34	220	20	1	190	20	1	190	190	Yes
179 bis	2012	Mixed pork	C1	raw meat	Y	*L. welshimeri*	10	100	1	5	0	50	29	3	290	2.46	290	7	1	73	47	4	460	460	Yes
184	2012	Hamburger meat	C1	raw meat	N	*L. mono*	10	100	1	91	13	950	92	13	960	2.98	960	94	16	1000	94	16	1000	1000	Yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALOA COUNT / EPT (no revivification) - Depth																			Conf. Col.
									Vol. seeded	Repetition 1									Repetition 2							
										24 h			45 h						24 h			45 h				
										1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h	Result after 72 h (cold storage)	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result after 72 h (cold storage)	
					Artificial contam. (Y / N)?	Listeria species				No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g		No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g		
									V (ml)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
2	2012	Country pâté	C2	deli foods	N	*L. spp*	10	100	1	0	0	<10	0	0	<10	<1	< 10	1	0	<10	1	0	< 40	< 40	Yes
177	2012	Liver pâté	C2	deli foods	Y	*L. innocua*	10	100	1	>150	36	3600	>150	36	3600 (N')	3.56	3600 (N')	>150	35	3500	>150	36	3600	3600 (N')	Yes
180	2012	Pork rillettes	C2	deli foods	Y	*L. ivanovii + L. innocua*	10	100	1	>150	17	17000	>150	26	2600 (N')	3.41	2600 (N')	>150	18	1800	>150	22	2200	2200 (N')	Yes
190	2012	Pork rillettes	C2	deli foods	N	*L. mono*	10	100	1	44	1	410	49	2	460	2.67	460	45	2	430	46	3	450	450	Yes
30	2018	Bacon	C2	deli foods and salting	Y	*L. welshimeri*	100	1000	1	28	0	2500	39	1	3600	3.56	3600								Yes
31	2018	Pure pork slicing sausage	C2	deli foods and salting	Y	*L. welshimeri*	100	1000	1	30	2	2900	32	2	3100	3.49	3100								Yes
1	2012	Marinated chicken	C3	cooked dish	N	*L. mono + L. spp*	10	100	1	24	2	240	26	2	260	2.41	260	22	1	210	22	2	220	220	Yes
176	2012	Cooked hamburger meat + sauce	C3	cooked dish	Y	*L. ivanovii*	10	100	1	71	7	710	101	10	1000	3.00	1000	61	3	580	122	10	1200	1200	Yes
27	2018	Meatballs	C3	Processed meats	Y	*L. welshimeri*	100	1000	1	76	10	7800	141	16	14000	4.15	14000								Yes
28	2018	Minced poultry	C3	Processed meats	Y	*L. welshimeri*	100	1000	1	60	7	6100	138	15	14000	4.14	14000								Yes
29	2018	Beef meatball curry	C3	Processed meats	Y	*L. welshimeri*	100	1000	1	137	13	14000	>150	17	1700 (N')	3.23	17000 (N')								Yes
170	2012	Haddock	P1	raw fish	Y	*L. innocua*	10	100	1	83	8	830	120	14	1200	3.09	1200	84	5	810	119	10	1200	1200	Yes
171	2012	Tropical Sole	P1	raw fish	Y	*L. innocua*	10	100	1	23	1	220	23	1	220	2.34	220	21	3	220	21	3	220	220	Yes
173	2012	Tropical Sole	P1	raw fish	Y	*L. ivanovii*	0.1	3	1	>150	15	150000	>150	19	190000 (N')	5.28	190000 (N')	>150	14	140000	>150	20	200000	200000	Yes
32	2018	Hake fillet	P1	raw fish	Y	*L. innocua*	100	1000	1	94	6	9100	95	6	9200	3.96	9200								Yes
33	2018	Salmon steak	P1	raw fish	Y	*L. innocua*	100	1000	1	97	10	9700	145	15	15000	4.16	15000								Yes
33	2012	Smoked haddock	P2	smoked fish	N / Y	*L. mono + L. innocua*	10	100	1	>150	31	3100	>150	39	3900 (N')	3.59	3900 (N')	>150	32	3200	>150	39	3900	3900	Yes
34	2012	Smoked trout	P2	smoked fish	N	*L. spp*	10	100	1	5	0	50	5	0	50 (NE)	1.66	50 (NE)	7	0	60	7	1	70	70 (NE)	Yes
36	2012	Smoked salmon	P2	smoked fish	Y	*L. innocua*	10	100	1	>150	35	3500	>150	53	5300 (N')	3.72	5300 (N')	>150	48	4800	>150	69	6900	6900	Yes
163	2012	Smoked haddock	P2	smoked fish	Y	*L. welshimeri*	10	100	1	5	0	50	5	0	50	1.66	50 (NE)	12	1	120	12	1	120	120	Yes
181	2012	Smoked haddock	P2	smoked fish	Y	*L. welshimeri*	10	100	1	6	0	60	7	1	70 (NE)	1.86	70 (NE)	5	0	50	6	0	60	60 (NE)	Yes
158	2012	Pink prawns	P3	catered dish	Y	*L. ivanovii + L. seeligeri*	10	100	1	3	0	30	3	1	40	1.56	40	1	1	20	2	1	30	< 40	Yes
159	2012	Accras de morue	P3	catered dish	Y	*L. ivanovii + L. innocua*	10	100	1	1	0	10	18	4	200	2.30	200	1	0	10	15	0	140	140	Yes
216	2012	Tuna balls	P3	Catered dish	N	*L. spp*	1000	10000	1	20	2	20000	20	2	20000	4.30	20000	17	1	16000	17	2	17000	17000	Yes
34	2018	Cod	P3	Processed fish	Y	*L. innocua*	100	1000	1	88	9	8800	138	15	14000	4.14	14000								Yes
35	2018	Salmon	P3	Processed fish	Y	*L. innocua*	100	1000	1	100	7	9700	147	15	15000	4.17	15000								Yes
57	2018	Hake fillet, sauce eloise	P3	Processed fish	Y	*L. innocua*	10	100	1	61	10	650	62	10	660	2.82	660								Yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALOA COUNT / EPT (no revivification) - Depth																	Conf. Col.
									Vol. seeded	Repetition 1								Repetition 2							
										24 h			45 h					24 h			45 h				
										1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h	Result after 72 h (cold storage)	1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result after 72 h (cold storage)	
					Artificial contam. (Y / N)?	Listeria species				No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g		No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g		
									V (ml)	n1	n2		m1	m2			CFU/g	n1	n2		m1	m2		CFU/g	
67	2012	Sand-grown carrots	V1	fresh fruit and vegetables	Y	*L. innocua*	10	100	1	11	1	110	16	2	160	2.21	160	7	0	60	11	1	110	110	Yes
71	2012	Radishes	V1	fresh fruit and vegetables	Y	*L. welshimeri + L. ivanovii*	10	100	1	9	1	90	18	1	170	2.24	170	14	2	150	22	2	220	220	Yes
82	2012	Organic cherry tomatoes	V1	fresh fruit and vegetables	Y	*L. welshimeri*	10	100	1	43	5	430	43	5	440	2.64	440	43	3	420	44	3	430	430	Yes
36	2018	Apricots	V1	fresh fruit and vegetables	Y	*L. innocua*	10	100	1	1	0	10	1	0	10	1.00	10								Yes
37	2018	Tomatoes	V1	fresh fruit and vegetables	Y	*L. innocua*	10	100	1	20	0	180	21	0	190	2.28	190								Yes
58	2018	Carrots	V1	fresh vegetables	Y	*L. innocua*	10	100	1	25	5	270	36	8	400	2.60	400								Yes
61 bis	2012	Exotic fruit salad	V2	frozen fruit and vegetables	N	*L. spp*	10	100	1	0	0	<10	0	0	<10	<1	< 10	0	0	<10	0	0	<10	< 10	-
62 bis	2012	Red berry mix	V2	frozen fruit and vegetables	Y	*L. welshimeri*	10	100	1	25	2	250	25	2	250	2.39	250	17	1	160	19	2	190	190	Yes
63	2012	Couscous/vegetable mix	V2	frozen fruit and vegetables	Y	*L. mono + L. innocua*	10	100	1	88	6	860	95	9	950	2.98	950	85	7	840	99	11	1000	1000	Yes
65	2012	Pan-fried Pengourdine	V2	frozen fruit and vegetables	Y	*L. mono + L. welshimeri*	10	100	1	28	1	260	28	2	270	2.44	270	21	1	200	22	1	210	210	Yes
38	2018	Pieces of pumpkin and butternut squash	V2	frozen vegetables	Y	*L. innocua*	10	100	1	19	0	170	19	0	170	2.24	170								Yes
59	2018	Pan-fried vegetables	V2	frozen vegetables	Y	*L. innocua*	10	100	1	59	7	600	72	9	740	2.87	740								Yes
39	2018	Tomato purée	V3	processed vegetables	Y	*L. welshimeri*	100	1000	1	28	2	2700	28	5	3000	3.48	3000								Yes
40	2018	Ratatouille	V3	processed vegetables	Y	*L. welshimeri*	100	1000	1	53	8	5500	55	9	5800	3.76	5800								Yes
41	2018	Creamed mushrooms	V3	processed vegetables	Y	*L. welshimeri*	100	1000	1	8	0	730	10	1	1000	3.00	1000								Yes
42	2018	courgette gratin	V3	processed vegetables	Y	*L. welshimeri*	100	1000	1	110	12	11000	>150	16	16000 (N')	4.20	16000 (N')								Yes
43	2018	Vegetable soup	V3	processed vegetables	Y	*L. welshimeri*	100	1000	1	103	10	10000	106	12	11000	4.03	11000								Yes
165	2012	Smoked bacon and spaghetti	T1	Hot foods	Y	*L. ivanovii + L. welshimeri*	10	100	1	55	3	530	60	3	570	2.76	570	40	8	440	43	10	480	480	Yes
64	2012	Tuna pizza	T1	Hot foods	Y	*L. mono + L. welshimeri*	10	100	1	28	0	260	28	0	260	2.41	260	24	1	230	24	1	230	230	Yes
48	2018	Quiche	T1	Hot foods	Y	*L. innocua*	100	1000	1	0	0	<10	5	0	460 (NE)	2.66	460 (NE)								Yes
49	2018	Quiche with bacon	T1	Hot foods	Y	*L. innocua*	100	1000	1	0	0	<10	8	1	820 (NE)	2.91	820 (NE)								Yes
50	2018	Spring rolls with pork	T1	Hot foods	Y	*L. innocua*	100	1000	1	6	0	550	6	0	550 (NE)	2.74	550 (NE)								Yes
217	2012	Tuna / surimi salad	T2	Cold foods	Y	*L. seeligeri*	1000	10000	1	17	2	17000	17	2	17000	4.24	17000	19	2	19000	19	2	19000	19000	Yes
44	2018	Mixed salad with rice	T2	Cold foods	Y	*L. welshimeri*	10	100	1	35	3	350	39	3	380	2.58	380								Yes
45	2018	Nigerian salad	T2	Cold foods	Y	*L. welshimeri*	10	100	1	60	7	610	73	7	730	2.86	730								Yes
46	2018	Mixed salad	T2	Cold foods	Y	*L. welshimeri*	10	100	1	58	7	590	62	9	650	2.81	650								Yes
47	2018	Red cabbage / ham	T2	Cold foods	Y	*L. welshimeri*	10	100	1	35	2	330	40	2	380	2.58	380								Yes

Internal pallet number	Date of analysis	Sample name	Cat.	Matrix type	Type of contamination		1st dilution	2nd dilution	Alternative method: ALOA COUNT / EPT (no revivification) - Depth																			Conf. Col.
									Vol. seeded	Repetition 1								Result after 72 h (cold storage)	Repetition 2								
										24 h			45 h						24 h			45 h					
					Artificial contam. (Y / N)?	Listeria species				1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h	Result: 45 h			1st dil.	2nd dil.	Result: 24 h	1st dil.	2nd dil.	Result: 45 h			
										No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g	log cfu/g			No. col.	No. col.	cfu/g	No. col.	No. col.	cfu/g			
									V (ml)	n1	n2		m1	m2				CFU/g	n1	n2		m1	m2			CFU/g	
83	2012	Custard pastry	T3	egg product	Y	*L. ivanovii + L. innocua*	10	100	1	29	4	300	40	4	400	2.60		400	22	1	210	35	4	360		350	Yes
84	2012	Custard	T3	egg product	Y	*L. mono + L. welshimeri*	10	100	1	44	3	430	60	7	610	2.78		610	47	3	460	64	5	630		630	Yes
86	2012	Mayonnaise	T3	egg product	N / Y	*L. mono + L. innocua*	10	100	1	5	0	50	5	0	50 (NE)	1.66		50 (NE)	3	0	30	3	0	30		< 40	Yes
91	2012	Custard cream	T3	egg product	Y	*L. ivanovii*	10	100	1	17	3	180	21	4	230	2.36		230	19	1	180	22	1	210		210	Yes
94	2012	Chocolate mousse	T3	egg product	N	*L. spp*	10	100	1	46	2	440	46	2	440	2.64		440	56	3	540	56	3	540		540	Yes
99	2012	Caramel flan	T3	egg product	Y	*L. innocua*	100	1000	1	>150	16	16000	>150	29	29000 (N')	4.46		29000 (N')	>150	25	25000	>150	37	37000		37000	Yes
124	2012	Slaughterhouse - Q2 slicing machine cleaning cloth	E1	surface sample	N	*L. spp*	10	100	1	6	1	60	6	1	60 (NE)	1.80		60 (NE)	7	0	60	7	0	60		60 (NE)	Yes
125	2012	Slaughterhouse - Q3 slicing machine cleaning cloth	E1	surface sample	Y	*L. mono + L. welshimeri*	10	100	1	40	2	680	55	8	570	2.76		570	53	3	510	74	4	710		710	Yes
134	2012	Grinding shop, 2nd rate grinding stack swab	E1	surface sample	N / Y	*L. mono + L. welshimeri*	10	100	1	1	0	10	5	1	60 (NE)	1.74		60 (NE)	2	1	30	4	2	60		60 (NE)	Yes
135	2012	Grinding shop, mixing stack swab	E1	surface sample	N / Y	*L. mono + L. innocua*	10	100	1	15	1	150	15	1	150	2.16		150	19	0	170	19	0	170		170	Yes
156	2012	CL3 belt cutting floor wipe - production environment	E1	surface sample	N	*L. spp*	10	100	1	>150	137	14000	>150	>150	>15000	>4.18		>15000	999	153	10000	999	201	11000		> 15000	Yes
166	2012	Working surface cleaning wipe	E1	surface sample	N	*L. spp*	10	100	1	1	0	10	1	0	10	1.00		10	1	0	10	1	0	10		< 40	Yes
168	2012	Swab - cold storage room shelves	E1	surface sample	N	*L. spp*	10	100	1	3	0	30	4	0	40 (NE)	1.56		40 (NE)	1	0	10	1	0	10		< 40	Yes
169	2012	Swab - cold room floor and handle	E1	surface sample	Y	*L. ivanovii*	10	100	1	7	0	60	13	0	120	2.07		120	3	1	40	10	2	110		110	Yes
62	2018	Working surface cleaning wipe	E1	surface sample	Y	*L. innocua*	10	100	1	47	5	470	82	9	830	2.92		830									Yes
141	2012	Water in grinding shop, Fresh raw materials refrigeration drain	E2	process water	Y	*L. innocua*	10	100	1	7	0	60	7	0	60 (NE)	1.80		60 (NE)	8	2	90	8	2	90		90 (NE)	Yes
143	2012	Water in slaughterhouse drain	E2	process water	Y	*L. mono + L. innocua*	10	100	1	24	3	250	38	4	380	2.58		380	16	7	210	26	8	310		310	Yes
220	2012	Seed rinsing water	E2	process water	Y	*L. welshimeri*	100	1000	1	41	4	4100	41	1	3800	3.58		3800	49	5	4900	49	5	4900		4900	Yes
221	2012	Drainage water	E2	process water	Y	*L. welshimeri*	100	1000	1	40	3	3900	40	3	3900	3.59		3900	39	3	3800	39	3	3800		3800	Yes
51	2018	Composite watercress water	E2	process water	Y	*L. innocua*	100	1000	1	10	1	1000	13	1	1300	3.10		1300									Yes
63	2018	Drainage water	E2	process water	Y	*L. innocua*	10	100	1	60	9	630	72	11	760	2.88		760									Yes
52	2018	Waste - bakery	E3	Dust and residues	Y	*L. innocua*	10	100	1	9	1	90	10	1	100	2.00		100									Yes
53	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	20	1	190	20	1	190	2.28		190									Yes
54	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	0	0	<10	7	1	70 (NE)	1.86		70 (NE)									Yes
55	2018	Waste - bakery	E3	Dust and residues	Y	*L. innocua*	10	100	1	56	4	550	66	5	650	2.81		650									Yes
56	2018	Waste from the floor - delicatessen	E3	Dust and residues	Y	*L. innocua*	10	100	1	36	1	340	38	3	370	2.57		370									Yes

APPENDIX 7

Relative accuracy: Statistical calculations *Listeria spp.*

Statistical calculations: *Listeria spp.*-Surface inoculation

Incubation 45 h - surface							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Dairy products	L1	21	2012	2.16	2.21	2.19	0.05
	L1	205	2012	3.12	3.09	3.10	-0.02
	L1	218	2012	2.00	1.80	1.90	-0.20
	L1	219	2012	1.74	1.86	1.80	0.12
	L1	60	2018	2.24	2.04	2.14	-0.20
	L1	60	2018	2.37	2.39	2.38	0.02
	L2	147	2012	2.19	2.24	2.21	0.05
	L2	148	2012	2.59	2.66	2.62	0.07
	L2	162	2012	2.44	2.49	2.46	0.05
	L2	1	2018	2.49	2.50	2.50	0.01
	L2	24	2018	2.54	2.37	2.46	-0.16
	L3	95	2012	2.19	2.07	2.13	-0.12
	L3	96	2012	2.55	2.53	2.54	-0.02
	L3	97	2012	2.80	2.71	2.75	-0.09
	L3	25	2018	2.36	2.54	2.45	0.18
	L3	26	2018	2.45	2.37	2.41	-0.08
	Category average						-0.02
	Category standard deviation						0.11
Meat products	C1	49	2012	2.30	2.16	2.23	-0.14
	C1	152	2012	2.13	2.26	2.20	0.12
	C1	174 bis	2012	2.32	2.24	2.28	-0.08
	C1	179 bis	2012	2.57	2.56	2.57	-0.01
	C1	184	2012	3.10	3.00	3.05	-0.09
	C2	177	2012	3.68	3.59	3.64	-0.09
	C2	180	2012	3.50	3.42	3.46	-0.08
	C2	190	2012	2.64	2.73	2.68	0.09
	C2	30	2018	3.66	3.63	3.64	-0.03
	C2	31	2018	3.41	3.36	3.38	-0.05
	C3	1	2012	2.42	2.46	2.44	0.04
	C3	176	2012	3.03	3.00	3.02	-0.03
	C3	27	2018	4.07	4.10	4.09	0.04
	C3	28	2018	3.98	4.04	4.01	0.07
	C3	29	2018	3.30	3.38	3.34	0.08
	Category average						-0.01
	Category standard deviation						0.08
Seafood products	P1	170	2012	3.09	3.09	3.09	0.00
	P1	171	2012	2.37	2.30	2.34	-0.07
	P1	173	2012	5.23	5.12	5.18	-0.11
	P1	32	2018	3.88	3.84	3.86	-0.04
	P1	33	2018	4.06	4.09	4.08	0.03
	P2	33	2012	3.57	3.59	3.58	0.02
	P2	34	2012	1.91	2.07	1.99	0.16
	P2	36	2012	3.80	3.67	3.73	-0.14
	P2	163	2012	2.07	1.86	1.97	-0.21
	P2	181	2012	1.96	1.66	1.81	-0.30
	P3	159	2012	2.26	2.21	2.24	-0.05
	P3	216	2012	4.34	4.30	4.32	-0.04
	P3	34	2018	4.15	4.10	4.12	-0.06
	P3	35	2018	4.14	4.14	4.14	0.00
	P3	57	2018	2.78	2.74	2.76	-0.04
	Category average						-0.06
	Category standard deviation						0.11

Statistical calculations: *Listeria spp.*-Surface inoculation

Incubation 45 h - surface							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Vegetable products	V1	67	2012	2.24	2.30	2.27	0.06
	V1	71	2012	2.07	2.16	2.12	0.09
	V1	82	2012	2.57	2.53	2.55	-0.04
	V1	37	2018	2.26	2.49	2.37	0.23
	V1	58	2018	2.45	2.61	2.53	0.16
	V2	62 bis	2012	2.28	2.42	2.35	0.14
	V2	63	2012	3.14	3.20	3.17	0.07
	V2	65	2012	2.37	2.44	2.40	0.06
	V2	38	2018	2.37	2.26	2.32	-0.11
	V2	59	2018	2.87	2.91	2.89	0.04
	V3	39	2018	3.53	3.63	3.58	0.10
	V3	40	2018	3.80	3.67	3.73	-0.14
	V3	41	2018	2.91	2.91	2.91	0.00
	V3	42	2018	4.12	4.15	4.13	0.03
	V3	43	2018	4.02	4.05	4.03	0.03
	Category average						0.05
	Category standard deviation						0.10
Composite foods	T1	165	2012	2.76	2.76	2.76	0.01
	T1	64	2012	2.42	2.37	2.40	-0.05
	T1	48	2018	2.86	2.80	2.83	-0.06
	T1	49	2018	2.66	2.96	2.81	0.30
	T1	50	2018	2.91	2.66	2.79	-0.26
	T2	217	2012	4.41	4.37	4.39	-0.03
	T2	44	2018	2.48	2.45	2.46	-0.03
	T2	45	2018	2.77	2.89	2.83	0.12
	T2	46	2018	2.88	2.74	2.81	-0.15
	T2	47	2018	2.57	2.54	2.55	-0.03
	T3	83	2012	2.67	2.69	2.68	0.02
	T3	84	2012	2.93	2.89	2.91	-0.03
	T3	91	2012	2.32	2.26	2.29	-0.06
	T3	94	2012	2.70	2.71	2.71	0.02
	T3	99	2012	4.68	4.76	4.72	0.07
	Category average						-0.02
	Category standard deviation						0.12
Environment	E1	124	2012	1.96	1.86	1.91	-0.10
	E1	125	2012	2.94	2.97	2.96	0.03
	E1	135	2012	2.30	2.30	2.30	0.00
	E1	156	2012	3.30	3.30	3.30	0.00
	E1	169	2012	2.00	2.07	2.04	0.07
	E1	62	2018	2.98	2.77	2.88	-0.21
	E2	143	2012	2.57	2.49	2.53	-0.08
	E2	220	2012	3.63	3.65	3.64	0.02
	E2	221	2012	3.60	3.61	3.61	0.01
	E2	51	2018	3.10	3.10	3.10	0.00
	E2	63	2018	2.85	2.78	2.82	-0.07
	E3	52	2018	1.91	2.04	1.98	0.12
	E3	53	2018	2.32	2.24	2.28	-0.08
	E3	54	2018	1.96	1.86	1.91	-0.10
	E3	55	2018	2.86	2.83	2.85	-0.03
	E3	56	2018	2.45	2.46	2.46	0.01
	Category average						-0.02
	Category standard deviation						0.08

Statistical calculations: *Listeria spp.*-Surface inoculation

Incubation 45 h - surface							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Average - all categories							-0.01
Standard deviation - all categories							0.10

n =	92
β =	95%
T(0.025.91) =	1.98

Lower confidence limit	Upper confidence limit
-0.21	0.19

Samples excluded from the statistical analysis

				Incubation 45 h - surface			
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
L	L1	161	2012	1.00	1.26	1.13	0.26
	L2	164	2012	1.66	1.44	1.55	-0.22
C	C1	153	2012	0.00	0.00	0.00	0.00
	C2	2	2012	0.00	0.00	0.00	0.00
P	P3	158	2012	1.66	1.26	1.46	-0.40
V	V1	36	2018	0.00	1.00	0.50	1.00
	V2	61a	2012	0.00	0.00	0.00	0.00
T	T3	86	2012	1.26	1.80	1.53	0.54
E	E1	134	2012	1.44	1.80	1.62	0.36
	E1	166	2012	0.00	1.44	0.72	1.44
	E1	168	2012	1.00	1.00	1.00	0.00
	E2	141	2014	1.44	2.00	1.72	0.56

Statistical calculations: *Listeria spp.*-Pour-plating inoculation

Incubation 45 h - depth							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Dairy products	L1	21	2012	2.16	2.10	2.13	-0.06
	L1	205	2012	3.12	3.09	3.10	-0.03
	L1	219	2012	1.74	2.00	1.87	0.26
	L1	60	2018	2.24	2.19	2.22	-0.05
	L1	61	2018	2.37	2.34	2.36	-0.03
	L2	147	2012	2.19	2.19	2.19	0.00
	L2	148	2012	2.59	2.60	2.60	0.01
	L2	162	2012	2.44	2.30	2.37	-0.13
	L2	164	2012	1.66	1.74	1.70	0.08
	L2	1	2018	2.49	2.60	2.55	0.11
	L2	24	2018	2.54	2.60	2.57	0.06
	L3	95	2012	2.19	2.24	2.21	0.05
	L3	96	2012	2.55	2.48	2.51	-0.07
	L3	97	2012	2.80	2.79	2.79	-0.01
	L3	25	2018	2.36	2.21	2.29	-0.14
	L3	26	2018	2.45	2.41	2.43	-0.04
	Category average						0.00
	Category standard deviation						0.10
Meat products	C1	49	2012	2.30	2.26	2.28	-0.04
	C1	152	2012	2.13	2.10	2.12	-0.03
	C1	174 bis	2012	2.32	2.34	2.33	0.02
	C1	179 bis	2012	2.57	2.46	2.52	-0.11
	C1	184	2012	3.10	2.98	3.04	-0.12
	C2	177	2012	3.68	3.56	3.62	-0.13
	C2	180	2012	3.50	3.41	3.46	-0.09
	C2	190	2012	2.64	2.67	2.65	0.03
	C2	30	2018	3.66	3.56	3.61	-0.10
	C2	31	2018	3.41	3.49	3.45	0.08
	C3	1	2012	2.42	2.41	2.41	-0.02
	C3	176	2012	3.03	3.00	3.02	-0.03
	C3	27	2018	4.07	4.15	4.11	0.09
	C3	28	2018	3.98	4.14	4.06	0.17
	C3	29	2018	3.30	3.23	3.27	-0.07
	Category average						-0.02
	Category standard deviation						0.09
Seafood products	P1	170	2012	3.09	3.09	3.09	-0.01
	P1	171	2012	2.37	2.34	2.36	-0.03
	P1	173	2012	5.23	5.28	5.25	0.05
	P1	32	2018	3.88	3.96	3.92	0.09
	P1	33	2018	4.06	4.16	4.11	0.10
	P2	33	2012	3.57	3.59	3.58	0.02
	P2	34	2012	1.91	1.66	1.79	-0.26
	P2	36	2012	3.80	3.72	3.76	-0.08
	P2	163	2012	2.07	1.66	1.87	-0.41
	P2	181	2012	1.96	1.86	1.91	-0.10
	P3	159	2012	2.26	2.30	2.28	0.04
	P3	216	2012	4.34	4.30	4.32	-0.04
	P3	34	2018	4.15	4.14	4.15	-0.01
	P3	35	2018	4.14	4.17	4.15	0.03
	P3	57	2018	2.78	2.82	2.80	0.04
	Category average						-0.04
	Category standard deviation						0.14

Statistical calculations: *Listeria spp.*-Pour-plating inoculation

Incubation 45 h - depth							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Vegetable products	V1	67	2012	2.24	2.21	2.23	-0.02
	V1	71	2012	2.07	2.24	2.15	0.16
	V1	82	2012	2.57	2.64	2.61	0.07
	V1	37	2018	2.26	2.28	2.27	0.02
	V1	58	2018	2.45	2.60	2.53	0.15
	V2	62 bis	2012	2.28	2.39	2.34	0.11
	V2	63	2012	3.14	2.98	3.06	-0.16
	V2	65	2012	2.37	2.44	2.40	0.06
	V2	38	2018	2.37	2.24	2.31	-0.14
	V2	59	2018	2.87	2.87	2.87	0.00
	V3	39	2018	3.53	3.48	3.50	-0.05
	V3	40	2018	3.80	3.76	3.78	-0.04
	V3	41	2018	2.91	3.00	2.96	0.09
	V3	42	2018	4.12	4.20	4.16	0.08
	V3	43	2018	4.02	4.03	4.02	0.01
	Category average						0.02
	Category standard deviation						0.09
Composite foods	T1	165	2012	2.76	2.76	2.76	0.00
	T1	64	2012	2.42	2.41	2.41	-0.02
	T1	48	2018	2.86	2.66	2.76	-0.20
	T1	49	2018	2.66	2.91	2.79	0.26
	T1	50	2018	2.91	2.74	2.82	-0.18
	T2	217	2012	4.41	4.24	4.32	-0.17
	T2	44	2018	2.48	2.58	2.53	0.10
	T2	45	2018	2.77	2.86	2.82	0.09
	T2	46	2018	2.88	2.81	2.85	-0.07
	T2	47	2018	2.57	2.58	2.58	0.01
	T3	83	2012	2.67	2.60	2.64	-0.07
	T3	84	2012	2.93	2.78	2.86	-0.14
	T3	91	2012	2.32	2.36	2.34	0.04
	T3	94	2012	2.70	2.64	2.67	-0.06
	T3	99	2012	4.68	4.46	4.57	-0.22
	Category average						-0.03
	Category standard deviation						0.13
Environment	E1	124	2012	1.96	1.80	1.88	-0.15
	E1	125	2012	2.94	2.76	2.85	-0.18
	E1	135	2012	2.30	2.16	2.23	-0.14
	E1	169	2012	2.00	2.07	2.04	0.07
	E1	62	2018	2.98	2.92	2.95	-0.06
	E2	143	2012	2.57	2.58	2.58	0.01
	E2	220	2012	3.63	3.58	3.61	-0.05
	E2	221	2012	3.60	3.59	3.60	-0.01
	E2	51	2018	3.10	3.10	3.10	0.00
	E2	63	2018	2.85	2.88	2.87	0.03
	E3	52	2018	1.91	2.00	1.96	0.09
	E3	53	2018	2.32	2.28	2.30	-0.04
	E3	54	2018	1.96	1.86	1.91	-0.10
	E3	55	2018	2.86	2.81	2.84	-0.05
	E3	56	2018	2.45	2.57	2.51	0.12
	Category average						-0.03
	Category standard deviation						0.09

Statistical calculations: *Listeria spp.*-Pour-plating inoculation

Incubation 45 h - depth							
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
Average - all categories							-0.02
Standard deviation - all categories							0.11

n =	91
β =	95%
T(0.025.90) =	1.98

Lower confidence limit	Upper confidence limit
-0.24	0.20

Samples excluded from the statistical analysis

				incubation 45 h - depth			
Category	Type	Sample ref.	Date of analysis	log cfu/g		Average	Difference
				Ref. method	Altern. method		
L	L1	161	2012	1.00	1.26	1.13	0.26
	L1	218	2012	2.00	1.56	1.78	-0.44
C	C1	153	2012	0	0.00	0.00	0.00
	C2	2	2012	0	0.00	0.00	0.00
P	P3	158	2012	1.66	1.56	1.61	-0.10
V	V1	36	2018	0.00	1.00	0.50	1.00
	V2	61a	2012	0.00	0.00	0.00	0.00
T	T3	86	2012	1.26	1.66	1.46	0.40
E	E1	134	2012	1.44	1.74	1.59	0.30
	E1	156	2012	3.30	5.18	4.24	1.88
	E1	166	2012	0.00	1.00	0.50	1.00
	E1	168	2012	1.00	1.56	1.28	0.56
	E2	141	2014	1.44	1.80	1.62	0.36

APPENDIX 8

Relative accuracy: Results of 2018 confirmations

samp. no.	Category	Type	Matrix	Strain ref.	Confirmations					
					ISO method	Alternative method (surface and depth)				
					Reference test (gallery)	*Reference test (gallery)*	Vidas Lmo2		Rapid check	Palcam
							RFV value	result		
1	Dairy	Raw milk	Goat milk	no. IAA 168	*Listeria monocytogenes*	*Listeria monocytogenes*	15866	+	/	/
2	Meat	Processed meat products	Beef meatballs	no. AFNOR 2	*Listeria monocytogenes*	*Listeria monocytogenes*	15866	+	/	/
3	Meat	Processed meat products	Chicken gratin	no. AFNOR 2	*Listeria monocytogenes*	*Listeria monocytogenes*	15864	+	/	/
4	Meat	Cured product	Bacon	no. AFNOR 2	*Listeria monocytogenes*	*Listeria monocytogenes*	15865	+	/	/
5	Vegetables	Fresh vegetables	Apricot	no. AFNOR 8	*Listeria monocytogenes*	*Listeria monocytogenes*	15864	+	/	/
6	Vegetables	Processed vegetables	Mixed carrots	no. AFNOR 8	*Listeria monocytogenes*	*Listeria monocytogenes*	15867	+	/	/
7	Vegetables	Processed vegetables	Fried potatoes	no. AFNOR 8	*Listeria monocytogenes*	*Listeria monocytogenes*	15861	+	/	/
8	Vegetables	Processed vegetables	Green bean salad	no. AFNOR 8	*Listeria monocytogenes*	*Listeria monocytogenes*	15862	+	/	/
9	Vegetables	Processed vegetables	Tomatoes with French dressing	no. AFNOR 8	*Listeria monocytogenes*	*Listeria monocytogenes*	15861	+	/	/
10	Vegetables	Processed vegetables	Spinach purée	no. AFNOR 8	*Listeria monocytogenes*	*Listeria monocytogenes*	15862	+	/	/
11	Composites	Cold catered dish	Quinoa and beet hummus	no. AFNOR 27	*Listeria monocytogenes*	*Listeria monocytogenes*	15861	+	/	/
12	Composites	Cold catered dish	Mixed salad with tomatoes and eggs	no. AFNOR 27	*Listeria monocytogenes*	*Listeria monocytogenes*	15862	+	/	/
13	Composites	Cold catered dish	Spring roll	no. AFNOR 27	*Listeria monocytogenes*	*Listeria monocytogenes*	15866	+	/	/
14	Composites	Cold catered dish	Mixed salad	no. AFNOR 27	*Listeria monocytogenes*	*Listeria monocytogenes*	15866	+	/	/
15	Composites	Cold catered dish	Tomato salad with bacon	no. AFNOR 27	*Listeria monocytogenes*	*Listeria monocytogenes*	15864	+	/	/
16	Composites	Hot catered dish	Mediterranean quiche	no. AFNOR 22	*Listeria monocytogenes*	*Listeria monocytogenes*	15866	+	/	/
17	Composites	Hot catered dish	Tomato and pepper patties	no. AFNOR 22	*Listeria monocytogenes*	*Listeria monocytogenes*	15865	+	/	/
18	Composites	Hot catered dish	Fish with spinach	no. AFNOR 22	*Listeria monocytogenes*	*Listeria monocytogenes*	15866	+	/	/
19	Environment	Dust and residues	Working surface waste - bakery	no. IAA 296	*Listeria monocytogenes*	*Listeria monocytogenes*	15866	+	/	/
20	Environment	Dust and residues	Waste from a sink - delicatessen	no. IAA 296	*Listeria monocytogenes*	*Listeria monocytogenes*	15868	+	/	/
21	Environment	Dust and residues	Waste from the floor - delicatessen	no. IAA 296	*Listeria monocytogenes*	*Listeria monocytogenes*	15867	+	/	/
22	Environment	Dust and residues	Waste from the floor - bakery	no. IAA 296	*Listeria monocytogenes*	*Listeria monocytogenes*	15867	+	/	/
24	Dairy	Raw milk	Cow's milk	no. IAA 228	*Listeria innocua*	*Listeria innocua*	/	/	+	+
25	Dairy	Ice cream and dairy dessert	Caramel cream	no. IAA 228	*Listeria innocua*	*Listeria innocua*	/	/	+	+
26	Dairy	Ice cream and dairy dessert	Chocolate cream	no. IAA 228	*Listeria innocua*	*Listeria innocua*	/	/	+	+
27	Meat	Processed meat products	Meatballs	no. AFNOR 6	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
28	Meat	Processed meat products	Minced poultry	no. AFNOR 6	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
29	Meat	Processed meat products	Beef meatball curry	no. AFNOR 6	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
30	Meat	Cured product	Bacon	no. AFNOR 6	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
31	Meat	Cured product	Pure pork slicing sausage	no. AFNOR 6	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
32	Seafood	Raw fish	Raw hake fillet	no. AFNOR 23	*Listeria innocua*	*Listeria innocua*	/	/	+	+
33	Seafood	Raw fish	Raw salmon steak	no. AFNOR 23	*Listeria innocua*	*Listeria innocua*	/	/	+	+

samp. no.	Category	Type	Matrix	Strain ref.	Confirmations					
					ISO method	Alternative method (surface and depth)				
					Reference test (gallery)	*Reference test (gallery)*	Vidas Lmo2		Rapid check	Palcam
							RFV value	result		
34	Seafood	Cooked seafood products	Cod	no. AFNOR 23	*Listeria innocua*	*Listeria innocua*	/	/	+	+
35	Seafood	Cooked seafood products	Salmon	no. AFNOR 23	*Listeria innocua*	*Listeria innocua*	/	/	+	+
36	Vegetables	Fresh vegetables	Apricot	no. AFNOR 57	*Listeria innocua*	*Listeria innocua*	/	/	+	+
37	Vegetables	Fresh vegetables	Tomato	no. AFNOR 57	*Listeria innocua*	*Listeria innocua*	/	/	+	+
38	Vegetables	Frozen vegetables	Pieces of pumpkin and butternut squash	no. AFNOR 57	*Listeria innocua*	*Listeria innocua*	/	/	+	+
39	Vegetables	Processed vegetables	Tomato purée	no. AFNOR 56	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
40	Vegetables	Processed vegetables	Ratatouille	no. AFNOR 56	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
41	Vegetables	Processed vegetables	Creamed mushrooms	no. AFNOR 56	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
42	Vegetables	Processed vegetables	courgette gratin	no. AFNOR 56	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
43	Vegetables	Processed vegetables	vegetable soup	no. AFNOR 56	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
44	Composites	Cold catered dish	Mixed salad with rice	no. AFNOR 14	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
45	Composites	Cold catered dish	Nigerian salad	no. AFNOR 14	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
46	Composites	Cold catered dish	Mixed salad	no. AFNOR 14	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
47	Composites	Cold catered dish	Red cabbage and ham salad	no. AFNOR 14	*Listeria welshimeri*	*Listeria welshimeri*	/	/	+	+
48	Composites	Hot catered dish	Quiche	no. AFNOR 21	*Listeria innocua*	*Listeria innocua*	/	/	+	+
49	Composites	Hot catered dish	Quiche with bacon	no. AFNOR 21	*Listeria innocua*	*Listeria innocua*	/	/	+	+
50	Composites	Hot catered dish	Spring rolls with pork	no. AFNOR 21	*Listeria innocua*	*Listeria innocua*	/	/	+	+
51	Environment	Process water	composite watercress water	no. AFNOR 55	*Listeria innocua*	*Listeria innocua*	/	/	+	+
52	Environment	Dust and residues	Working surface waste - bakery	no. IAA 246	*Listeria innocua*	*Listeria innocua*	/	/	+	+
53	Environment	Dust and residues	Waste from a sink - delicatessen	no. IAA 246	*Listeria innocua*	*Listeria innocua*	/	/	+	+
54	Environment	Dust and residues	working surface waste - bakery	no. IAA 246	*Listeria innocua*	*Listeria innocua*	/	/	+	+
55	Environment	Dust and residues	Waste from the floor - bakery	no. IAA 246	*Listeria innocua*	*Listeria innocua*	/	/	+	+
56	Environment	Dust and residues	Waste from the floor - delicatessen	no. IAA 246	*Listeria innocua*	*Listeria innocua*	/	/	+	+
57	Seafood	Processed seafood products	Hake fillet, sauce eloise	no. AFNOR 23	*Listeria innocua*	*Listeria innocua*	/	/	+	+
58	Vegetables	Fresh vegetables	Mixed carrots	no. AFNOR 57	*Listeria innocua*	*Listeria innocua*	/	/	+	+
59	Vegetables	Frozen vegetables	Pan-fried vegetables	no. AFNOR 57	*Listeria innocua*	*Listeria innocua*	/	/	+	+
60	Dairy	Raw milk cheese	Goat cheese	no. IAA 228	*Listeria innocua*	*Listeria innocua*	/	/	+	+
61	Dairy	Raw milk cheese	Goat cheese	no. IAA 228	*Listeria innocua*	*Listeria innocua*	/	/	+	+

samp. no.	Category	Type	Matrix	Strain ref.	Confirmations					
					ISO method	Alternative method (surface and depth)				
					Reference test (gallery)	*Reference test (gallery)*	Vidas Lmo2		Rapid check	Palcam
							RFV value	result		
62	Environment	Surface	working surface wipes	no. IAA 237	*Listeria innocua*	*Listeria innocua*	/	/	+	+
63	Environment	Process water	drainage water	no. IAA 237	*Listeria innocua*	*Listeria innocua*	/	/	+	+
64	Meat	Processed meat products	Beef meatball	18IAA_4093.2	*Listeria monocytogenes*	*Listeria monocytogenes*	15850	+	/	/
65	Meat	Processed meat products	Minced poultry	18IAA_4093.2	*Listeria monocytogenes*	*Listeria monocytogenes*	15856	+	/	/
66	Meat	Processed meat products	Sautéed pork	18IAA_4093.2	*Listeria monocytogenes*	*Listeria monocytogenes*	15850	+	/	/
67	Seafood	Processed seafood products	Sardines with tomatoes	18IAA_5554.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15850	+	/	/
68	Seafood	Processed seafood products	Saithe filet with carrots	18IAA_5554.1	*Listeria monocytogenes*	*Listeria monocytogenes*	13420	+	/	/
69	Seafood	Processed seafood products	Surimi	18IAA_5554.1	*Listeria monocytogenes*	*Listeria monocytogenes*	11986	+	/	/
70	Seafood	Processed seafood products	Breaded fish	18IAA_5554.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15854	+	/	/
71	Seafood	Processed seafood products	salmon steak with chives	18IAA_5554.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15056	+	/	/
72	Environment	Surface	wipe	18IAA_4889.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15853	+	/	/
73	Environment	Surface	Slaughterhouse - carcass cleaning cloth	18IAA_4889.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15854	+	/	/
74	Environment	Surface	Meat grinder swab	18IAA_4889.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15850	+	/	/
75	Environment	Surface	working surface cleaning cloth - delicatessen, butchery	18IAA_4889.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15849	+	/	/
76	Environment	Surface	Slicing machine wipe	18IAA_4889.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15090	+	/	/
77	Environment	Process water	composite water 7287.1	18IAA_4634.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15478	+	/	/
78	Environment	Dust and residues	composite water - alfalfa	18IAA_4634.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15855	+	/	/
79	Environment	Dust and residues	composite water 7265.3	18IAA_4634.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15854	+	/	/
80	Environment	Dust and residues	drain water	18IAA_4634.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15854	+	/	/
81	Environment	Dust and residues	rinsing water	18IAA_4634.1	*Listeria monocytogenes*	*Listeria monocytogenes*	15854	+	/	/
82	Environment	Dust and residues	Waste - bakery	18IAA_5350.11	*Listeria monocytogenes*	*Listeria monocytogenes*	14133	+	/	/
83	Dairy	Dairy dessert	vanilla cream	18IAA_6440.2	*Listeria monocytogenes*	*Listeria monocytogenes*	9930	+	/	/
85	Vegetables	Fresh vegetables	broccoli	18IAA_5292.3	*Listeria monocytogenes*	*Listeria monocytogenes*	7059	+	/	/
86	Vegetables	Fresh vegetables	tomatoes	18IAA_5292.3	*Listeria monocytogenes*	*Listeria monocytogenes*	7567	+	/	/
87	Vegetables	Frozen vegetables	butternut squash soup	18IAA_5292.3	*Listeria monocytogenes*	*Listeria monocytogenes*	7364	+	/	/
88	Vegetables	Frozen vegetables	pan-fried vegetables	18IAA_5292.3	*Listeria monocytogenes*	*Listeria monocytogenes*	7482	+	/	/
89	Composites	Pastries	egg cream	18IAA_2069.1	*Listeria monocytogenes*	*Listeria monocytogenes*	7317	+	/	/
90	Vegetables	Processed vegetables	Cooked beetroot	18IAA_5292.3	*Listeria monocytogenes*	*Listeria monocytogenes*	6103	+	/	/

APPENDIX 9

Accuracy profiles: Initial results *Listeria monocytogenes*

DAIRY PRODUCTS-*L. monocytogenes*																		
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count									
									Surface inoculation					Pour-plating inoculation				
				Dilution	Vol. seeded	cfu/dish	CFU/g	log CFU/g	Dilution	Vol. seeded	cfu/dish	CFU/g	log CFU/g	Dilution	Vol. seeded	cfu/dish	CFU/g	log CFU/g
mesophilic flora: 53.10^5 CFU/g	*Listeria monocytogenes 2b* (ref. 75 - origin Valençay)	1	1	10	1	11	110	2.04	10	1	7	82	1.91	10	1	9	90	1.95
				100		1			100		2			100		1		
			2	10		10	91	1.96	10		10	100	2.00	10		5	60	1.78
				100		0			100		1			100		1		
			3	10		6	64	1.81	10		12	110	2.04	10		11	120	2.08
				100		1			100		0			100		2		
			4	10		13	150	2.18	10		12	110	2.04	10		14	140	2.15
				100		3			100		0			100		1		
			5	10		11	100	2.00	10		13	120	2.08	10		6	60	1.78
				100		0			100		0			100		0		
		2	11	10	1	63	620	2.79	10	1	52	500	2.70	10	1	52	510	2.71
				100		5			100		3			100		4		
			12	10		55	560	2.75	10		49	460	2.66	10		45	440	2.64
				100		7			100		1			100		3		
			13	10		58	560	2.75	10		67	660	2.82	10		56	560	2.75
				100		3			100		6			100		5		
			14	10		45	470	2.67	10		60	610	2.79	10		66	660	2.82
				100		7			100		7			100		6		
			15	10		56	600	2.78	10		51	500	2.70	10		50	480	2.68
				100		10			100		4			100		3		
Raw milk goat cheese Batch 1		3	21	10	0.1	24	2300	3.36	10	0.1	37	3500	3.54	100	1	21	1900	3.28
				100		1			100		1			1000		0		
			22	10		29	2800	3.45	10		32	3500	3.54	100		28	2600	3.41
				100		2			100		6			1000		1		
			23	10		29	2700	3.43	10		28	2800	3.45	100		22	2200	3.34
				100		1			100		3			1000		2		
			24	10		24	2200	3.34	10		22	2500	3.40	100		26	2600	3.41
				100		0			100		6			1000		3		
			25	10		35	3300	3.52	10		34	3500	3.54	100		24	2300	3.36
				100		1			100		5			1000		1		
mesophilic flora: 62.10^5 CFU/g		1	6	10	1	10	91	1.96	10	1	10	130	2.11	10	1	13	120	2.08
				100		0			100		4			100		0		
			7	10		7	64	1.81	10		15	140	2.15	10		17	170	2.23
				100		0			100		0			100		2		
			8	10		11	110	2.04	10		10	130	2.11	10		14	140	2.15
				100		1			100		4			100		1		
			9	10		8	82	1.91	10		13	140	2.15	10		9	90	1.95
				100		1			100		2			100		1		
			10	10		12	110	2.04	10		6	60	1.78	10		11	100	2.00
				100		0			100		0			100		0		
		2	16	10	1	48	460	2.66	10	1	65	650	2.81	10	1	57	540	2.73
				100		2			100		6			100		2		
			17	10		62	640	2.81	10		58	590	2.77	10		51	480	2.68
				100		8			100		7			100		2		
			18	10		49	490	2.69	10		46	460	2.66	10		45	430	2.63
				100		5			100		5			100		2		
			19	10		64	590	2.77	10		54	550	2.74	10		60	580	2.76
				100		1			100		6			100		4		
			20	10		46	470	2.67	10		59	590	2.77	10		58	570	2.76
				100		6			100		6			100		5		
Raw milk goat cheese Batch 2		3	26	10	0.1	26	2700	3.43	10	0.1	35	3500	3.54	100	1	29	2900	3.46
				100		4			100		3			1000		3		
			27	10		24	2400	3.38	10		33	3200	3.51	100		25	2500	3.40
				100		2			100		2			1000		2		
			28	10		17	1900	3.28	10		21	2200	3.,34	100		21	2200	3.34
				100		4			100		3			1000		3		
			29	10		21	2200	3.34	10		18	1900	328	100		21	1900	3.28
				100		3			100		3			1000		0		
			30	10		20	2000	3.30	10		22	2300	3.36	100		23	2400	3.38
				100		2			100		3			1000		3		

MEAT PRODUCTS -*L. monocytogenes*																		
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count									
									Surface inoculation					Pour-plating inoculation				
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h		
						cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g
Minced meat Batch 1 mesophilic flora: 90000 CFU/g	*Listeria monocytogenes 2a (ref. 9 - lean ground beef*	1	1	10	1	16	160	2.20	10	1	17	160	2.20	10	1	16	160	220
				100		2			100		1			100		2		
			2	10		17	170	2.23	10		16	160	2.20	10		16	150	2.18
				100		2			100		2			100		0		
			3	10		14	140	2.15	10		14	140	2.15	10		17	160	2.20
				100		1			100		1			100		0		
			4	10		13	120	2.08	10		17	160	2.20	10		19	200	2.30
				100		0			100		1			100		3		
			5	10		17	160	2.20	10		16	160	2.20	10		18	160	2.20
				100		1			100		1			100		0		
		2	11	10	1	76	750	2.88	10	1	74	740	2.87	10	1	84	840	2.92
				100		6			100		7			100		8		
			12	10		79	790	2.90	10		78	770	2.89	10		81	810	2.91
				100		8			100		7			100		8		
			13	10		70	700	2.85	10		73	720	2.86	10		74	740	2.87
				100		7			100		6			100		7		
			14	10		75	760	2.88	10		80	790	2.90	10		84	850	2.93
				100		8			100		7			100		9		
			15	10		75	750	2.88	10		78	780	2.89	10		80	810	2.91
				100		7			100		8			100		9		
		3	21	10	0.1	57	5600	3.75	10	0.1	59	6000	3.78	100	1	61	6100	3.79
				100		5			100		7			1000		6		
			22	10		59	5900	3.77	10		62	6200	3.79	100		64	6500	3.81
				100		6			100		6			1000		8		
			23	10		63	6300	3.80	10		64	6500	3.81	100		63	6300	3.80
				100		6			100		7			1000		6		
			24	10		55	5400	3.73	10		60	5900	3.77	100		64	6400	3.81
				100		4			100		5			1000		6		
			25	10		56	5500	3.74	10		58	5700	3.76	100		56	5500	3.74
				100		5			100		5			1000		5		
Minced meat Batch 2 mesophilic flora: 63.10⁵ CFU/g		1	6	10	1	15	150	2.18	10	1	15	150	2.18	10	1	16	170	2.23
				100		1			100		1			100		3		
			7	10		18	180	2.26	10		18	180	2.26	10		15	150	2.18
				100		2			100		2			100		1		
			8	10		14	140	2.15	10		16	150	2.18	10		14	140	2.15
				100		1			100		0			100		1		
			9	10		15	150	2.18	10		14	130	2.11	10		16	150	2.18
				100		1			100		0			100		0		
			10	10		19	190	2.28	10		15	140	2.15	10		17	160	2.20
				100		2			100		0			100		1		
		2	16	10	1	78	780	2.89	10	1	87	870	2.94	10	1	82	820	2.91
				100		8			100		9			100		8		
			17	10		74	740	2.87	10		84	860	2.93	10		83	860	2.93
				100		7			100		10			100		11		
			18	10		79	790	2.90	10		76	760	2.88	10		80	810	2.91
				100		8			100		7			100		9		
			19	10		71	720	2.86	10		79	790	2.90	10		84	850	2.93
				100		8			100		8			100		9		
			20	10		80	800	2.90	10		83	840	2.92	10		79	790	2.90
				100		8			100		9			100		8		
		3	26	10	0.1	56	5500	3.74	10	0.1	56	5500	3.74	100	1	60	6000	3.78
				100		5			100		4			1000		6		
			27	10		65	6500	3.81	10		71	7200	3.86	100		67	6500	3.81
				100		6			100		8			1000		5		
			28	10		55	5500	3.74	10		54	5500	3.74	100		56	5500	3.74
				100		5			100		6			1000		5		
			29	10		51	5200	3.72	10		57	5600	3.75	100		57	5500	3.74
				100		6			100		5			1000		4		
			30	10		52	5300	3.72	10		57	5600	3.75	100		53	5200	3.72
				100		6			100		5			1000		4		

SEAFOOD PRODUCTS -*L. monocytogenes*																		
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count									
									Surface inoculation					Pour-plating inoculation				
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h		
						cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g
mesophilic flora: 29000 CFU/g Salmon Batch 1	*Listeria monocytogenes 1/2a (ref. 161 - Salmon)*	1	1	10	1	7	73	1.86	10	1	10	100	2.00	10	1	9	82	1.91
				100		1			100		1			100		0		
			2	10		9	82	1.91	10		10	91	1.96	10		8	73	1.86
				100		0			100		0			100		0		
			3	10		7	73	1.86	10		11	100	2.00	10		6	55	1.74
				100		1			100		0			100		0		
			4	10		8	82	1.91	10		8	73	1.86	10		10	91	1.96
				100		1			100		0			100		0		
			5	10		7	64	1.80	10		11	110	2.04	10		5	45	1.66
				100		0			100		1			100		0		
		2	11	10	1	39	400	2.60	10	1	49	480	2.68	10	1	45	440	2.64
				100		5			100		4			100		3		
			12	10		47	460	2.66	10		48	460	2.66	10		52	510	2.71
				100		4			100		2			100		4		
			13	10		49	490	2.69	10		49	480	2.68	10		49	480	2.68
				100		5			100		4			100		4		
			14	10		41	410	2.61	10		40	390	2.59	10		42	420	2.62
				100		4			100		3			100		4		
			15	10		42	400	2.60	10		38	360	2.56	10		39	380	2.58
				100		2			100		1			100		3		
		3	21	10	0.1	24	2400	3.38	10	0.1	20	2000	3.30	100	1	15	1600	3.20
				100		2			100		2			1000		3		
			22	10		28	2800	3.45	10		27	2800	3.45	100		20	2000	3.30
				100		3			100		4			1000		2		
			23	10		20	1900	3.28	10		31	2800	3.45	100		20	2000	3.30
				100		1			100		0			1000		2		
			24	10		16	1600	3.20	10		16	1700	3.23	100		13	1200	3.08
				100		2			100		3			1000		0		
			25	10		22	2300	3.36	10		29	3000	3.48	100		19	1700	3.23
				100		3			100		4			1000		0		
mesophilic flora: 1500 CFU/g Salmon Batch 2		1	6	10	1	9	82	1.91	10	1	9	91	1.96	10	1	10	91	1.96
				100		0			100		1			100		0		
			7	10		7	64	1.80	10		8	73	1.86	10		9	82	1.91
				100		0			100		0			100		0		
			8	10		7	64	1.80	10		8	73	1.86	10		10	100	2.00
				100		0			100		0			100		1		
			9	10		8	82	1.91	10		8	73	1.86	10		11	110	2.04
				100		1			100		0			100		1		
			10	10		5	45	1.66	10		5	45	1.66	10		7	73	1.86
				100		0			100		0			100		1		
		2	16	10	1	37	360	2.56	10	1	39	360	2.56	10	1	43	430	2.63
				100		3			100		1			100		4		
			17	10		40	400	2.60	10		43	420	2.62	10		44	440	2.64
				100		4			100		3			100		4		
			18	10		37	380	2.58	10		37	360	2.56	10		38	390	2.59
				100		5			100		3			100		5		
			19	10		45	450	265	10		39	380	2.58	10		39	400	2.60
				100		4			100		3			100		5		
			20	10		41	400	2.60	10		41	410	2.61	10		44	430	2.63
				100		3			100		4			100		3		
		3	26	10	0.1	26	2600	3.41	10	0.1	35	3500	3.54	100	1	33	3200	3.51
				100		3			100		4			1000		2		
			27	10		30	3000	3.48	10		30	3100	3.49	100		28	2600	3.41
				100		3			100		4			1000		1		
			28	10		29	2900	3.46	10		25	2500	3.40	100		24	2300	3.36
				100		3			100		2			1000		2		
			29	10		26	2500	3.40	10		26	2500	3.40	100		25	2500	3.40
				100		2			100		2			1000		2		
			30	10		32	2900	3.46	10		32	3000	3.48	100		27	2600	3.41
				100		0			100		1			1000		2		

VEGETABLE PRODUCTS -*L. monocytogenes*																		
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count									
									Surface inoculation					Pour-plating inoculation				
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h		
						cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g
Green salad Batch 1 mesophilic flora: 46.10⁶ CFU/g	*Listeria monocytogenes 4b (ref. 20 - green salad)*	1	1	10	1	9	100	2.00	10	1	12	110	2.04	10	1	8	82	1.91
				100		2			100		0			100		1		
			2	10		9	91	1.96	10		7	73	1.86	10		6	64	1.80
				100		1			100		1			100		1		
			3	10		8	82	1.91	10		8	73	1.86	10		10	100	2.00
				100		1			100		0			100		1		
			4	10		6	55	1.74	10		10	91	1.96	10		9	82	1.91
				100		0			100		0			100		0		
			5	10		8	82	1.91	10		11	100	2.00	10		10	100	2.00
				100		1			100		0			100		1		
		2	11	10	1	36	370	2.57	10	1	34	340	2.53	10	1	47	450	2.65
				100		5			100		3			100		2		
			12	10		51	460	2.66	10		52	490	2.69	10		53	510	2.71
				100		0			100		2			100		3		
			13	10		46	430	2.63	10		43	450	2.65	10		50	500	2.70
				100		1			100		6			100		5		
			14	10		53	510	2.71	10		50	490	2.69	10		47	470	2.67
				100		3			100		4			100		4		
			15	10		55	560	2.75	10		51	500	2.70	10		58	560	2.75
				100		6			100		4			100		4		
		3	21	10	0.1	28	2600	3.41	10	0.1	36	3400	3.53	100	1	30	3100	3.49
				100		1			100		1			1000		4		
			22	10		32	3200	3.51	10		45	4700	3.67	100		22	2400	3.38
				100		3			100		7			1000		4		
			23	10		19	1900	3.28	10		34	3400	3.53	100		31	3100	3.49
				100		2			100		3			1000		3		
			24	10		27	2900	3.46	10		22	2300	3.36	100		25	2500	3.40
				100		5			100		3			1000		3		
			25	10		30	3000	3.48	10		34	3300	3.52	100		30	3200	3.51
				100		3			100		2			1000		5		
Green salad Batch 2 mesophilic flora: 45.10⁵ CFU/g		1	6	10	1	10	100	2.00	10	1	14	140	2.15	10	1	8	82	1.91
				100		1			100		1			100		1		
			7	10		9	82	1.91	10		10	91	1.96	10		10	110	2.04
				100		0			100		0			100		2		
			8	10		9	82	1.91	10		12	110	2.04	10		15	160	2.20
				100		0			100		0			100		2		
			9	10		9	100	2.00	10		9	82	1.91	10		7	64	1.80
				100		2			100		0			100		0		
			10	10		12	110	2.04	10		8	91	1.96	10		6	73	1.86
				100		0			100		2			100		2		
		2	16	10	1	53	520	2.72	10	1	52	520	2.72	10	1	48	470	2.67
				100		4			100		5			100		4		
			17	10		37	380	2.58	10		42	420	2.62	10		47	480	2.68
				100		5			100		4			100		6		
			18	10		45	480	2.68	10		49	520	2.72	10		40	380	2.58
				100		8			100		8			100		2		
			19	10		43	460	2.66	10		47	460	2.66	10		55	530	2.72
				100		8			100		3			100		3		
			20	10		42	440	2.64	10		43	390	2.59	10		46	450	2.65
				100		6			100		0			100		3		
		3	26	10	0.1	27	2700	3.43	10	0.1	35	3500	3.54	100	1	30	2900	3.46
				100		3			100		4			1000		2		
			27	10		30	3000	3.48	10		28	2600	3.41	100		27	2800	3.45
				100		3			100		1			1000		4		
			28	10		28	2800	3.45	10		42	4000	3.60	100		33	3200	3.51
				100		3			100		2			1000		2		
			29	10		31	3000	3.48	10		33	3200	3.51	100		23	2400	3.38
				100		2			100		2			1000		3		
			30	10		35	3300	3.52	10		21	2300	3.36	100		30	3000	3.48
				100		1			100		4			1000		3		

COMPOSITE FOODS -*L. monocytogenes*																			
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count										
									Surface inoculation					Pour-plating inoculation					
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			
						cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g	
Tabbouleh Batch 1 mesophilic flora: 3500 CFU/g	*Listeria monocytogenes 2a (ref. 286 - Tabouleh)*	1	1	10	1	15	160	2.20	10	1	12	120	2.08	10	1	13	140	2.15	
				100		2			100		1			100		2			
			2	10		13	130	2.11	10		15	140	2.15	10		15	160	2.20	
				100		1			100		0			100		2			
			3	10		11	110	2.04	10		11	100	2.00	10		15	160	2.20	
				100		1			100		0			100		2			
			4	10		15	160	2.20	10		18	190	2.28	10		11	110	2.04	
				100		2			100		3			100		1			
			5	10		16	160	2.20	10		18	190	2.28	10		18	180	2.26	
				100		1			100		3			100		2			
		2	11	10	1	70	700	2.85	10	1	65	660	2.82	10	1	70	710	2.85	
				100		7			100		7			100		8			
			12	10		76	780	2.89	10		73	740	2.87	10		70	700	2.85	
				100		10			100		8			100		7			
			13	10		72	730	2.86	10		78	780	2.89	10		77	780	2.89	
				100		8			100		8			100		9			
			14	10		66	660	2.82	10		74	720	2.86	10		72	720	2.86	
				100		6			100		5			100		7			
			15	10		70	710	2.85	10		69	660	2.82	10		71	710	2.85	
				100		8			100		4			100		7			
		3	21	10	0.1	49	5000	3.70	10	0.1	54	5400	3.73	100	1	48	4800	3.68	
				100		6			100		6			1000		5			
			22	10		44	4300	3.63	10		49	4800	3.68	100		48	4800	3.68	
				100		3			100		4			1000		5			
			23	10		56	5400	3.73	10		52	5100	3.71	100		43	4300	3.63	
				100		3			100		4			1000		4			
			24	10		54	5200	3.72	10		49	4900	3.69	100		50	5100	3.71	
				100		3			100		5			1000		6			
			25	10		54	5500	3.74	10		45	4600	3.66	100		53	5400	3.73	
				100		7			100		6			1000		6			
Tabbouleh Batch 2 mesophilic flora: 2400 CFU/g		1	6	10	1	15	160	2.20	10	1	18	180	2.26	10	1	17	180	2.26	
				100		2			100		2			100		3			
			7	10		17	180	2.26	10		19	180	2.26	10		18	180	2.26	
				100		3			100		1			100		2			
			8	10		13	120	2.08	10		15	160	2.20	10		14	140	2.15	
				100		0			100		2			100		1			
			9	10		15	160	2.20	10		11	110	2.04	10		10	91	1.96	
				100		2			100		1			100		0			
			10	10		16	170	2.23	10		14	150	2.18	10		15	150	2.18	
				100		3			100		2			100		1			
		2	16	10	1	74	740	2.87	10	1	80	810	2.91	10	1	69	660	2.82	
				100		7			100		9			100		4			
			17	10		75	740	2.87	10		78	780	2.89	10		81	820	2.91	
				100		6			100		8			100		9			
			18	10		78	760	2.88	10		77	780	2.89	10		82	830	2.92	
				100		6			100		9			100		9			
			19	10		80	820	2.91	10		79	770	2.89	10		85	870	2.94	
				100		10			100		6			100		10			
			20	10		78	790	2.90	10		81	830	2.92	10		80	800	2.90	
				100		9			100		10			100		8			
		3	26	10	0.1	49	4900	3.69	10	0.1	50	4900	3.69	100	1	55	5600	3.75	
				100		5			100		4			1000		7			
			27	10		54	5200	3.72	10		59	5600	3.75	100		68	6900	3.84	
				100		3			100		3			1000		8			
			28	10		51	5100	3.71	10		48	4600	3.66	100		48	4700	3.67	
				100		5			100		3			1000		4			
			29	10		60	5900	3.77	10		50	5000	3.70	100		52	5100	3.71	
				100		5			100		5			1000		4			
			30	10		47	4600	3.66	10		52	5100	3.71	100		50	5000	3.70	
				100		4			100		4			1000		5			

ENVIRONMENT-*L. monocytogenes*																		
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count									
									Surface inoculation					Pour-plating inoculation				
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h		
						cfu/dish	CFU/mL	log CFU/mL			cfu/dish	CFU/mL	log CFU/mL			cfu/dish	CFU/mL	log CFU/mL
mesophilic flora: 144.10^5 CFU/mL Alfalfa drain water Batch 1	*Listeria monocytogenes 1/2a* (ref. 166 - rinsing water)	1	1	10	1	16	160	2.20	10	1	9	82	1.91	10	1	8	82	1.91
				100		2			100		0			100		1		
			2	10		18	160	2.20	10		13	120	2.08	10		9	91	1.96
				100		0			100		0			100		1		
			3	10		16	150	2.18	10		8	73	1.86	10		13	120	2.08
				100		0			100		0			100		0		
			4	10		10	91	1.96	10		6	64	1.80	10		9	91	1.96
				100		0			100		1			100		1		
			5	10		11	100	2.00	10		8	110	2.04	10		12	120	2.08
				100		0			100		4			100		1		
		2	11	10	1	51	510	2.71	10	1	44	460	2.66	10	1	env	910	2.96
				100		5			100		7			100		13		
			12	10		45	470	2.67	10		52	560	2.75	10		env	890	2.95
				100		6			100		9			100		4		
			13	10		50	520	2.72	10		55	570	2.76	10		env	690	2.84
				100		7			100		8			100		4		
			14	10		70	690	2.84	10		58	580	2.76	10		env	710	2.85
				100		6			100		6			100		12		
			15	10		91	870	2.94	10		49	540	2.73	10		env	640	2.81
				100		5			100		10			100		7		
		3	21	10	0.1	77	7500	3.88	10	0.1	90	8800	3.94	100	1	env	8800	3.94
				100		6			100		7			1000		5		
			22	10		97	9000	3.95	10		83	8100	3.91	100		env	8200	3.91
				100		2			100		6			1000		11		
			23	10		90	8900	3.95	10		99	9700	3.99	100		env	8000	3.90
				100		8			100		8			1000		7		
			24	10		97	9700	3.99	10		95	9500	3.98	100		env	8500	3.93
				100		10			100		9			1000		8		
			25	10		88	8700	3.94	10		104	10000	4.00	100		env	10000	4.00
				100		8			100		6			1000		11		
mesophilic flora: 24.10^5 CFU/mL Alfalfa drain water Batch 2		1	6	10	1	7	82	1.91	10	1	10	100	2.00	10	1	11	100	2.00
				100		2			100		1			100		0		
			7	10		12	110	2.04	10		9	91	1.96	10		15	160	2.20
				100		0			100		1			100		2		
			8	10		8	91	1.96	10		10	100	2.00	10		11	110	2.04
				100		2			100		1			100		1		
			9	10		12	130	2.11	10		11	110	2.04	10		7	64	1.80
				100		2			100		1			100		0		
			10	10		19	180	2.26	10		10	91	1.96	10		13	120	2.08
				100		1			100		0			100		0		
		2	16	10	1	106	1000	3.00	10	1	105	1000	3.00	10	1	env	960	2.98
				100		8			100		6			100		7		
			17	10		101	1000	3.00	10		100	960	2.98	10		env	860	2.93
				100		10			100		5			100		6		
			18	10		85	840	2.92	10		114	1100	3.04	10		env	830	2.92
				100		7			100		8			100		5		
			19	10		100	980	2.99	10		91	920	2.96	10		env	990	3.00
				100		8			100		10			100		15		
			20	10		92	930	2.97	10		92	930	2.97	10		env	1100	3.04
				100		10			100		10			100		7		
		3	26	10	0.1	108	11000	4.04	10	0.1	83	7900	3.90	100	1	env	8800	3.94
				100		12			100		4			1000		5		
			27	10		106	11000	4.04	10		91	8500	3.93	100		env	8700	3.94
				100		12			100		3			1000		14		
			28	10		104	10000	4.00	10		72	7700	3.89	100		env	8600	3.93
				100		7			100		13			1000		7		
			29	10		80	8100	3.91	10		104	9900	4.00	100		env	8200	3.91
				100		9			100		5			1000		7		
			30	10		74	7500	3.88	10		80	7600	3.88	100		env	7300	3.86
				100		8			100		4			1000		8		

APPENDIX 10

Accuracy profiles: Initial results *Listeria spp*.

DAIRY PRODUCTS-*L. spp.*																			
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count										
									Surface inoculation					Pour-plating inoculation					
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			
						cfu/dish	CFU/mL	log CFU/mL			cfu/dish	CFU/mL	log CFU/mL			cfu/dish	CFU/mL	log CFU/mL	
mesophilic flora: 240.10^6 CFU/mL Raw milk Batch 1	*Listeria innocua (ref. 228 - Goat milk)*	1	1	10	1	18	180	2.26	10	1	20	200	2.30	10	1	27	260	2.41
				100		2			100		2			100		2		
			2	10		28	270	2.43	10		16	160	2.20	10		29	280	2.45
				100		2			100		1			100		2		
			3	10		15	150	2.18	10		21	190	2.28	10		32	310	2.49
				100		1			100		0			100		2		
			4	10		29	290	2.46	10		12	130	2.11	10		30	280	2.45
				100		3			100		2			100		1		
			5	10		21	220	2.34	10		18	180	2.26	10		32	320	2.51
				100		3			100		2			100		3		
		2	11	10	0.1	31	3200	3.51	10	0.1	30	3300	3.52	100	1	27	2500	3.40
				100		4			100		6			1000		1		
			12	10		23	2100	3.32	10		30	2800	3.45	100		28	2600	3.41
				100		0			100		1			1000		1		
			13	10		21	2100	3.32	10		25	2400	3.38	100		27	2700	3.43
				100		2			100		1			1000		3		
			14	10		30	3000	3.48	10		26	2500	3.40	100		30	3100	3.49
				100		3			100		1			1000		4		
			15	10		39	3900	3.59	10		42	3900	3.59	100		24	2400	3.38
				100		4			100		1			1000		2		
		3	21	100	0.1	33	35000	4.54	100	0.1	28	25000	4.40	1000	1	22	22000	4.34
				1000		5			1000		0			10000		2		
			22	100		26	27000	4.43	100		29	29000	4.46	1000		33	33000	4.52
				1000		4			1000		3			10000		3		
			23	100		29	30000	4.48	100		25	28000	4.45	1000		24	24000	4.38
				1000		4			1000		6			10000		2		
			24	100		33	33000	4.52	100		32	31000	4.49	1000		30	29000	4.46
				1000		3			1000		2			10000		2		
			25	100		26	25000	4.40	100		41	39000	4.59	1000		27	26000	4.41
				1000		2			1000		2			10000		2		
mesophilic flora: 160.10^6 CFU/mL Raw milk Batch 2		1	6	10	1	32	320	2.51	10	1	11	110	2.04	10	1	25	260	2.41
				100		3			100		1			100		3		
			7	10		18	170	2.23	10		20	190	2.28	10		19	170	2.23
				100		1			100		1			100		0		
			8	10		24	250	2.40	10		24	240	2.38	10		26	240	2.38
				100		3			100		2			100		0		
			9	10		22	210	2.32	10		25	260	2.41	10		23	240	2.38
				100		1			100		3			100		3		
			10	10		27	260	2.41	10		23	230	2.36	10		29	290	2.46
				100		1			100		2			100		3		
		2	16	10	0.1	33	3400	3.53	10	0.1	20	2000	3.30	100	1	30	3100	3.49
				100		4			100		2			1000		4		
			17	10		42	3800	3.58	10		32	3200	3.51	100		23	2500	3.40
				100		0			100		3			1000		4		
			18	10		32	2900	3.46	10		34	3200	3.51	100		26	2600	3.41
				100		0			100		1			1000		3		
			19	10		28	2800	3.45	10		37	3500	3.54	100		25	2600	3.41
				100		3			100		1			1000		4		
			20	10		37	3500	3.54	10		33	3100	3.49	100		25	2400	3.38
				100		1			100		1			1000		1		
		3	26	100	0.1	37	34000	4.53	100	0.1	27	27000	4.43	1000	1	21	21000	4.32
				1000		0			1000		3			10000		2		
			27	100		24	23000	4.36	100		34	34000	4.53	1000		22	22000	4.34
				1000		1			1000		3			10000		2		
			28	100		27	27000	4.43	100		30	29000	4.46	1000		29	30000	4.48
				1000		3			1000		2			10000		4		
			29	100		29	29000	4.46	100		30	30000	4.48	1000		30	30000	4.48
				1000		3			1000		3			10000		3		
			30	100		30	27000	4.43	100		27	27000	4.43	1000		29	29000	4.46
				1000		0			1000		3			10000		3		

SEAFOOD PRODUCTS -L. spp.																		
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count									
									Surface inoculation					Pour-plating inoculation				
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h		
						cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g
mesophilic flora: 364 000 CFU/g Fish terrine Batch 1	*Listeria welshimeri (ref. 261 - fish)*	1	1	10	1	39	380	2.58	10	1	39	390	2.59	10	1	43	440	2.64
				100		3			100		4			100		5		
			2	10		40	380	2.58	10		33	340	2.53	10		38	380	2.58
				100		2			100		4			100		4		
			3	10		36	370	2.57	10		35	360	2.56	10		41	440	2.64
				100		5			100		4			100		7		
			4	10		44	440	2.64	10		36	360	2.56	10		43	420	2.62
				100		4			100		3			100		3		
			5	10		36	370	2.57	10		38	360	2.56	10		44	440	2.64
				100		5			100		2			100		4		
		2	11	10	0.1	38	3800	3.58	10	0.1	36	3500	3.54	100	1	38	3700	3.57
				100		4			100		3			1000		3		
			12	10		41	4200	3.62	10		42	4100	3.61	100		39	4000	3.60
				100		5			100		3			1000		5		
			13	10		37	3600	3.56	10		39	3900	3.59	100		41	4000	3.60
				100		3			100		4			1000		3		
			14	10		43	4200	3.62	10		44	4400	3.64	100		36	3500	3.54
				100		3			100		5			1000		3		
			15	10		41	4300	3.63	10		38	3700	3.57	100		43	4300	3.63
				100		6			100		3			1000		4		
		3	21	100	0.1	37	36000	4.56	100	0.1	35	33000	4.52	1000	1	32	30000	4.48
				1000		3			1000		1			10000		1		
			22	100		31	30000	4.48	100		39	40000	4.60	1000		29	27000	4.43
				1000		2			1000		5			10000		1		
			23	100		29	27000	4.43	100		29	29000	4.46	1000		30	30000	4.48
				1000		1			1000		3			10000		3		
			24	100		34	32000	4.51	100		39	38000	4.58	1000		34	33000	4.52
				1000		1			1000		3			10000		2		
			25	100		38	38000	4.58	100		34	32000	4.51	1000		28	25000	4.40
				1000		4			1000		1			10000		0		
mesophilic flora: 376 000 CFU/g Fish terrine Batch 2		1	6	10	1	38	370	2.57	10	1	41	420	2.62	10	1	43	430	2.63
				100		3			100		5			100		4		
			7	10		34	350	2.54	10		31	280	2.45	10		36	360	2.56
				100		4			100		0			100		3		
			8	10		42	420	2.62	10		33	320	2.51	10		36	370	2.57
				100		4			100		2			100		5		
			9	10		40	400	2.60	10		41	390	2.59	10		43	410	2.61
				100		4			100		2			100		2		
			10	10		36	360	2.56	10		39	390	2.59	10		40	400	2.60
				100		4			100		4			100		4		
		2	16	10	0.1	37	3700	3.57	10	0.1	39	3800	3.58	100	1	46	4500	3.65
				100		4			100		3			1000		4		
			17	10		38	3800	3.58	10		39	3700	3.57	100		38	3700	3.57
				100		4			100		2			1000		3		
			18	10		38	3700	3.57	10		36	3500	3.54	100		32	3100	3.49
				100		3			100		3			1000		2		
			19	10		38	3700	3.57	10		38	3600	3.56	100		38	3700	3.57
				100		3			100		2			1000		3		
			20	10		49	5000	3.70	10		51	5100	3.71	100		47	4700	3.67
				100		6			100		5			1000		5		
		3	26	100	0.1	37	36000	4.56	100	0.1	35	34000	4.53	1000	1	33	31000	4.49
				1000		3			1000		2			10000		1		
			27	100		36	35000	4.54	100		34	32000	4.51	1000		31	28000	4.45
				1000		3			1000		1			10000		0		
			28	100		43	44000	4.64	100		45	45000	4.65	1000		32	29000	4.46
				1000		5			1000		4			10000		0		
			29	100		31	30000	4.48	100		36	36000	4.56	1000		29	28000	4.45
				1000		2			1000		4			10000		2		
			30	100		36	35000	4.54	100		38	37000	4.57	1000		33	33000	4.52
				1000		3			1000		3			10000		3		

COMPOSITE FOODS -*L. spp.*																		
Matrix	strain	Level	Sample ref.	Reference method: ISO 11290-2 #					Alternative method: Aloa Count									
									Surface inoculation					Pour-plating inoculation				
				Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h			Dilution	Volume seeded	48 h		
						cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g			cfu/dish	CFU/g	log CFU/g
Piedmont…… Batch 1 mesophilic flora: 42.10^5 CFU/g	*Listeria seelegeri (ref. 24 - mixed salad)*	1	1	10	1	36	360	2.56	10	1	37	360	2.56	10	1	38	380	2.58
				100		3			100		2			100		4		
			2	10		39	410	2.61	10		24	250	2.40	10		29	280	2.45
				100		6			100		3			100		2		
			3	10		34	370	2.57	10		37	350	2.54	10		29	280	2.45
				100		7			100		1			100		2		
			4	10		35	360	2.56	10		29	290	2.46	10		40	400	2.60
				100		5			100		3			100		4		
			5	10		31	300	2.48	10		36	360	2.56	10		38	370	2.57
				100		2			100		4			100		3		
		2	11	10	0.1	38	3700	3.57	10	0.1	44	4500	3.65	100	1	32	3100	3.49
				100		3			100		5			1000		2		
			12	10		56	5600	3.75	10		38	4000	3.60	100		38	3800	3.58
				100		6			100		6			1000		4		
			13	10		52	5200	3.72	10		46	4600	3.66	100		36	3500	3.54
				100		5			100		5			1000		3		
			14	10		46	4600	3.66	10		57	5400	3.73	100		48	4500	3.65
				100		5			100		2			1000		2		
			15	10		66	6600	3.82	10		49	4800	3.68	100		47	4500	3.65
				100		7			100		4			1000		2		
		3	21	100	0.1	63	63000	4.80	100	0.1	60	59000	4.77	1000	1	39	38000	4.58
				1000		6			1000		5			10000		3		
			22	100		57	56000	4.75	100		55	54000	4.73	1000		38	38000	4.58
				1000		5			1000		4			10000		4		
			23	100		65	64000	4.81	100		57	56000	4.75	1000		34	34000	4.53
				1000		5			1000		5			10000		3		
			24	100		70	72000	4.86	100		62	58000	4.76	1000		40	40000	4.60
				1000		9			1000		2			10000		4		
			25	100		61	62000	4.79	100		64	64000	4.81	1000		55	55000	4.74
				1000		7			1000		6			10000		6		
Piedmont…… Batch 2 mesophilic flora: 34.10^5 CFU/g		1	6	10	1	47	490	2.69	10	1	40	380	2.58	10	1	28	280	2.45
				100		7			100		2			100		3		
			7	10		34	360	2.56	10		47	460	2.66	10		30	280	2.45
				100		6			100		4			100		1		
			8	10		45	440	2.64	10		46	460	2.66	10		44	460	2.66
				100		3			100		5			100		7		
			9	10		41	430	2.63	10		47	470	2.67	10		36	360	2.56
				100		6			100		5			100		4		
			10	10		37	360	2.56	10		40	370	2.57	10		40	400	2.60
				100		3			100		1			100		4		
		2	16	10	0.1	63	6300	3.80	10	0.1	50	4900	3.69	100	1	40	4100	3.61
				100		6			100		4			1000		5		
			17	10		67	7000	3.85	10		59	5800	3.76	100		47	4800	3.68
				100		10			100		5			1000		6		
			18	10		66	6500	3.81	10		62	6000	3.78	100		34	3400	3.53
				100		6			100		4			1000		3		
			19	10		61	6300	3.80	10		69	6700	3.83	100		32	3300	3.52
				100		8			100		5			1000		4		
			20	10		37	3900	3.59	10		60	6100	3.79	100		31	3200	3.51
				100		6			100		7			1000		4		
		3	26	100	0.1	71	70000	4.85	100	0.1	59	62000	4.79	1000	1	45	46000	4.66
				1000		6			1000		9			10000		6		
			27	100		64	64000	4.81	100		73	73000	4.86	1000		59	60000	4.78
				1000		6			1000		7			10000		7		
			28	100		73	73000	4.86	100		60	60000	4.78	1000		62	61000	4.79
				1000		7			1000		6			10000		5		
			29	100		60	59000	4.77	100		71	72000	4.86	1000		46	46000	4.66
				1000		5			1000		8			10000		5		
			30	100		63	64000	4.81	100		60	59000	4.77	1000		61	61000	4.79
				1000		7			1000		5			10000		6		

APPENDIX 11

Specificity and selectivity:
(study conducted in 2000)

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	*Serovar*	Product	Result									
				24 h.					48 h.				
				Quantitative		Qualitative			Quantitative		Qualitative		
				ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
1	*Listeria monocytogenes*	*1/2 a*	Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
2	*Listeria monocytogenes*	*1/2 b*	Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
3	*Listeria monocytogenes*	*4 b*	Rillettes	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
4	*Listeria monocytogenes*		Hamburger meat	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
5	*Listeria monocytogenes*	*4 b*	Rillettes	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
6	*Listeria monocytogenes*	*1/2 a*	Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
7	*Listeria monocytogenes*		Water	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
8	*Listeria monocytogenes*	*2 b*	AES CIP 7831	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
9	*Listeria monocytogenes*		Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
10	*Listeria monocytogenes*		ATTC 15313	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	*Serovar*	Product	Result									
				24 h.					48 h.				
				Quantitative		Qualitative			Quantitative		Qualitative		
				ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
11	*Listeria monocytogenes*	*1/2 a*	Goat cheese	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
12	*Listeria monocytogenes*	*1/2 a*	Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
13	*Listeria monocytogenes*		Mushrooms	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
14	*Listeria monocytogenes*		Mushrooms	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
15	*Listeria monocytogenes*		Giblets	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
16	*Listeria monocytogenes*		Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
17	*Listeria monocytogenes*		Veal cutlet (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
18	*Listeria monocytogenes*	*1/2 a*	Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
19	*Listeria monocytogenes*	*1/2 a*	Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
20	*Listeria monocytogenes*	*4 b*	Merguez (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	*Serovar*	Product	Result									
				24 h.					48 h.				
				Quantitative		Qualitative			Quantitative		Qualitative		
				ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
21	*Listeria monocytogenes*		Turkey roulade (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
22	*Listeria monocytogenes*		Rond de tranche (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
23	*Listeria monocytogenes*		Sausage meat (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
24	*Listeria monocytogenes*		St Nectaire	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
25	*Listeria monocytogenes*		Backbone	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
26	*Listeria monocytogenes*	*1/2 b*	Wipe	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
27	*Listeria monocytogenes*		Pork chop (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
28	*Listeria monocytogenes*	*4 b*	Pork chop (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
29	*Listeria monocytogenes*	*1/2 a*	Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
30	*Listeria monocytogenes*	*1/2 b*	Goat cheese	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	*Serovar*	Product	Result									
				24 h.					48 h.				
				Quantitative		Qualitative			Quantitative		Qualitative		
				ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
31	*Listeria monocytogenes*		Sausages (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
32	*Listeria monocytogenes*		Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
33	*Listeria monocytogenes*	*1/2 a*	Goat cheese	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
34	*Listeria monocytogenes*		Flour	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
35	*Listeria monocytogenes*		Sausage meat (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
36	*Listeria monocytogenes*		Sausages (raw)	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
37	*Listeria monocytogenes*		Pork shoulder	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
38	*Listeria monocytogenes*		Pork throat	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
39	*Listeria monocytogenes*	*4 b*	Sausage meat	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
40	*Listeria monocytogenes*		Hamburger meat	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	*Serovar*	Product	Result									
				24 h.					48 h.				
				Quantitative		Qualitative			Quantitative		Qualitative		
				ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
41	*Listeria monocytogenes*		Hamburger meat	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
42	*Listeria monocytogenes*	*4 b*	Sausage meat	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
43	*Listeria monocytogenes*		Sausage meat	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
44	*Listeria monocytogenes*		Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
45	*Listeria monocytogenes*	*1/2 b*	Goat cheese	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
46	*Listeria monocytogenes*	*1/2 b*	Goat cheese	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
47	*Listeria monocytogenes*		Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
48	*Listeria monocytogenes*		Goat cheese	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
49	*Listeria monocytogenes*		Goat milk	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies
50	*Listeria monocytogenes*		Flour	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies	100	100	blue-green colonies with halo	colourless	small, white, translucent colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Origin of the strain	Result									
			24 h.					48 h.				
			Quantitative		Qualitative			Quantitative		Qualitative		
			ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
1	*Staphylococcus aureus*	Cow's milk	0	100	/	/	Yellow and mucous	0	100	/	/	Yellow and mucous
2	*Staphylococcus aureus*	Cow's milk	0	100	/	/	Yellow and mucous	0	100	/	/	Yellow and mucous
3	*Staphylococcus aureus*	Bovine drinking water	0	100	/	/	Yellow and mucous	0	100	/	/	Yellow and mucous
4	*Listeria ivanovii*	Silage	100	100	very thin blue-green colonies without halo	yellow	very small, white, translucent colonies	100	100	blue-green colonies without halo	yellow	translucent colonies
5	*Listeria ivanovii*	Game intestine	100	100	very thin blue-green colonies without halo	yellow	very small, white, translucent colonies	100	100	blue-green colonies with halo	yellow	translucent colonies
6	*Listeria ivanovii*	Small sheep	100	100	very thin blue-green colonies without halo	yellow	very small, white, translucent colonies	100	100	blue-green colonies with halo	yellow	translucent colonies
7	*Listeria innocua*	Silage	100	100	very thin pale blue-green colonies without halo	yellow	very small, whitish colonies	100	100	blue-green colonies without halo	yellow	translucent colonies
8	*Listeria innocua*	Goat milk	100	100	very thin pale blue-green colonies without halo	yellow	very small, whitish colonies	100	100	blue-green colonies without halo	yellow	translucent colonies
9	*Listeria innocua*	Bovine placenta	100	100	very thin pale blue-green colonies without halo	yellow	very small, whitish colonies	100	100	blue-green colonies without halo	yellow	translucent colonies
10	*Listeria seeligeri*	Bovine placenta	0	100	/	/	very small, whitish colonies	30	100	very small blue-green colonies without halo	yellow	translucent colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Origin of the strain	Result									
			24 h.					48 h.				
			Quantitative		Qualitative			Quantitative		Qualitative		
			ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
11	*Staphylococcus spp.*	Goat milk	0	100	/	/	Yellow and mucous	0	100	/	/	Yellow and mucous
12	*Bacillus cereus*	AES 14574	0	100	/	/	White, serrated colonies	0	100	/	/	White, serrated colonies
13	*Bacillus cereus*	Lactic ferment	0	100	/	/	White, serrated colonies	2	100	substantial blurred, irregular, white colonies with halo	/	White, serrated colonies
14	*Bacillus cereus*	Lactic ferment	0	100	/	/	White, serrated colonies	0	100	/	/	White, serrated colonies
15	*Bacillus cereus*	Lactic ferment	0	100	/	/	White, serrated colonies	15	100	Small, irregular white colonies with halo	/	White, serrated colonies
16	*Bacillus cereus*	Lactic ferment	1	100	substantial blurred, irregular, white colonies with halo	/	White, serrated colonies	7	100	substantial blurred, irregular, white colonies with halo	/	White, serrated colonies
17	*Bacillus cereus*	Lactic ferment	0	100	/	/	White, serrated colonies	0	100	/	/	White, serrated colonies
18	*Salmonella*	Animal origin	0	100	/	/	translucent colonies	0	100	/	/	translucent colonies
19	*Escherichia coli*	Animal origin	0	100	/	/	mucous colonies	0	100	/	/	mucous colonies
20	*Enterobacter cloacae*	Lactic ferment	0	100	/	/	mucous colonies	0	100	/	/	mucous colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Origin of the strain	Result									
			24 h.					48 h.				
			Quantitative		Qualitative			Quantitative		Qualitative		
			ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
21	*Listeria ivanovii*	Goat milk	100	100	very small blue-green colonies with small halo	yellow	very small, whitish colonies	100	100	blue-green colonies with halo	yellow	very small, whitish colonies
22	*Listeria ivanovii*	Goat milk	100	100	very small blue-green colonies with small halo	yellow	very small, whitish colonies	100	100	blue-green colonies with halo	yellow	very small, whitish colonies
23	*Candida pelliculum*	Flour	0	100	/	/	very small, whitish colonies	0	100	/	/	very small, whitish colonies
24	*Candida parapsilosis*	AES IP 882-64	0	100	/	/	very small, whitish colonies	0	100	/	/	very small, whitish colonies
25	*Saccharomyces cerevisiae*	AES 1-1	0	0	/	/	/	0	0	/	/	/
26	*Saccharomyces cerevisiae*	AES 1-2	0	0	/	/	/	0	0	/	/	/
27	*Listeria ivanovii*	AES food born	0	0	/	/	/	0	0	blue-green colonies with halo	yellow	small, white, translucent colonies
28	*Listeria ivanovii*	AES food born	0	50	/	/	very small, translucent colonies	0	50	blue-green colonies with halo	yellow	small, white, translucent colonies
29	*Listeria innocua*	Goat cheese	100	100	small blue-green colonies without halo	yellow	translucent colonies	100	100	blue-green colonies without halo	yellow	translucent colonies
30	*Listeria seeligeri*	Goat cheese	100	100	small blue-green colonies without halo	yellow	translucent colonies	100	100	blue-green colonies without halo	yellow	translucent colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Origin of the strain	Result									
			24 h.					48 h.				
			Quantitative		Qualitative			Quantitative		Qualitative		
			ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
31	*Listeria welshimeri*	Goat cheese	100	100	small, blue-green colonies without halo	yellow	small, white, translucent colonies	100	100	blue-green colonies without halo	yellow	translucent colonies
32	*Listeria welshimeri*	Goat milk	0	100	/	/	small, white, translucent colonies	0	100	/	/	Very small, translucent colonies
33	*Listeria ivanovii*	Goat milk	0	100	/	/	small, white, translucent colonies	100	100	blue-green colonies with halo	yellow	small, white, translucent colonies
34	*Listeria ivanovii*	Goat milk	100	100	Very small blue-green colonies without halo	yellow	small, white, translucent colonies	100	100	blue-green colonies with halo	yellow	small, white, translucent colonies
35	*Staphylococcus aureus.*	AES food born	0	100	/	/	whitish colonies	0	100	/	/	whitish colonies
36	*Enterococcus faecium*	AES food born	0	100	/	/	small, white, translucent colonies	0	100	/	/	translucent colonies
37	*Enterococcus faecium*	ATCC 292/2	0	100	/	/	small, white, translucent colonies	0	100	/	/	translucent colonies
38	*Corynebacterium sp*	Cow's milk	0	0	/	/	small, whitish colonies	0	0	/	/	small, whitish colonies
39	*Corynebacterium sp*	Cow's milk	0	0	/	/	small, whitish colonies	0	0	/	/	small, whitish colonies

100 = dishes overgrown with isolated colonies

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Origin of the strain	Result									
			24 h.					48 h.				
			Quantitative		Qualitative			Quantitative		Qualitative		
			ALOA	GN	ALOA	L. Monodisk	GN	ALOA	GN	ALOA	L. Monodisk	GN
40	*Lactobacillus acidophilus*	AES LAC1-1 (food born)	0	100	/	/	very small colonies	0	100	/	/	small, whitish colonies
41	*Lactobacillus casei*	ATCC 7469	100	100	/	/	very small colonies	0	100	/	/	small, whitish colonies
42	*Lactobacillus acidophilus*	AES LAC1-1 (food born)	0	100	/	/	very small colonies	0	100	/	/	small, whitish colonies
43	*Enterococcus faecium*	CIP 5855	0	100	/	/	small, whitish colonies	0	100	Slight green colouration at the level of the deposit	/	small, whitish colonies
44	*Enterococcus faecalis*	AES ENT 2-2 (food born)	0	100	/	/	small, whitish colonies	0	100	Slight green colouration at the level of the deposit	/	small, whitish colonies
45	*Enterococcus faecium*	AES ENT 3-3 (food born)	0	100	/	/	small, whitish colonies	0	100	/	/	small, whitish colonies
46	*Brochotrix*	Pasteur	0	100	/	/	very small colonies	8	100	Green colonies without halo	/	small, transparent colonies
47	*Rhodococcus equi*	Laboratoire de Touraine	0	100	/	/	very small, mucous colonies	100	100	Yellow, mucous colonies	/	Cream-coloured, mucous colonies
48	*Leuconostoc mesenteroïdes*	ATCC 14935	0	100	/	/	Very thin, transparent colonies	2	100	small, transparent colonies	/	Cream-coloured, mucous colonies
49	*Listeria grayi*	CHU Trousseau	100	100	small, pale green colonies	/	small, white, translucent colonies	100	100	pale green colonies	/	transparent colonies
50	*Listeria ivanovii ivanovii*	AES	100	100	Blue-green colonies with very small halo	yellow	Bright white	100	100	blue-green with halo	yellow	Small, bright white colonies
51	*Listeria ivanovii londonensis*	AES	100	100	Blue-green colonies with very small halo	yellow	Bright white	100	100	blue-green with halo	yellow	Small, bright white colonies

100 = dishes overgrown with isolated colonies

APPENDIX 12

Specificity and selectivity:
(study conducted in 2005)

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	Serovar	Product	Analysis	
				Appearance of colonies	Results
1	*Listeria monocytogenes*	½ *a*	Hamburger meat	Colonies are blue-green with halo	positive
2	Listeria monocytogenes	½ b	Minced meat	Colonies are blue-green with halo	positive
3	*Listeria monocytogenes*	4b	Steak	Colonies are blue-green with halo	positive
4	*Listeria monocytogenes*	1/2a	Minced meat	Colonies are blue-green with halo	positive
5	*Listeria monocytogenes*	4b	Minced meat	Colonies are blue-green with halo	positive
6	*Listeria monocytogenes*	½ a	Veal	Colonies are blue-green with halo	positive
7	*Listeria monocytogenes*	2b	Sautéed veal	Colonies are blue-green with halo	positive
8	*Listeria monocytogenes*	4b	Sirloin	Colonies are blue-green with halo	positive
9	*Listeria monocytogenes*	4b	Meat	Colonies are blue-green with halo	positive
10	*Listeria monocytogenes*	1/2a	Veal	Colonies are blue-green with halo	positive

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	Serovar	Product	Analysis	
				Appearance of colonies	Results
11	*Listeria monocytogenes*	*1/2a*	Veal	Colonies are blue-green with halo	positive
12	*Listeria monocytogenes*	*1/2a*	Wipe	Colonies are blue-green with halo	positive
13	*Listeria monocytogenes*	*1/2a*	Dry cured sausage	Colonies are blue-green with halo	positive
14	*Listeria monocytogenes*	4b	Unit portion	Colonies are blue-green with halo	positive
15	*Listeria monocytogenes*	4b	Surface surface	Colonies are blue-green with halo	positive
16	*Listeria monocytogenes*	4b	Salmon cone smoked	Colonies are blue-green with halo	positive
17	*Listeria monocytogenes*	1/2a	Cheese	Colonies are blue-green with halo	positive
18	*Listeria monocytogenes*	1/2a	Wipe	Colonies are blue-green with halo	positive
19	*Listeria monocytogenes*	1/2a	Dry cured sausage	Colonies are blue-green with halo	positive
20	*Listeria monocytogenes*	4b	Merguez	Colonies are blue-green with halo	positive

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	Serovar	Product	Analysis	
				Appearance of colonies	Results
21	*Listeria monocytogenes*	*4b*	Chipolata sausages	Colonies are blue-green with halo	positive
22	*Listeria monocytogenes*	4b	Wipe	Colonies are blue-green with halo	positive
23	*Listeria monocytogenes*	4b	Swab	Colonies are blue-green with halo	positive
24	*Listeria monocytogenes*	4b	Tart	Colonies are blue-green with halo	positive
25	*Listeria monocytogenes*	1/2a	Tart	Colonies are blue-green with halo	positive
26	*Listeria monocytogenes*	4b	Cheese	Colonies are blue-green with halo	positive
27	*Listeria monocytogenes*	1/2b	Cheese	Colonies are blue-green with halo	positive
28	*Listeria monocytogenes*	1/2b	Bard	Colonies are blue-green with halo	positive
29	*Listeria monocytogenes*	4b	Capas	Colonies are blue-green with halo	positive
30	*Listeria monocytogenes*	1/2b	Cheese	Colonies are blue-green with halo	positive

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	Serovar	Product	Analysis	
				Appearance of colonies	Results
31	*Listeria monocytogenes*	*1/2b*	Goat milk	Colonies are blue-green with halo	positive
32	*Listeria monocytogenes*	*1/2b*	Goat milk	Colonies are blue-green with halo	positive
33	*Listeria monocytogenes*	4b	Lamb shoulder	Colonies are blue-green with halo	positive
34	*Listeria monocytogenes*	1/2a	Milk	Colonies are blue-green with halo	positive
35	*Listeria monocytogenes*	4b	Pork liver	Colonies are blue-green with halo	positive
36	*Listeria monocytogenes*	4b	Surface Veal carcass	Colonies are blue-green with halo	positive
37	*Listeria monocytogenes*	4b	Chipolata sausage meat	Colonies are blue-green with halo	positive
38	*Listeria monocytogenes*	1/2a	Cow's milk	Colonies are blue-green with halo	positive
39	*Listeria monocytogenes*		CECALAIT milk	Colonies are blue-green with halo	positive
40	*Listeria monocytogenes*		Chocolate	Colonies are blue-green with halo	positive

ALOA® AGAR INCLUSIVITY STUDY

Strain No.	Nature of the strain	Serovar	Product	Analysis	
				Appearance of colonies	Results
41	*Listeria monocytogenes*	*4b*	Pork meat	Colonies are blue-green with halo	positive
42	*Listeria monocytogenes*		Radishes	Colonies are blue-green with halo	positive
43	*Listeria monocytogenes*	1/2a	Cantal	Colonies are blue-green with halo	positive
44	*Listeria monocytogenes*	1/2a	St Nectaire	Colonies are blue-green with halo	positive
45	*Listeria monocytogenes*	4b	Curry powder	Colonies are blue-green with halo	positive
46	*Listeria monocytogenes*	4b	Placenta	Colonies are blue-green with halo	positive
47	*Listeria monocytogenes*	4b	Placenta	Colonies are blue-green with halo	positive
48	*Listeria monocytogenes*	4b	Placenta	Colonies are blue-green with halo	positive
49	*Listeria monocytogenes*	4b	Silage	Colonies are blue-green with halo	positive
50	*Listeria monocytogenes*	4b	Feed	Colonies are blue-green with halo	positive

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Product	Analysis	
			Appearance of colonies	Results
1	*Staphylococcus aureus*	Goat cheese	Non-characteristic colonies	Negative
2	*Staphylococcus aureus*	Goat milk	Non-characteristic colonies	Negative
3	*Staphylococcus* aureus	Duck tenderloins	Non-characteristic colonies	Negative
4	*Listeria ivanovii*	Goat milk	Small, characteristic colonies with halo	Negative
5	*Listeria ivanovii*	Buvard goat milk	Small, characteristic colonies with very fine halo	Negative
6	*Listeria ivanovii*	Goat milk	Small, characteristic colonies with very fine halo	Negative
7	*Listeria innocua*	Goat milk	Non-characteristic colonies	Negative
8	*Listeria innocua*	Wipe	Non-characteristic colonies	Negative
9	*Listeria innocua*	Goat milk	Non-characteristic colonies	Negative
10	*Listeria seeligeri*	Strain bank	Non-characteristic colonies	Negative

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Product	Analysis	
			Appearance of colonies	Results
11	*Staphylococcus enteritidis*	Strain bank	Non-characteristic colonies	Negative
12	*Bacillus cereus*	Tabbouleh	Non-characteristic colonies	Negative
13	*Bacillus mycoides*	Organic radishes	Non-characteristic colonies	Negative
14	*Bacillus cereus*	Wheat	Non-characteristic colonies	Negative
15	*Bacillus cereus*	ATCC14579	Non-characteristic colonies	Negative
16	*Bacillus megaterium*	IAA strain bank 14/01/93	Non-characteristic colonies	Negative
17	*Bacillus subtilis*	IAA strain bank 21/9/93	Non-characteristic colonies	Negative
18	*Salmonella typhimurium*	BV strain	Non-characteristic colonies	Negative
19	*Escherichia coli*	IAA strain bank	Non-characteristic colonies	Negative
20	*Enterobacter cloacae*	BV strain	Non-characteristic colonies	Negative

ALOA® AGAR EXCLUSIVITY STUDY

Strain No.	Nature of the strain	Product	Analysis	
			Appearance of colonies	Results
21	*Listeria welshimeri*	Veal	Non-characteristic colonies	Negative
22	*Listeria welshimeri*	Wipe	Non-characteristic colonies	Negative
23	*Staphylococcus haemolyticus*	BV strain	Non-characteristic colonies	Negative
24	*Pantoea*	BV strain	Non-characteristic colonies	Negative
25	*Staphylococcus aureus*	Endives salad	Non-characteristic colonies	Negative
26	*Enterococcus faecalis*	BV strain	Non-characteristic colonies	Negative
27	*Enterococcus faecium*	ATCC strain SA	Non-characteristic colonies	Negative
28	*Enterococcus faecium*	AES strain	Non-characteristic colonies	Negative
29	*Enterococcus faecalis*	AES strain	Non-characteristic colonies	Negative
30	*Enterococcus faecium*	AES strain CIP5855	Non-characteristic colonies	Negative

APPENDIX 13

Specificity and selectivity:
(study conducted in 2006 by ISHA)

TARGETED STRAINS: ***Listeria monocytogenes***

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result	
P1 TA100	*L. monocytogenes*	Smoked trout	BV	+	+	LM	yes	BV	+	+	LM	yes
P2TA100	*L. monocytogenes*	Breaded fish	BV	+	+	LM	yes	BV	+	+	LM	yes
P4TA100	*L. monocytogenes*	Salmon steak	BV	+	+	LM	yes	BV	+	+	LM	yes
P10TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P11TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P12TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P13TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P14TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P15TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P16TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P17TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
P18TA100	*L. monocytogenes*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
E16TA100	*L. monocytogenes*	Grinding shop rinsing water meat processing	BV	+	+	LM	yes	BV	+	+	LM	yes
C11TA100	*L. monocytogenes*	Grinding shop wipes meat processing	BV	+	+	LM	yes	BV	+	+	LM	yes
V1TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V2TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V3TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V4TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V5TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V8TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V9TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V10TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V12TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V13TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V14TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes

BV: blue-green

LM: *Listeria monocytogenes*

TARGETED STRAINS: ***Listeria monocytogenes***

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result	
R 62	*L. monocytogenes*	CIP 78.31	BV	+	+	LM	yes	BV	+	+	LM	yes
L09	*L. monocytogenes*	Environment - clinic	BV	+	+	LM	yes	BV	+	+	LM	yes
L10	*L. monocytogenes*	Milk 107P	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.2	*L. monocytogenes*	Duck	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.3	*L. monocytogenes*	Dairy product	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.6	*L. monocytogenes*	Environment - production	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.7	*L. monocytogenes*	Environment - production	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.10	*L. monocytogenes*	Frozen fish	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.11	*L. monocytogenes*	Frozen fish	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.12	*L. monocytogenes*	Frozen fish	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.13	*L. monocytogenes*	Frozen fish	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.14	*L. monocytogenes*	Frozen fish	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.15	*L. monocytogenes*	Sausages	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.18	*L. monocytogenes*	Cooked dish (sea products)	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.19	*L. monocytogenes*	Dairy product	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.20	*L. monocytogenes*	ATCC 13932	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.21	*L. monocytogenes*	Sausages	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.22	*L. monocytogenes*	Sausages	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.23	*L. monocytogenes*	Milk powder	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.26	*L. monocytogenes*	Milk powder	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.28	*L. monocytogenes*	Milk powder	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.31	*L. monocytogenes*	Dairy product	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.32	*L. monocytogenes*	Dairy product	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.33	*L. monocytogenes*	Milk powder	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.34	*L. monocytogenes*	Dairy product	BV	+	+	LM	yes	BV	+	+	LM	yes

BV: blue-green

LM: *Listeria monocytogenes*

TARGETED STRAINS: ***Listeria monocytogenes***

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result	
V17TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V18TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V19TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V20TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V21TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V22TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V23TA100	*L. monocytogenes*	Minced meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V24TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V25TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V26TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V27TA100	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
V17A48	*L. monocytogenes*	Hamburger meat (beef)	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.1	*L. monocytogenes 1/2*	ATCC 15313	BV	+	+	LM	yes	BV	+	+	LM	yes
L101	*L. monocytogenes 1/2 H=0*	Roast chicken	BV	+	+	LM	yes	BV	+	+	LM	yes
I100	*L. monocytogenes 1/2a*	skewer zucchini goat	BV	+	+	LM	yes	BV	+	+	LM	yes
I103	*L. monocytogenes 1/2a*	raw ham and vegetables	BV	+	+	LM	yes	BV	+	+	LM	yes
I104	*L. monocytogenes 1/2a*	ham and emmental sandwich	BV	+	+	LM	yes	BV	+	+	LM	yes
I107	*L. monocytogenes 1/2a*	ham and emmental sandwich	BV	+	+	LM	yes	BV	+	+	LM	yes
I108	*L. monocytogenes 1/2a*	tuna egg surimi sandwich	BV	+	+	LM	yes	BV	+	+	LM	yes
I109	*L. monocytogenes 1/2a*	granulated beef roast	BV	+	+	LM	yes	BV	+	+	LM	yes
I112	*L. monocytogenes 1/2a*	lettuce	BV	+	+	LM	yes	BV	+	+	LM	yes
I121	*L. monocytogenes 1/2a*	chicken curry	BV	+	+	LM	yes	BV	+	+	LM	yes
I122	*L. monocytogenes 1/2a*	smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
I123	*L. monocytogenes 1/2a*	foie gras	BV	+	+	LM	yes	BV	+	+	LM	yes
I125	*L. monocytogenes 1/2a*	ktipiti sauce	BV	+	+	LM	yes	BV	+	+	LM	yes

BV: blue-green

LM: *Listeria monocytogenes*

TARGETED STRAINS: ***Listeria monocytogenes***

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result	
I130	*L. monocytogenes 1/2a*	salmon tartar	BV	+	+	LM	yes	BV	+	+	LM	yes
I132	*L. monocytogenes 1/2a*	verification surface sewer	BV	+	+	LM	yes	BV	+	+	LM	yes
I134	*L. monocytogenes 1/2a*	raw vegetables	BV	+	+	LM	yes	BV	+	+	LM	yes
I135	*L. monocytogenes 1/2a*	vegetable salad	BV	+	+	LM	yes	BV	+	+	LM	yes
I 97	*L. monocytogenes 1/2a*	farm-fresh guinea fowl	BV	+	+	LM	yes	BV	+	+	LM	yes
I 99	*L. monocytogenes 1/2a*	bacon and raw vegetables sandwich	BV	+	+	LM	yes	BV	+	+	LM	yes
L11	*L. monocytogenes 1/2a*	CIP 103574 (152P)	BV	+	+	LM	yes	BV	+	+	LM	yes
L12	*L. monocytogenes 1/2a*	CIP 104794 (153P)	BV	+	+	LM	yes	BV	+	+	LM	yes
L52	*L. monocytogenes 1/2a*	Fresh cheese	BV	+	+	LM	yes	BV	+	+	LM	yes
L53	*L. monocytogenes 1/2a*	Cheese meal	BV	+	+	LM	yes	BV	+	+	LM	yes
L58	*L. monocytogenes 1/2a*	Fish and vegetables provençale	BV	+	+	LM	yes	BV	+	+	LM	yes
L60	*L. monocytogenes 1/2a*	Ham	BV	+	+	LM	yes	BV	+	+	LM	yes
L62	*L. monocytogenes 1/2a*	Minced meat	BV	+	+	LM	yes	BV	+	+	LM	yes
L83	*L. monocytogenes 1/2a*	Sewer swab	BV	+	+	LM	yes	BV	+	+	LM	yes
L86	*L. monocytogenes 1/2a*	Reblochon	BV	+	+	LM	yes	BV	+	+	LM	yes
L94	*L. monocytogenes 1/2a*	Pickled vegetables	BV	+	+	LM	yes	BV	+	+	LM	yes
L97	*L. monocytogenes 1/2a*	Sheep's cheese	BV	+	+	LM	yes	BV	+	+	LM	yes
L98	*L. monocytogenes 1/2a*	Blue cheese	BV	+	+	LM	yes	BV	+	+	LM	yes
L99	*L. monocytogenes 1/2a*	Diced cucumbers	BV	+	+	LM	yes	BV	+	+	LM	yes
L100	*L. monocytogenes 1/2a*	Line swab	BV	+	+	LM	yes	BV	+	+	LM	yes
L104	*L. monocytogenes 1/2a*	Crab	BV	+	+	LM	yes	BV	+	+	LM	yes
L105	*L. monocytogenes 1/2a*	Scallops tartar	BV	+	+	LM	yes	BV	+	+	LM	yes
L106	*L. monocytogenes 1/2a*	Floor wipe	BV	+	+	LM	yes	BV	+	+	LM	yes
L107	*L. monocytogenes 1/2a*	Sausage	BV	+	+	LM	yes	BV	+	+	LM	yes
L108	*L. monocytogenes 1/2a*	Sewer wipe	BV	+	+	LM	yes	BV	+	+	LM	yes

BV: blue-green

LM: *Listeria monocytogenes*

TARGETED STRAINS: *Listeria monocytogenes*

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result	
L102	*L. monocytogenes 1/2a*	Minced meat	BV	+	+	LM	yes	BV	+	+	LM	yes
L69	*L. monocytogenes 1/2a*	Indies chicken	BV	+	+	LM	yes	BV	+	+	LM	yes
L73	*L. monocytogenes 1/2a*	Duck foie de gras	BV	+	+	LM	yes	BV	+	+	LM	yes
L74	*L. monocytogenes 1/2a*	Green pepper	BV	+	+	LM	yes	BV	+	+	LM	yes
L76	*L. monocytogenes 1/2a*	Country ham and emmental	BV	+	+	LM	yes	BV	+	+	LM	yes
L80	*L. monocytogenes 1/2a*	Granulated beef roast	BV	+	+	LM	yes	BV	+	+	LM	yes
L 116	*L. monocytogenes 1/2a*	smoked salmon tzatziki tortilla	BV	+	+	LM	yes	BV	+	+	LM	yes
L117	*L. monocytogenes 1/2a*	Minced pork belly	BV	+	+	LM	yes	BV	+	+	LM	yes
I106	*L. monocytogenes (1/2b)*	duck leg	BV	+	+	LM	yes	BV	+	+	LM	yes
I114	*L. monocytogenes (1/2b)*	praliné paste	BV	+	+	LM	yes	BV	+	+	LM	yes
I 96	*L. monocytogenes (1/2b)*	rolled raw turkey	BV	+	+	LM	yes	BV	+	+	LM	yes
L55	*L. monocytogenes (1/2b)*	Spiced herring	BV	+	+	LM	yes	BV	+	+	LM	yes
L68	*L. monocytogenes (1/2b)*	Raw milk	BV	+	+	LM	yes	BV	+	+	LM	yes
L110	*L. monocytogenes (1/2b)*	Selection of fine delicatessen	BV	+	+	LM	yes	BV	+	+	LM	yes
L72	*L. monocytogenes (1/2b)*	Grilled vegetables	BV	+	+	LM	yes	BV	+	+	LM	yes
I102	*L. monocytogenes (1/2c)*	minced meat	BV	+	+	LM	yes	BV	+	+	LM	yes
I113	*L. monocytogenes (1/2c)*	Gouda	BV	+	+	LM	yes	BV	+	+	LM	yes
I129	*L. monocytogenes (1/2c)*	Chef's salad sandwich	BV	+	+	LM	yes	BV	+	+	LM	yes
L13	*L. monocytogenes (1/2c)*	CIP 103573 (154P)	BV	+	+	LM	yes	BV	+	+	LM	yes
L54	*L. monocytogenes (1/2c)*	Duck foie de gras	BV	+	+	LM	yes	BV	+	+	LM	yes
L59	*L. monocytogenes (1/2c)*	Duck foie de gras	BV	+	+	LM	yes	BV	+	+	LM	yes
L64	*L. monocytogenes (1/2c)*	Salmon tartar	BV	+	+	LM	yes	BV	+	+	LM	yes
L65	*L. monocytogenes (1/2c)*	Ktipiti sauce	BV	+	+	LM	yes	BV	+	+	LM	yes
L66	*L. monocytogenes (1/2c)*	Foie gras	BV	+	+	LM	yes	BV	+	+	LM	yes
L84	*L. monocytogenes (1/2c)*	Minced meat	BV	+	+	LM	yes	BV	+	+	LM	yes

BV: blue-green

LM: *Listeria monocytogenes*

TARGETED STRAINS: *Listeria monocytogenes*			ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.
Code	Name	Origin	Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result	
L87	*L. monocytogenes (1 / 2c)*	Foie gras	BV	+	+	LM	yes	BV	+	+	LM	yes
L109	*L. monocytogenes (1 / 2c)*	Duck foie de gras	BV	+	+	LM	yes	BV	+	+	LM	yes
L111	*L. monocytogenes (1 / 2c)*	Raw vegetables	BV	+	+	LM	yes	BV	+	+	LM	yes
L115	*L. monocytogenes (1 / 2c)*	Comté	BV	+	+	LM	yes	BV	+	+	LM	yes
I105	*L. monocytogenes 3a*	Smoked salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
I131	*L. monocytogenes 3a*	Sliced bacon	BV	+	+	LM	yes	BV	+	+	LM	yes
L57	*L. monocytogenes 3a*	Surface verification	BV	+	+	LM	yes	BV	+	+	LM	yes
L61	*L. monocytogenes 3a*	Grilled bacon	BV	+	+	LM	yes	BV	+	+	LM	yes
L63	*L. monocytogenes 3a*	Goat cheese sandwich	BV	+	+	LM	yes	BV	+	+	LM	yes
L88	*L. monocytogenes 3a*	Tarama trout eggs	BV	+	+	LM	yes	BV	+	+	LM	yes
L90	*L. monocytogenes 3a*	Wild salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
L93	*L. monocytogenes 3a*	Salmon tarama	BV	+	+	LM	yes	BV	+	+	LM	yes
L103	*L. monocytogenes 3a*	Tarama	BV	+	+	LM	yes	BV	+	+	LM	yes
L112	*L. monocytogenes 3a*	Cut salad	BV	+	+	LM	yes	BV	+	+	LM	yes
L113	*L. monocytogenes 3a*	Conditioning edge swab	BV	+	+	LM	yes	BV	+	+	LM	yes
L114	*L. monocytogenes 3a*	Guinea fowl fillet	BV	+	+	LM	yes	BV	+	+	LM	yes
L118	*L. monocytogenes 3a*	Tarama	BV	+	+	LM	yes	BV	+	+	LM	yes
L82	*L. monocytogenes 3b*	Arlequin peppers	BV	+	+	LM	yes	BV	+	+	LM	yes
L92	*L. monocytogenes 3c*	Salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
I128	*L. monocytogenes 4b*	salmon strips	BV	+	+	LM	yes	BV	+	+	LM	yes
L14	*L. monocytogenes 4b*	CIP 103575 (155P)	BV	+	+	LM	yes	BV	+	+	LM	yes
L15	*L. monocytogenes 4b*	CIP 7838 (156P)	BV	+	+	LM	yes	BV	+	+	LM	yes
L56	*L. monocytogenes 4b*	Surface verification - salmon	BV	+	+	LM	yes	BV	+	+	LM	yes
L95	*L. monocytogenes 4b*	Raw milk Cantal	BV	+	+	LM	yes	BV	+	+	LM	yes
L96	*L. monocytogenes 4b*	Raw milk	BV	+	+	LM	yes	BV	+	+	LM	yes
LIS 3.5	*L. monocytogenes 4b*	ATCC 19115	BV	+	+	LM	yes	BV	+	+	LM	yes
L16	*L. monocytogenes 4c*	CIP 7839 (157P)	BV	+	+	LM	yes	BV	+	+	LM	yes

BV: blue-green

LM: *Listeria monocytogenes*

NON-TARGETED STRAINS

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.	Identification according to ISO 11290
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result		
I 38	*Bacillus amyloliquefasciens*	Dairy product	-	-	-	no growth	no growth	/	/	/	/	/	/
R 87	*Bacillus cereus*	CIP 66.24 T	translucent	-	-	LM no	no	/	/	/	/	/	/
I 28	*Bacillus cereus*	Dairy industry	-	-	-	no growth	no growth	/	/	/	/	/	/
I 80	*Bacillus cereus*	UHT milk	translucent	+	-	LM no	no	/	/	/	/	/	/
R 53	*Bacillus cereus*	CIP 54.9	translucent	+	-	LM no	no	/	/	/	/	/	/
R 70	*Bacillus cereus*	SIK 281 Sué	translucent	+	-	LM no	no	/	/	/	/	/	/
BA.1.2	*Bacillus cereus*	Nems	translucent	+	-	LM no	no*	translucent	+	-	LM no	/	/
BA.1.5	*Bacillus cereus*	Milk powder	translucent	+	-	LM no	no*	translucent	+	-	LM no	/	/
R 86	*Bacillus circulans*	CIP 52.76	-	-	-	no growth	no growth	/	/	/	/	/	/
I 21	*Bacillus circulans*	Dairy industry	-	-	-	no growth	no growth	/	/	/	/	/	/
I 22	*Bacillus subtilis*	Dessert cream	-	-	-	no growth	no growth	/	/	/	/	/	/
I 40	*Bacillus subtilis*	Dairy product	-	-	-	no growth	no	/	/	/	/	/	/
R 10	*Bacillus subtilis*	CIP 52.65 T	-	-	-	no growth	no growth	/	/	/	/	/	/
I 35	*Brevibacterium casei*	Dairy product	-	-	-	no growth	no growth	/	/	/	/	/	/
R 63	*Candida albicans*	CNCM 48.72	-	-	-	no growth	no growth	/	/	/	/	/	/
R 75	*Candida albicans*	ATCC 10231	-	-	-	no growth	no growth	/	/	/	/	/	/
LevD	*Cryptococcus*	Vegetable products	-	-	-	no growth	no growth	/	/	/	/	/	/
I 25	*Enterobacter aerogenes*	Dairy industry	-	-	-	no growth	no growth	/	/	/	/	/	/
I 37	*Enterobacter sakazakii*	Milk powder	-	-	-	no growth	no growth	/	/	/	/	/	/
R 3	*Escherichia coli*	CIP 54.127	-	-	-	no growth	no growth	/	/	/	/	/	/
I2	*Escherichia coli*	Grated carrots	-	-	-	no growth	no growth	/	/	/	/	/	/
L02	*L. grayi*	CIP 105447T	BV	-	+	LM no	no	/	/	/	/	/	/
LIS 5.1	*L. grayi*	Sausages	BV	-	+	LM no	no	/	/	/	/	/	/
I124	*L. innocua*	Vegetable sandwich	BV	-	+	LM no	no	/	/	/	/	/	/
I126	*L. innocua*	Bacon and raw vegetables sandwich	BV	-	+	LM no	no	/	/	/	/	/	/

BV: blue-green

LM: *Listeria monocytogenes*

* atypical colonies to a experienced eye

NON-TARGETED STRAINS

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.	Identification according to ISO 11290
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result		
I133	*L. innocua*	verification surface door	BV	-	+	LM no	no	/	/	/	/	/	/
L04	*L. innocua*	CIP 80.12	BV	-	+	LM no	no	/	/	/	/	/	/
L47	*L. innocua*	CTSCCV	BV	-	+	LM no	no	/	/	/	/	/	/
L49	*L. innocua*	17765 (pork meat)	BV	-	+	LM no	no	/	/	/	/	/	/
L50	*L. innocua*	Chicken and bacon sandwich	BV	-	+	LM no	no	/	/	/	/	/	/
L51	*L. innocua*	Beef tongue	BV	-	-	LM no	no	/	/	/	/	/	/
L67	*L. innocua*	Minced meat	BV	-	+	LM no	no	/	/	/	/	/	/
R 30	*L. innocua*	CIP 80.11	BV	-	+	LM no	no	/	/	/	/	/	/
L71	*L. innocua*	Peking duck	BV	-	+	LM no	no	/	/	/	/	/	/
L75	*L. innocua*	Chicken and raw vegetables	BV	-	-	LM no	no	/	/	/	/	/	/
L77	*L. innocua*	Roast turkey	BV	-	+	LM no	no	/	/	/	/	/	/
L89	*L. innocua*	Salmon	BV	-	-	LM no	no	/	/	/	/	/	/
L91	*L. innocua*	Peking duck	BV	-	+	LM no	no	/	/	/	/	/	/
L120	*L. innocua*	Ham and emmental sandwich	BV	-	+	LM no	no	/	/	/	/	/	/
LIS.1.3	*L. innocua*	minced meat	BV	-	+	LM no	no	/	/	/	/	/	/
LIS.1.4	*L. innocua*	Meat	BV	-	+	LM no	no	/	/	/	/	/	/
LIS.1.5	*L. innocua*	Milk powder	BV	-	+	LM no	no	/	/	/	/	/	/
LIS.1.6	*L. innocua*	Milk powder	BV	-	+	LM no	no	/	/	/	/	/	/
L41	*L. ivanovii*	raw milk	BV	+/-	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
L45	*L. ivanovii*	CTSCCV	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
R 31	*L. ivanovii*	CIP 78.42	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS.2.1	*L. ivanovii*	Broccoli	BV	+/-	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
LIS.2.2	*L. ivanovii*	Poultry	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS.2.5	*L. ivanovii*	Clinical strain	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS.2.6	*L. ivanovii*	Raw milk cheese	BV	+/-	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*

BV: blue-green

LM: *Listeria monocytogenes*

** after 48h of incubation

NON-TARGETED STRAINS

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance ALOA™/ ALOA conf.	Identification according to ISO 11290
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result		
LIS.2.7	*L. ivanovii*	Raw milk cheese	BV	+/-	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
LIS 2.8	*L. ivanovii*	Sheep's milk	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS 2.9	*L. ivanovii*	Sheep's milk	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS 2.11	*L. ivanovii*	Raw milk cheese	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS 2.12	*L. ivanovii*	Milk powder	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS 2.13	*L. ivanovii*	Milk powder	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
PG	*L. ivanovii*	CTSCCV	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
LIS.2.4	*L. ivanovii (Londoniensis)*	CIP 103466T	BV	+/-	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
L01	*L. ivanovii (Londoniensis)*	CIP 103505	BV	+	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
I 41	*L. ivanovii*	Dairy product	BV	+	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
L 119	*L. ivanovii*	Sandwich	BV	+	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
835.3	*L. ivanovii*	Goat milk	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
1220.1	*L. ivanovii*	Goat milk	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
3069.1	*L. ivanovii*	Surface meat	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
3069.3	*L. ivanovii*	Surface meat	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
5979.3	*L. ivanovii*	Goat milk	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
5979.7	*L. ivanovii*	Goat milk	BV	+	-	LM no	yes**	BV	+	-	LM no	no	*L. ivanovii*
6232.3	*L. ivanovii*	Goat milk	BV	+/-	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
6595.6	*L. ivanovii*	Goat cheese	BV	+	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
7769.2	*L. ivanovii*	Rocamadour cheese	BV	+	-	LM no	yes**	BV	+/-	-	LM no	no	*L. ivanovii*
L03	*L. seeligeri*	CIP 79.46	BV	-	+	LM no	no	/	/	/	/	/	/
L48	*L. seeligeri*	CTSCCV	BV	-	-	LM no	no	/	/	/	/	/	/
LIS 4.2	*L. seeligeri*	Sheep's milk	BV	-	+/-	LM no	no	/	/	/	/	/	/
LIS 4.3	*L. seeligeri*	Sausages	BV	-	+/-	LM no	no	/	/	/	/	/	/
LIS 4.4	*L. seeligeri*	Milk powder	BV	-	+/-	LM no	no	/	/	/	/	/	/

BV: blue-green

LM: *Listeria monocytogenes*

** after 48h of incubation

NON-TARGETED STRAINS

Code	Name	Origin	ALOA profile confirmation from a non-selective medium				ALOA™	ALOA profile confirmation from ALOA™				Concordance	Identification
			Colour stripe	Halo	Curve at the yellow	Result	Colonies typical	Colour stripe	Halo	Curve at the yellow	Result	ALOA™/ ALOA conf.	according to ISO 11290
L05	*L. welshimeri*	CIP 81.48	BV	-	+	LM no	no	/	/	/	/	/	/
L06	*L. welshimeri*	CIP 81.94 T	BV	-	+	LM no	no	/	/	/	/	/	/
L46	*L. welshimeri*	CTSCCV	BV	-	+	LM no	no	/	/	/	/	/	/
L70	*L. welshimeri*	Yellow wings	BV	-	+	LM no	no	/	/	/	/	/	/
I 33	*Lactobacillus casei*	dairy product	-	-	-	no growth	no growth	/	/	/	/	/	/
R 96	*Lactobacillus casei*	CIP 157	-	-	-	no growth	no growth	/	/	/	/	/	/
R113	*Lactobacillus casei rhamnosu*	B 7138 (ADRIA)	-	-	-	no growth	no growth	/	/	/	/	/	/
R 99	*Lactobacillus johnsonii*	CIP 130 620	-	-	-	no growth	no growth	/	/	/	/	/	/
R 98	*Lactobacillus leishmanii*	CIP 53.61	-	-	-	no growth	no growth	/	/	/	/	/	/
R114	*Lactobacillus paracasei*	99A70 (ADRIA)	-	-	-	no growth	no growth	/	/	/	/	/	/
R 97	*Lactobacillus plantarum*	CIP A159	-	-	-	no growth	no growth	/	/	/	/	/	/
R 66	*Leuconostoc pseudomesentero*	CIP 103 316	-	-	-	no growth	no growth	/	/	/	/	/	/
I 42	*Pediococcus*	Vegetable products	-	-	-	no growth	no growth	/	/	/	/	/	/
R 65	*Pseudomonas aeruginosa*	ATCC 19429	-	-	-	no growth	no growth	/	/	/	/	/	/
R 6	*Rhodococcus equi*	CIP 58.69	-	-	-	no growth	no	/	/	/	/	/	/
R 37	*Staphylococcus aureus*	CIP 57.10	-	-	-	no growth	no growth	/	/	/	/	/	/
R 46	*Staphylococcus aureus*	CIP 4.83	-	-	-	no growth	no growth	/	/	/	/	/	/
R 73	*Staphylococcus aureus*	ATCC 6538	-	-	-	no growth	no growth	/	/	/	/	/	/
R 83	*Staphylococcus aureus*	CIP 53.154	-	-	-	no growth	no growth	/	/	/	/	/	/
I 32	*Staphylococcus aureus*	Superficial water	-	-	-	no growth	no growth	/	/	/	/	/	/
I 34	*Staphylococcus epidermidis*	dairy product	-	-	-	no growth	no growth	/	/	/	/	/	/
I 11	*Staphylococcus epidermidis 2*	contact box in	-	-	-	no growth	no growth	/	/	/	/	/	/
I 39	*Staphylococcus equorum*	Vietnamese beef paste	-	-	-	no growth	no growth	/	/	/	/	/	/
I 12	*Staphylococcus haemolyticus*	contact box in	-	-	-	no growth	no growth	/	/	/	/	/	/
R 85	*Staphylococus xylosus*	CIP 81.66 T	-	-	-	no growth	no growth	/	/	/	/	/	/

BV: blue-green

LM: *Listeria monocytogenes*

APPENDIX 14

Specificity and selectivity:
(study conducted in 2010)

Inclusivity study

Ref.	*Name*	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
1635/20/15	*L. monocytogenes (1/2a)*	Hamburger meat	75	Colonies are blue-green with halo	positive	positive
1651/20/31	*L. monocytogenes (1/2a)*	Egg white	55	Colonies are blue-green with halo	positive	positive
1641/20/21	*L. monocytogenes (1/2b)*	Radishes	30	Colonies are blue-green with halo	positive	positive
1048 - 8865.1	*L. monocytogenes*	Beef carcass	20	Colonies are blue-green with halo	positive	positive
645 - 5391.4	*L. monocytogenes (1/2c)*	Cooked foie gras	65	Colonies are blue-green with halo	positive	positive
1040 - 8776.1	*L. monocytogenes*	Chapeau berrichon (ice cream)	35	Colonies are blue-green with halo	positive	positive
1630/20/10	*L. monocytogenes (1/2a)*	Wipe	85	Colonies are blue-green with halo	positive	positive
978 - 7549.1	*L. monocytogenes*	Religieuse chocolat	50	Colonies are blue-green with halo	positive	positive
1645/20/25	*L. monocytogenes (1/2a)*	Smoked salmon	25	Colonies are blue-green with halo	positive	positive
1648/20/28	*L. monocytogenes (4b)*	Raw goat milk	25	Colonies are blue-green with halo	positive	positive
1629/20/9	*L. monocytogenes (1/2c)*	Wipe	70	Colonies are blue-green with halo	positive	positive
1632/20/12	*L. monocytogenes (1/2a)*	Minced meat	35	Colonies are blue-green with halo	positive	positive
1632/20/14	*L. monocytogenes (1/2a)*	Veal	40	Colonies are blue-green with halo	positive	positive

Ref.	*Name*	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
1636/20/16	*L. monocytogenes (1/2a)*	Veal	15	Colonies are blue-green with halo	positive	positive
1639/20/19	*L. monocytogenes (1/2a)*	Kebab	50	Colonies are blue-green with halo	positive	positive
1527/20/7	*L. monocytogenes (1/2a)*	Wipe	65	Colonies are blue-green with halo	positive	positive
1647/20/27	*L. monocytogenes (1/2a)*	Cheese	35	Colonies are blue-green with halo	positive	positive
1630/20/10	*L. monocytogenes (1/2a)*	Wipe	85	Colonies are blue-green with halo	positive	positive
1640/20/20	*L. monocytogenes*	Herb sausages	30	Colonies are blue-green with halo	positive	positive
1628/20/8	*L. monocytogenes (1/2a)*	Rinsing water	90	Colonies are blue-green with halo	positive	positive
LIS 5.2	*L. grayi*	Sausage	50	Small, blue-green colonies without halo	positive	positive
LIS 5.3	*L. grayi*	Camembert	50	Small, blue-green colonies without halo	positive	positive
L190	*L. grayi*	Frozen chips	50	Small, blue-green colonies without halo	positive	positive
L143	*L. grayi*	Frozen chips	50	Small, blue-green colonies without halo	positive	positive
09_IAA_9625.4	*L. ivanovii*	CECALAIT	70	Small, white colonies with halo (24h) then blue-green with halo (48h)	Positive (proof ok, 2nd light trace)	positive
96 - 779.2	*L. ivanovii*	Veal	65	Small, white colonies with halo (24h) then blue-green with halo (48h)	Positive (proof ok, 2nd light trace)	positive
593 - 4637.1	*L. ivanovii*	Goat milk	80	Small, white colonies with halo (24h) then blue-green with halo (48h)	positive	positive

Ref.	Name	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
1076 - 9325.3	*L. ivanovii*	Goat milk	75	Small, white colonies with halo (24h) then blue-green with halo (48h)	Positive (proof ok, 2nd light trace)	positive
102 - 1153.2	*L. ivanovii*	Lean veal	80	Small, white colonies with halo (24h) then blue-green with halo (48h)	positive	positive
133 - 1564.5	*L. ivanovii*	Goat milk	70	Small, white colonies with halo (24h) then blue-green with halo (48h)	positive	positive
513 - 6336.1	*L. ivanovii*	Crottin goat cheese	75	Small, white colonies with halo (24h) then blue-green with halo (48h)	positive	positive
516 - 6398.2	*L. ivanovii*	Goat cheese	80	Small, white colonies with halo (24h) then blue-green with halo (48h)	positive	positive
682 - 9143.2	*L. ivanovii*	Ground beef (fresh)	65	Small, white colonies with halo (24h) then blue-green with halo (48h)	Positive (proof ok, 2nd light trace)	positive
82 - 847.2	*L. innocua*	Goat cheese	55	Blue-green colonies without halo	positive	positive
87 - 891.2	*L. innocua*	Goat milk	50	Blue-green colonies without halo	positive	positive
404 - 3310.2	*L. innocua*	Alfafa	40	Blue-green colonies without halo	positive	positive
592 - 4698.5	*L. innocua*	Floor wipe, siphon, cheese dairy	60	Blue-green colonies without halo	positive	positive
898 - 7119.1	*L. innocua*	Beef carcass surface	35	Blue-green colonies without halo	positive	positive
1025 - 8436.1	*L. innocua*	Beef carcass surface	40	Blue-green colonies without halo	positive	positive
673 - 5353.5	*L. innocua*	Leeks	45	Blue-green colonies without halo	positive	positive
64 - 601.5	*L. innocua*	Goat milk	50	Blue-green colonies without halo	positive	positive

Ref.	Name	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
206 - 2586.1	*L. innocua*	Flour	50	Blue-green colonies without halo	positive	positive
374 - 4368.2	*L. innocua*	Wipe (workspace/poultry)	60	Blue-green colonies without halo	positive	positive
LIS 1.7	*L. innocua*	Broccoli	45	Blue-green colonies without halo	positive	positive
300 - 2673.1	*L. seeligeri*	Goat milk	55	Blue-green colonies without halo	positive	positive
81 - 760.9	*L. seeligeri*	CECALAIT	70	Blue-green colonies without halo	positive	positive
586/7/19	*L. seeligeri*	Wipe	65	Blue-green colonies without halo	positive	positive
317/3/74	*L. seeligeri*	Beef meat	80	Blue-green colonies without halo	positive	positive
1326/16/30	*L. seeligeri*	Salad	70	Blue-green colonies without halo	positive	positive
LIS 4.3	*L. seeligeri*	Sausage	60	Blue-green colonies without halo	positive	positive
LIS 4.8	*L. seeligeri*	Wipe	75	Blue-green colonies without halo	positive	positive
LIS 4.10	*L. seeligeri*	Braised endives	80	Blue-green colonies without halo	positive	positive
L140	*L. seeligeri*	Frozen chips	90	Blue-green colonies without halo	positive	positive
L115	*L. seeligeri*	Lake water	50	Blue-green colonies without halo	positive	positive

Ref.	Name	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
LIS 6.2	*L. welshimeri*	CECALAIT	50	Blue-green colonies without halo	positive	positive
61 - 583.1	*L. welshimeri*	Line 1 tallow wipe	80	Blue-green colonies without halo	positive	positive
350 - 3236.1	*L. welshimeri*	Sprouted rice	60	Blue-green colonies without halo	positive	positive
899 - 7120.2	*L. welshimeri*	Lean veal	50	Blue-green colonies without halo	positive	positive
1038 - 7704.2	*L. welshimeri*	Veal, unit portion	50	Blue-green colonies without halo	positive	positive
625 - 5032.3	*L. welshimeri*	Roasted beef fillet	45	Blue-green colonies without halo	positive	positive
16 - 278.1	*L. welshimeri*	Raw turkey	40	Blue-green colonies without halo	positive	positive
43 - 575.2	*L. welshimeri*	Wipe for rillettes cooking area	65	Blue-green colonies without halo	positive	positive
373 - 4368.2	*L. welshimeri*	Wipe (workspace/poultry)	60	Blue-green colonies without halo	positive	positive

Exclusivity study

Ref.	Name	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
09_IAA_9456.2	*Bacillus cereus*	Sprouted grains	1.2E+06	Small, serrated, matt white colonies, small halo	Negative	Negative
1400/17/23	*Bacillus cereus*	Tabbouleh	2.5E+06	Small, serrated, matt white colonies, small halo	Negative	Negative
1399/17/22	*Bacillus cereus*	Wheat	1.4E+06	no colony	not done	not done
BA 10.3	*Bacillus circulans*	Lactic ferment	1.6E+06	no colony	not done	not done
BA 9.1	*Bacillus megaterium*	Salad	1.8E+06	Small, fringed, matt white colonies	Negative	Negative
BA 8.2	*Bacillus mycoides*	Organic radishes	1.2E+06	Small, white colonies with halo	Negative	Negative
1791/22/9	*Bacillus subtilis*	ATCC 6633 collection	1.5E+06	no colony	not done	not done
08_IAA_8724.1	*Candida albicans*	Orange juice	2.3E+06	no colony	not done	not done
617/7/50	*Corynebacteriaceae sp*	Poultry slaughter	2.3E+06	no colony	not done	not done
1786/22/4	*Enterococcus faecalis*	ATCC 29212 collection	2.0E+06	no colony	not done	not done
1412/17/35	*Enterococcus faecalis*	Cow's milk	3.0E+06	no colony	not done	not done
1413/17/36	*Enterococcus faecium*	Cut of duck	2.5E+06	no colony	not done	not done
1411/17/34	*Enterococcus faecium*	CIP 5855 collection	3.5E+06	Small, green, atypical colonies without halo	Negative	Negative
928/11/37	*Enterococcus hirae*	Water	2.0E+06	no colony	not done	not done

Ref.	Name	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
09_IAA_9833.2	*Escherichia coli*	Beef meat	2.5E+06	no colony	not done	not done
09_IAA_9834.1	*Escherichia coli*	Goat milk	2.4E+06	no colony	not done	not done
1415/17/38	*Lactobacillus acidophilus*	Dairy product	2.2E+06	no colony	not done	not done
1414/17/37	*Lactobacillus casei*	Dairy product	2.0E+06	no colony	not done	not done
1416/17/39	*Lactobacillus casei*	Milk powder	2.0E+06	no colony	not done	not done
1522/18/64	*Pediococcus pentosaceus*	Lactic ferment	1.0E+06	no colony	not done	not done
09_IAA_9683.3	*Pseudomonas aeruginosa*	Veal liver	5.0E+05	Yellowish, matt colonies without halo	Negative	Negative
1792/22/10	*Pseudomonas aeruginosa*	ATCC 27853	5.0E+05	Yellowish, matt colonies without halo	Negative	Negative
1328/16/32	*Rhodococcus equi*	Meat matrix	1.5E+06	no colony	not done	not done
1797/22/15	*Saccharomyces cerevisiae*	ATCC 9763 collection	1.0E+06	Film of white, matt, atypical colonies	Negative	Negative
1310/16/14	*Staphylococcus aureus*	Cow's milk	4.3E+06	no colony	not done	not done
1307/16/11	*Staphylococcus aureus*	Cow's milk	3.5E+06	no colony	not done	not done
1321/16/25	*Staphylococcus intermedius*	IAA	3.5E+06	no colony	not done	not done
16/0/16	*Streptococcus agalactiae*	Cow's milk	3.0E+06	no colony	not done	not done

Ref.	Name	Origin	Innoculation rate in 225 ml 1/2 Fraser (in CFU)	Appearance of colonies on ALOA (incubation 24h)	Results immunochrom. test	Results Palcam
279/3/36	*Streptococcus dysgalactiae*	Cow's milk	3.0E+06	no colony	not done	not done
772/9/43	*Streptococcus uberis*	Cow's milk	3.0E+06	no colony	not done	not done
IAA_ml	*Micrococcus luteus*	ATCC 9341	1.5E+06	no colony	not done	not done
5 SOU 60816	*Micrococcus luteus*	CIP 5345	1.5E+06	no colony	not done	not done