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## SOLABIA SAS

29 rue Delizy  
93500 PANTIN

### NF VALIDATION Validation of alternative analytical methods *Application to food microbiology*

#### Summary report

### ISO 16140 validation of the EASY STAPH method for enumeration of coagulase-positive Staphylococci in 24 h ±2 h

#### Quantitative method

This report consists of 128 pages including 12 appendices.

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Version 0  
10 February 2016

#### ADRIA DEVELOPPEMENT

Creac'h Gwen - F. 29196 QUIMPER Cedex - Tél. (33) 02.98.10.18.18 - Fax (33) 02.98.10.18.08

Email: [adria.developpement@adria.tm.fr](mailto:adria.developpement@adria.tm.fr) - Website: <http://www.adria.tm.fr>

NON-PROFIT ASSOCIATION - SIRET No. 306 964 271 00036 - EXISTENCE No. 532900006329 - VAT No. FR4530696427100036

<b>1</b>	<b>INTRODUCTION</b>	<b>5</b>
<b>2</b>	<b>PRESENTATION OF THE METHODS</b>	<b>5</b>
2.1	Reference method	5
2.2	Alternative method	5
<b>3</b>	<b>METHOD COMPARATIVE STUDY</b>	<b>6</b>
3.1	Accuracy profile study	6
3.1.1	Matrices used	6
3.1.2	Raw results	6
3.1.3	Statistical interpretation	6
3.1.4	Conclusion	15
3.2	Accuracy study	16
3.2.1	Number and type of samples	16
3.2.2	Artificial contaminants	22
3.2.3	Raw results	22
3.2.4	Statistical interpretation	23
3.3	Specificity and selectivity study	48
3.3.1	Protocols	48
3.3.2	Results	48
3.3.3	Conclusion	49
3.4	Practicability	50
<b>4</b>	<b>INTER-LABORATORY STUDY</b>	<b>51</b>
4.1	Study organisation	51
4.2	Experimental parameter control	52
4.2.1	Strain stability during transport	52
4.2.2	Sample temperature upon receipt	53
4.2.3	Sample temperature during transport	53
4.2.4	Inoculum homogeneity	53
4.3	Calculations, summary and interpretation of data	54
4.3.1	Expert laboratory results	54
4.3.2	Partner laboratory results	54
<b>5</b>	<b>CONCLUSION</b>	<b>60</b>

Appendix 1 - ISO 6888-2 reference method: Horizontal method for the enumeration of coagulase-positive staphylococci ( <i>Staphylococcus aureus</i> and other species) - Part 2: Technique using rabbit plasma fibrinogen agar medium	61
Appendix 2 - EASY STAPH alternative method protocol	62
Appendix 3 - Accuracy profile study: raw results	63
Appendix 4 - Accuracy profile study: Statistical calculations	73
Appendix 5 - Accuracy study: artificial contamination of samples	79
Appendix 6 - Accuracy study: raw results	82
Appendix 7 - Accuracy study: summary	109
Appendix 8 - Accuracy study: statistical calculations - Spread method	112
Appendix 9 - Accuracy study: statistical calculations - Pour plate method	116
Appendix 10 - Accuracy study: statistical calculations - Spiral method	120
Appendix 11 - Specificity>Selectivity: raw results	124
Appendix 12 - Inoculum homogeneity	127

## Foreword

All information required to validate the analysis guarantee is made available to SOLABIA.

The results are summarised in tables and interpreted as per the ISO/FDIS 16140 (2015) standard.

- ✓ **Manufacturer:** Biokar Diagnostics  
Rue des Quarante Mines - BP 10245  
60002 BEAUV AIS Cedex
- ✓ **Expert laboratory:** ADRIA Développement  
ZA Creac'h Gwen  
29196 QUIMPER Cedex
- ✓ **Method to validate:** **EASY STAPH method for enumeration of coagulase-positive *Staphylococci* in 24 h ±2 h**
- ✓ **Validation standard:** ISO/FDIS 16140 (2015): Microbiology of the food chain - Method validation
  - Part 1: Vocabulary*
  - Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method*
- ✓ **Reference method<sup>\*</sup>:** ISO 6888-2 - Horizontal method for the enumeration of coagulase-positive staphylococci (*Staphylococcus aureus* and other species) - Part 2: Technique using rabbit plasma fibrinogen agar medium
- ✓ **Validation scope** **All human food products**
- ✓ **Validation body:** AFNOR Certification

## 1 INTRODUCTION

The EASY STAPH method for the enumeration of coagulase-positive *Staphylococci* in 24 ±2 h was validated on 03 December 2015 for the following categories: meat and poultry products, dairy and seafood products (certificate no. BKR 23/10-12/15).

In January 2016, an extension study was conducted for the Egg products and "Composite foods" categories, thus extending the scope of the alternative method to the analysis of all human food products.

## 2 PRESENTATION OF THE METHODS

### 2.1 Reference method

The reference method use is the ISO 6888-2 standard - "Horizontal method for the enumeration of coagulase-positive staphylococci (*Staphylococcus aureus* and other species) - Part 2: Technique using rabbit plasma fibrinogen agar medium". The corresponding protocol is given in Appendix 1.

### 2.2 Alternative method

The EASY STAPH method provides enumeration in 24 ±2 h at 37 °C, with no confirmation step. The incubation range can be extended to 48 h for spread inoculation and to 72 h for pour plate inoculation and when using the Spiral plater.

These incubation times (minimum and maximum) were tested during initial validation.

Various inoculation protocols (see **Appendix 2**) are available:

- surface inoculation via manual spreading (pre-poured plates),
- surface inoculation using the spiral plater (pre-poured plates), by depositing 100 µl of a log phase culture, validation being required for 50 and 100 µl,
- pour plate inoculation (base kit + freeze-dried supplement).

### 3 METHOD COMPARATIVE STUDY

#### 3.1 Accuracy profile study

The accuracy profile study is a comparative study of the results obtained using the reference method and those obtained with the alternative method. This study is conducted using artificially contaminated samples. Only one type (of food) per category is tested.

##### 3.1.1 Matrices used

For each food category, one type was selected with a representative matrix. Two batches from this matrix were inoculated with a single strain at various loads. Two different batches of the same matrix per category were tested. The categories, types and matrices are described in table 1.

**Table 1**

	Category	Type	Matrix	Strain	Inoculation rate (log CFU/g)	
					Spreading - Pour plate	Spiral
Initial validation	Meat products	Cooked delicatessens and ready-made meals	Cooked ham	<i>Staphylococcus aureus</i> Ad 161	2.0 3.0 3.5 4.5 5.5	3.0 3.5 4.5 5.5
	Dairy products	Raw milk and raw milk-based dairy products	Raw milk	<i>Staphylococcus aureus</i> Ad 905		
	Seafood	Ready-made meals, terrines	Salmon terrine	<i>Staphylococcus aureus</i> Ad 899		
Extension study	Egg products	Raw dough, liquid egg portions	Pasteurised liquid egg portion	<i>Staphylococcus aureus</i> Ad 910	2.0 3.5 5.0	2.5 3.5 5.0
	Composite food	Pizzas, quiche	Vegetable quiche	<i>Staphylococcus aureus</i> Ad 166		

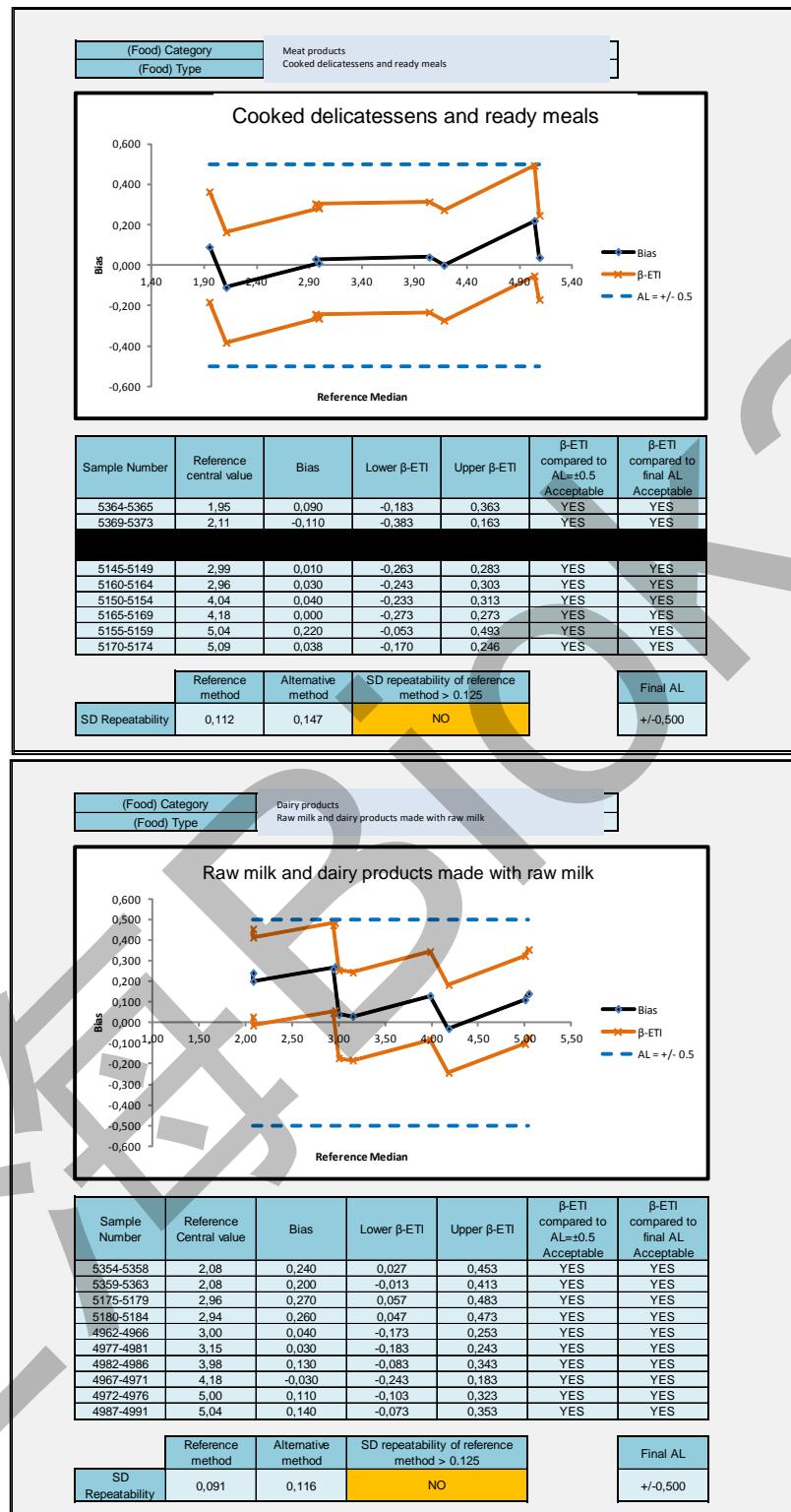
##### 3.1.2 Raw results

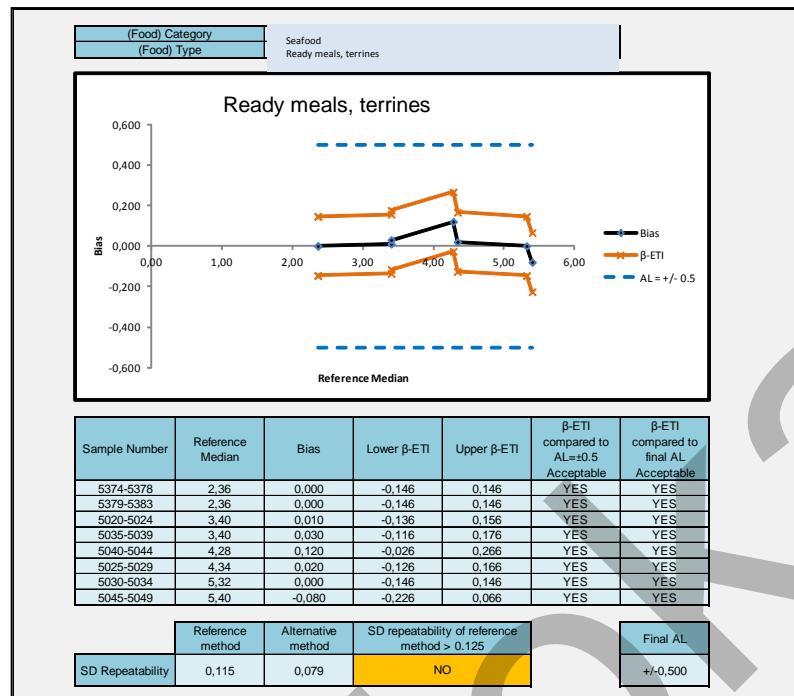
All of the results obtained per category are presented in **Appendix 3**.

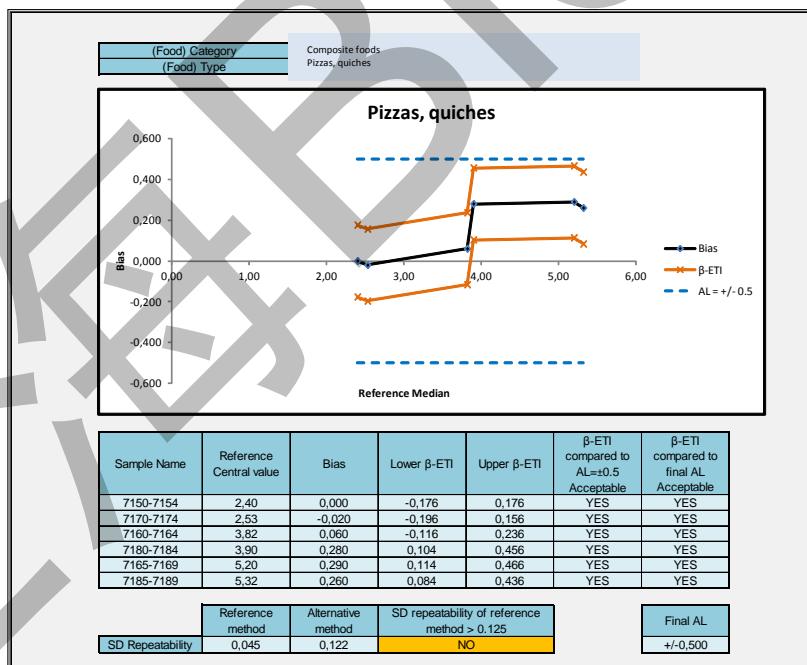
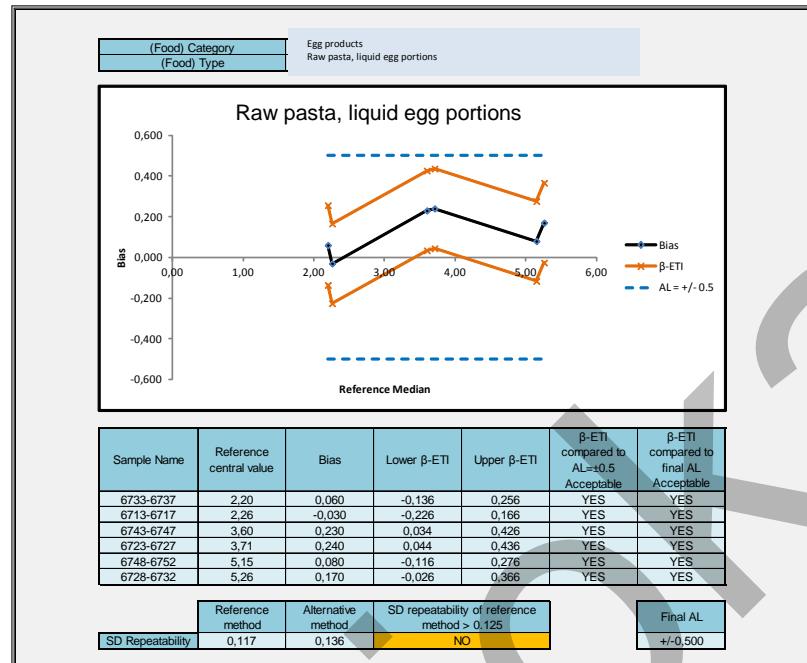
##### 3.1.3 Statistical interpretation

Statistical calculations are given in **Appendix 4**. The following graphs are presented:

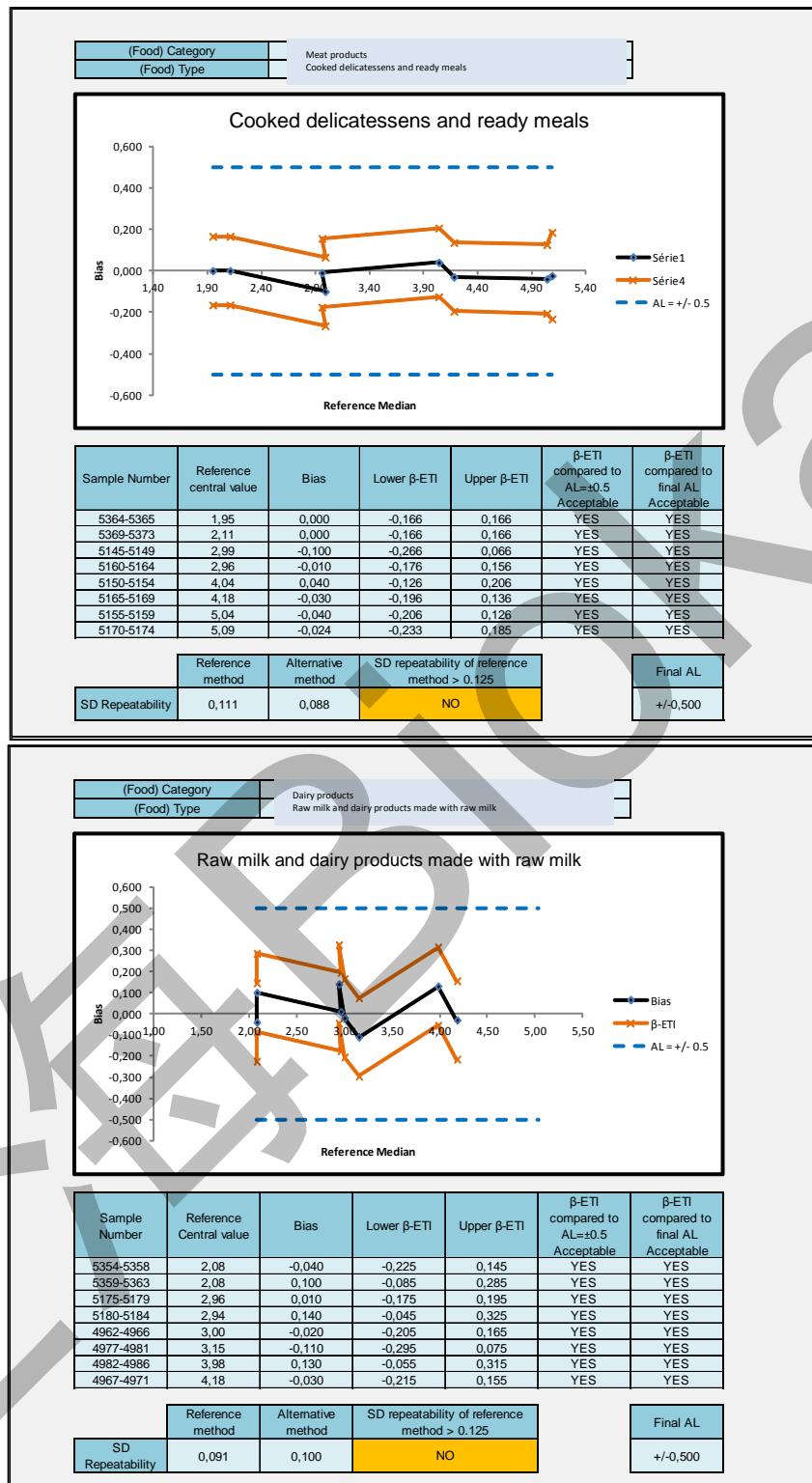
- Figure 1: spread method, 22 h incubation,
- Figure 2: pour plate method, 22 h incubation,
- Figure 3: Spiral method, 22 h incubation.

**- Figure 1 - Spread method, 22 h incubation,**

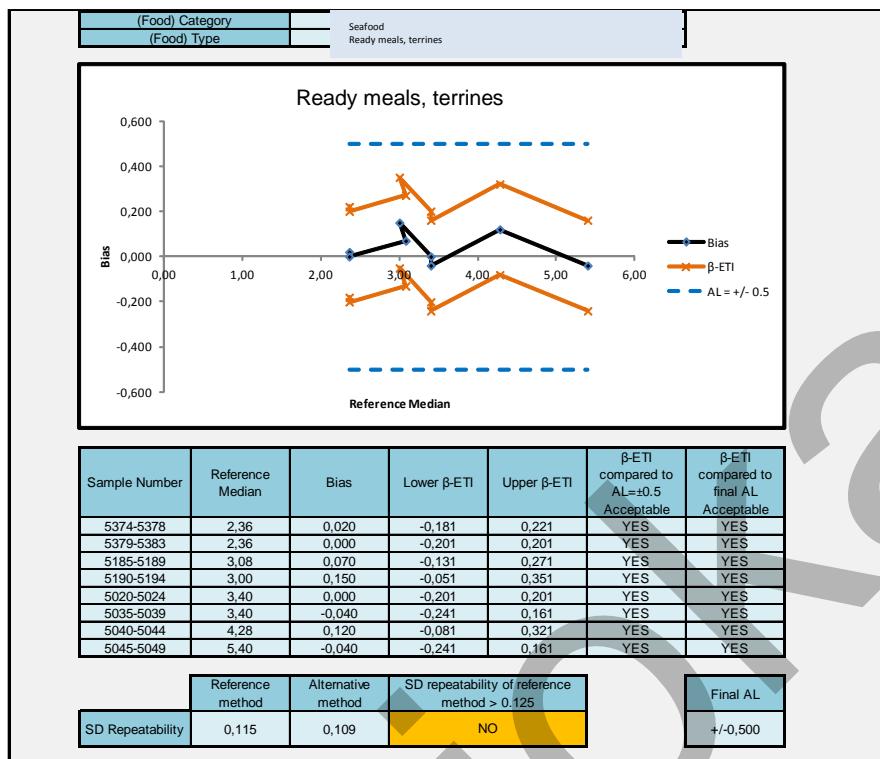
**- Figure 1 - Spread method, 22 h incubation,**

**- Figure 1 - Spread method, 22 h incubation,****Extension study (2015)**

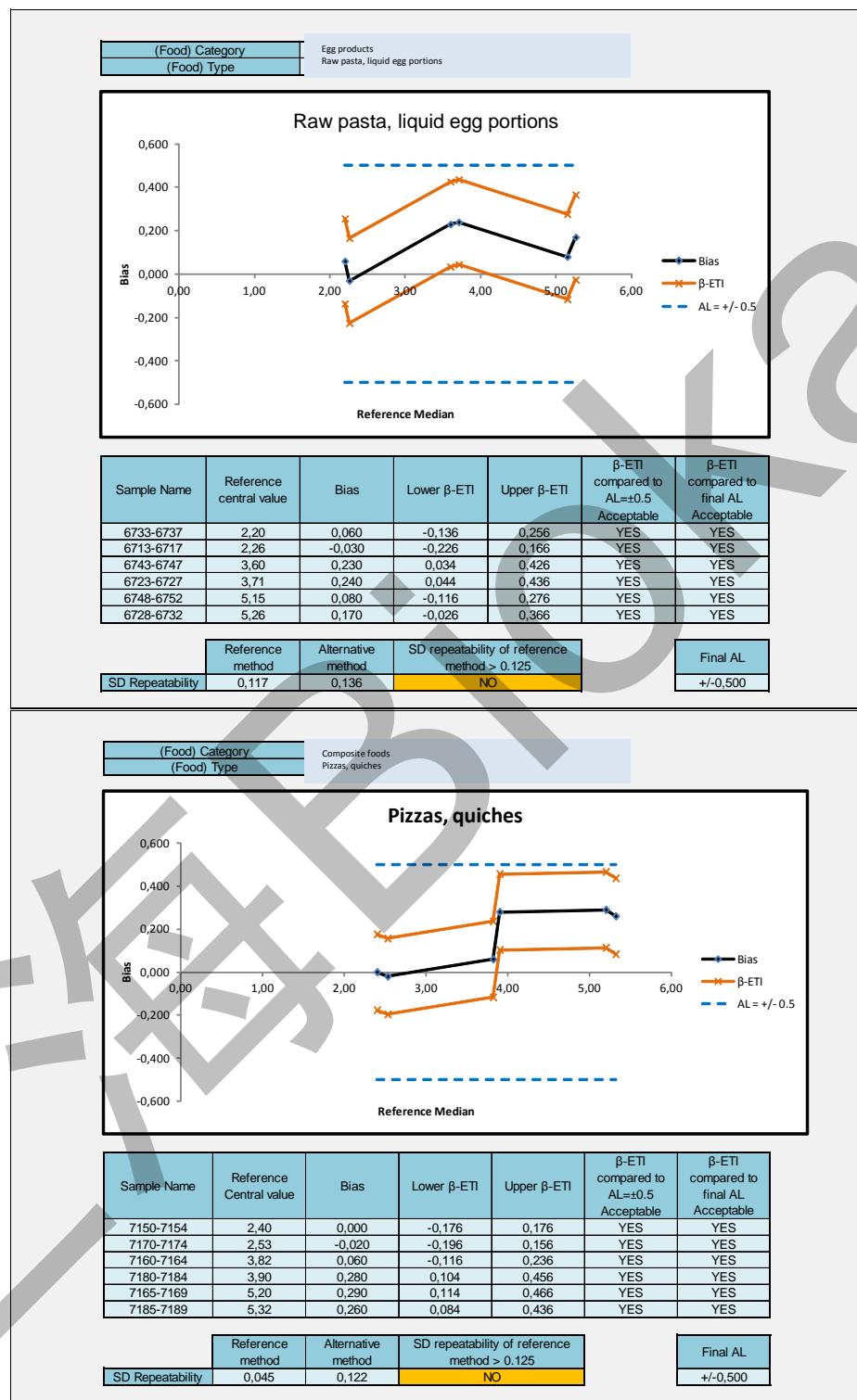
**- Figure 2 - Pour plate method, 22 h incubation,**



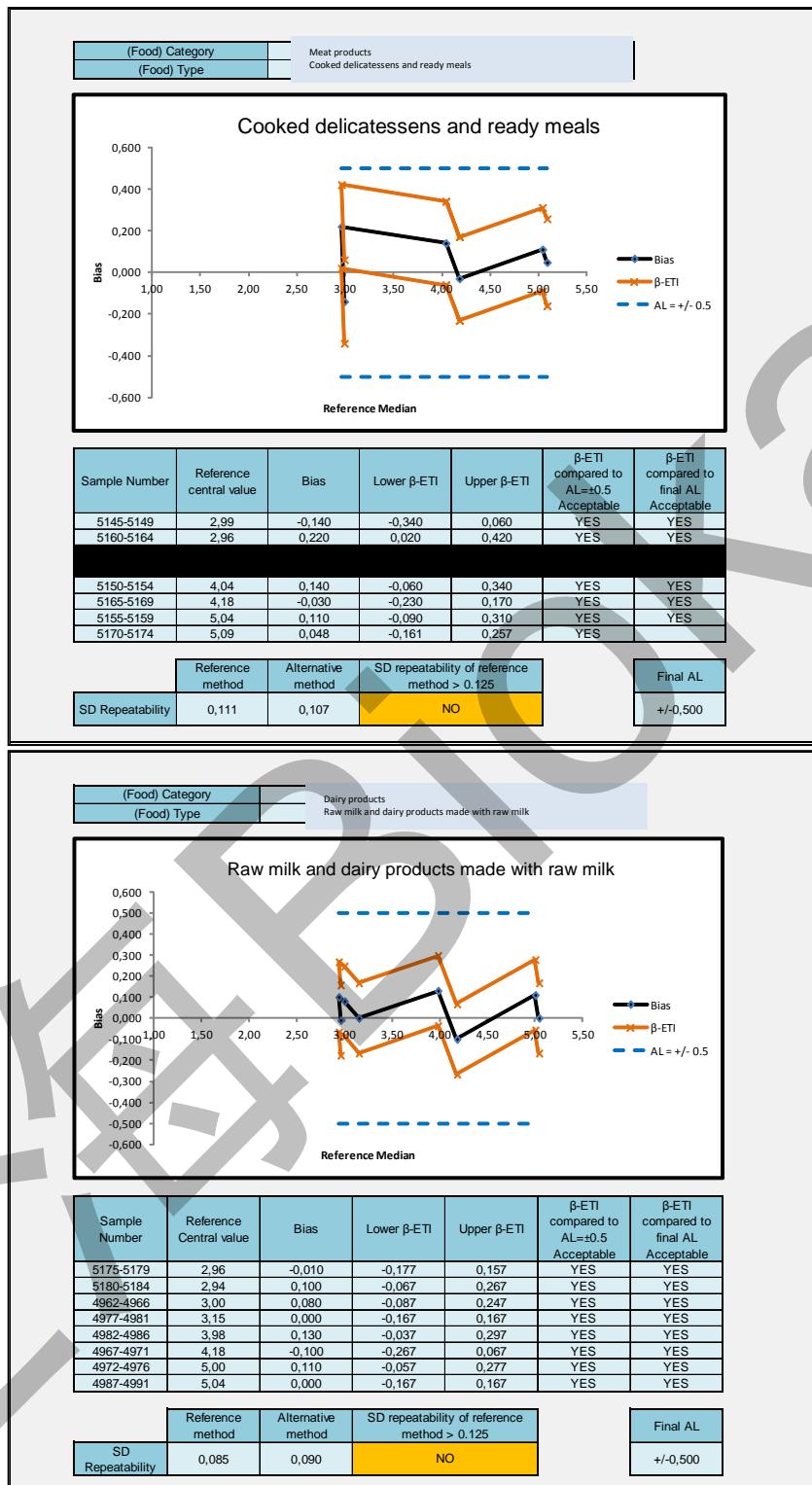
**- Figure 2 - Pour plate method, 22 h incubation,**



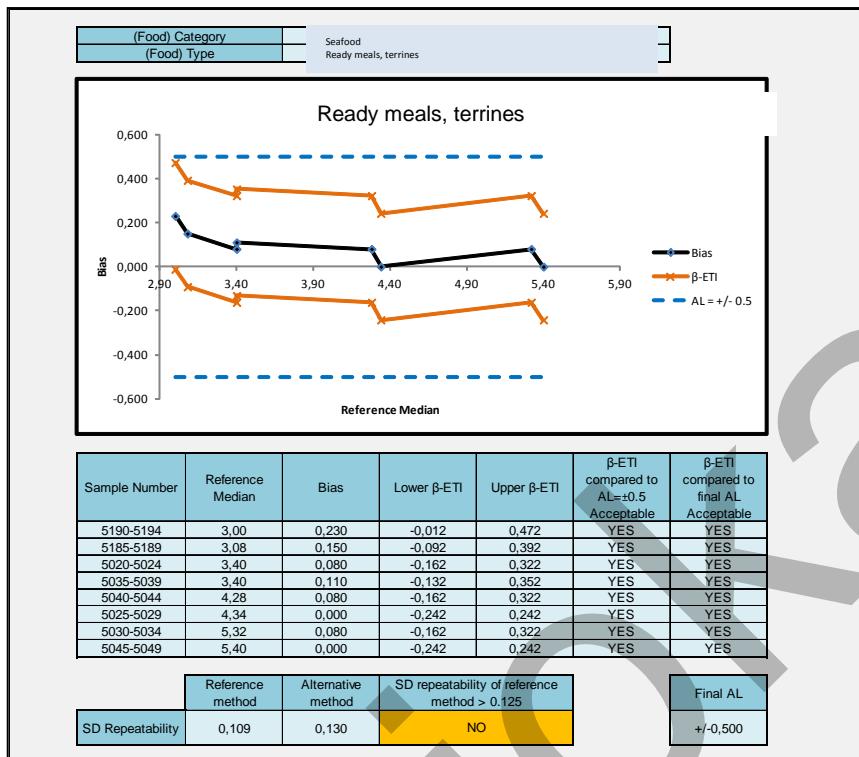
- Figure 2 - Pour plate method, 22 h incubation,  
Extension study (2015)

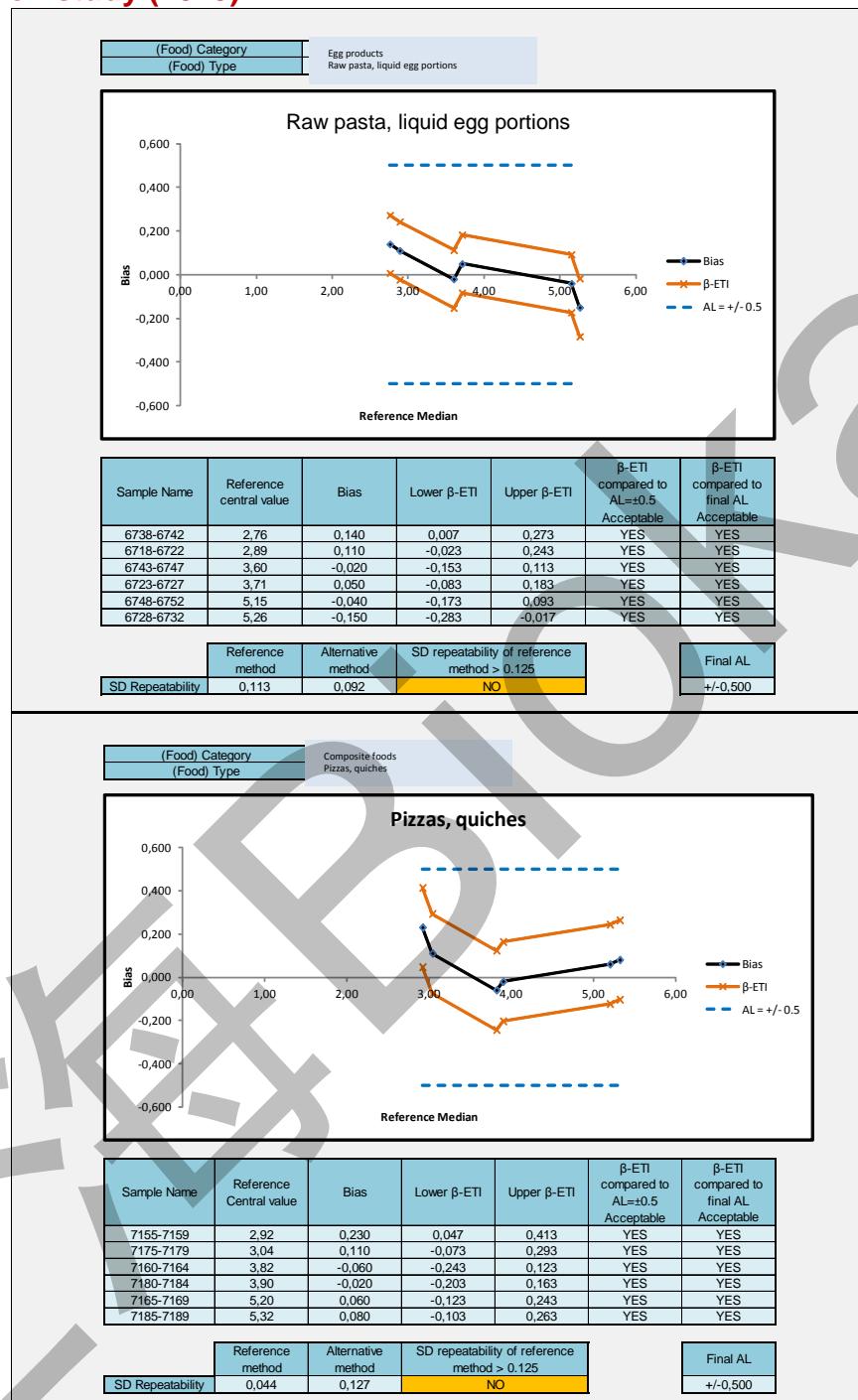


**- Figure 3 - Spiral method, 22 h incubation,**



**- Figure 3 - Spiral method, 22 h incubation,**



**- Figure 3 - Spiral method, 22 h incubation,****Extension study (2015)****3.1.4 Conclusion**

**In all cases, the alternative method is considered to be equivalent to the reference method, the bias always falling within the acceptability limits set at  $\pm 0.5 \log \text{CFU/g}$ .**

## 3.2 Accuracy study

The accuracy study is a comparative study of the result obtained using the reference method and those obtained with the alternative method. This study is conducted using naturally and/or artificially contaminated samples. Various food categories, types and products will be tested for this purpose.

### 3.2.1 Number and type of samples

The number of samples analysed and processed per category and analytical protocol is given in table 2.

Table 2 - Number and type of samples

	Categories	Type	Number of samples analysed	Number of results processed								
				22 h			48h	72 h				
				Spreading	Pour plate	Spiral		Inclusion	Spiral			
				10	12	6	10	12	5			
Initial validation	1 Meat products poultry products	a	Raw meats (minced steak, carpaccio, seasoned meats)	16	9	9	8	9	7			
		b	Raw delicatessens (smoked duck filet, ham, poultry sausages, dried sausages)	12	7	7	6	7	5			
		c	Cooked delicatessens and ready-made meals	12	26	28	24	28	17			
	Total			40	8	8	21	20	17			
	2 Dairy products	a	Raw milk and raw milk-based dairy products	13	7	7	8	7	6			
		b	Pasteurised milk and pasteurised milk-based products	8	6	6	7	7	5			
		c	Dairy desserts	8	21	21	21	20	17			
	Total			29	7	7	6	6	6			
	3 Seafood	a	Raw peeled shrimps, cocktail	8	5	5	7	7	6			
		b	Smoked and marinated fish	5	9	9	5	5	5			
		c	Ready-made meals, terrines	10	9	7	9	10	7			
	Total			23	21	21	21	22	18			
Extension study	4 Egg products	a	Raw dough, liquid egg portions	9	5	5	5	5	6			
		b	Desserts, pastries	9	5	5	5	5	5			
		c	Fresh pasta	7	7	7	7	7	7			
	Total			25	17	17	17	17	18			
	5 Composite foods	a	Salads, ready meals, sandwiches	7	5	5	5	5	5			
		b	Pizza, quiches, pastry shells	9	5	5	5	5	7			
		c	Ready-made meals	8	5	5	5	5	5			
	Total			24	15	15	15	15	17			
TOTAL				141	100	102	90	98	102			
									87			

Samples not used for statistical processing are presented in tables 3 to 5 for the three enumeration methods.

**Table 3 - Samples not used for statistical processing - Spreading method**

Spl. no.	Product	Reference method ISO 6888-2*	Alternative method EASY STAPH Spreading method		Category	Type
			22h	48h		
Initial validation	3817	Chicken thigh	<1.00	1.30*	1.00*	1 a
	3878	Turkey paupiette	1.30*	<1.00	1.60*	1 a
	4222	Beef carpaccio with pistou sauce	2.00	1.48*	1.48*	1 a
	4223	Beef carpaccio with basil	3.78	3.48*	<3.60	1 a
	4303	Blanquette	1.00*	1.00*	1.00*	1 a
	4304	Red meat	1.90	1.70	1.70	1 a
	4338	Neck skin	2.45	2.41	2.41	1 a
	4339	Neck skin	1.95	1.00*	1.48*	1 a
	3816	Raw sausage	<1.00	<1.00	<1.00	1 b
	3880	Sausages seasoned with herbs	<1.00	<1.00	<1.00	1 b
	4772	Perche sausage	unreadable	unreadable	unreadable	1 b
	4773	Rosette	2.90	2.60	<3.00	1 b
	3777	Wings BBQ	1.00*	1.30*	1.30*	1 c
	3779	Wings BBQ	1.00*	1.30*	1.30*	1 c
	3780	Wings BBQ	1.30*	1.70	1.70	1 c
	3781	Wings BBQ	1.30*	1.48*	1.00*	1 c
	3782	Wings BBQ	1.60	1.30*	1.30*	1 c
	4768	Chicken curry	3.60	3.45	<2.00	1 c
	3773	Reblochon made with raw milk	<3.00	<3.00	<3.00	2 a
	3775	Saint Nectaire made with raw milk	<1.00	<1.00	<1.00	2 a
	3815	Reblochon made with raw milk	1.48*	1.85	1.85	2 a
	4040	Raw milk	1.00*	1.30*	1.00*	2 a
	4336	Goat's cheese	1.30*	1.95	1.96	2 a
	3873	Pasteurised milk	2.48*	2.78	2.78	2 b
	3872	Black forest	1.30*	1.00*	1.00*	2 c
	4228	Rice pudding	3.90	3.30*	3.30*	2 c
	4652	Swordfish steak	<1.00	<1.00	<1.00	3 a
	4302	Spring roll	2.08	1.00*	1.00*	3 c

\* Test conducted under accreditation

	Spl. no.	Product	Reference method ISO 6888-2*	Alternative method EASY STAPH Spreading method		Category	Type
				22h	48h		
Extension study	7447	Puff pastry with butter	<1.00	<1.00	<1.00	4	a
	7448	Puff pastry with butter	<1.00	<1.00	<1.00	4	a
	7442	Flan	<1.00	<1.00	<1.00	4	b
	7443	Apple tart	<1.00	<1.00	<1.00	4	b
	7444	Apricot tart	<1.00	<1.00	<1.00	4	b
	7681	Mixed vegetables	<1.00	<1.00	<1.00	5	a
	7682	Grated carrots	<1.00	<1.00	<1.00	5	a
	7684	Ham and cheese croissants	<1.00	<1.00	<1.00	5	b
	7683	Couscous	<1.00	<1.00	<1.00	5	c
	7685	Hacao with Xiu Mai chicken	<1.00	<1.00	<1.00	5	c
	8088	Couscous	>5.00	>5.00	>5.00	5	c

\*: < 4 colonies per plate

Unreadable: plates unreadable due to the presence of significant secondary flora

\* Test conducted under accreditation

**Table 4 - Samples not used for statistical processing - Pour plate method**

Spl. no.	Product	Reference method ISO 6888-2*	Alternative method EASY STAPH Pour plate method		Category	Type
			22h	72h		
Initial validation	3817	Chicken thigh	<1.00	1.60	1.60	1 a
	3878	Turkey paupiette	1.30*	1.00*	1.00*	1 a
	4223	Beef carpaccio with basil	3.78	3.48*	3.48*	1 a
	4303	Blanquette	1.00*	1.00*	1.00*	1 a
	3816	Raw sausage	<1.00	<1.00	<1.00	1 b
	3880	Sausages seasoned with herbs	<1.00	<1.00	<1.00	1 b
	4772	Perche sausage	unreadable	unreadable	unreadable	1 b
	3777	Wings BBQ	1.00*	1.00*	1.00*	1 c
	3779	Wings BBQ	1.00*	1.70	1.70	1 c
	3780	Wings BBQ	1.30*	1.48*	1.60	1 c
	3781	Wings BBQ	1.30*	1.30*	1.30*	1 c
	3782	Wings BBQ	1.60	<1.00	1.00*	1 c
	3773	Reblochon made with raw milk	<3.00	<3.00	<3.00	2 a
	3775	Saint Nectaire made with raw milk	<1.00	<1.00	<1.00	2 a
	3815	Reblochon made with raw milk	1.48*	1.78	1.78	2 a
	3876	Saint Nectaire made with raw milk	2.78	2.69	3.48*	2 a
	4040	Raw milk	1.00*	<1.00	<1.00	2 a
	4336	Goat's cheese	1.30*	1.48*	1.00	2 a
	3873	Pasteurised milk	2.48*	<2.00	<2.00	2 b
Extension study	3872	Black forest	1.30*	1.00*	1.30*	2 c
	4228	Rice pudding	3.90	3.30*	3.30*	2 c
	4652	Swordfish steak	<1.00	<1.00	<1.00	3 a
	3868	Scallop terrine	3.08	2.48*	2.60	3 c
	7447	Puff pastry with butter	<1.00	<1.00	<1.00	4 a
	7448	Puff pastry with butter	<1.00	<1.00	<1.00	4 a
	3778	Custard cream	1.78	<1.00	<1.00	4 b
	7442	Flan	<1.00	<1.00	<1.00	4 b
	7443	Apple tart	<1.00	<1.00	<1.00	4 b
	7444	Apricot tart	<1.00	<1.00	<1.00	4 b
	7681	Mixed vegetables	<1.00	<1.00	<1.00	5 a
	7682	Grated carrots	<1.00	<1.00	<1.00	5 a
	7684	Ham and cheese croissants	<1.00	<1.00	<1.00	5 b
	7683	Couscous	<1.00	<1.00	<1.00	5 c
	7685	Hacao with Xiu Mai chicken	<1.00	<1.00	<1.00	5 c
	8088	Couscous	>5.00	>5.00	>5.00	5 c

\*: &lt; 4 colonies per plate

Unreadable: plates unreadable due to the presence of significant secondary flora

♦ Test conducted under accreditation

**Table 5 - Samples not used for statistical processing - Spiral method**

No. Spl.	Product	Alternative method ISO 6888-2*	Alternative method EASY STAPH Spiral method		Category	Type
			22h	72h		
Initial validation	3774	Duck manchons	4.89	4.75	/	1 a
	3817	Chicken thigh	<1.00	<2.00	<2.00	1 a
	3877	Turkey paupiette	1.90	<2.00	<2.00	1 a
	3878	Turkey paupiette	1.30*	<2.00	<2.00	1 a
	3879	Turkey paupiette	1.60	2.00*	2.00*	1 a
	4222	Beef carpaccio with pistou sauce	2.00	<2.00	<2.00	1 a
	4303	Blanquette	1.00*	<2.00	<2.00	1 a
	4304	Red meat	1.90	2.00*	2.00*	1 a
	4337	Neck skin	2.57	2.00*	2.30*	1 a
	4338	Neck skin	2.45	2.00*	2.00*	1 a
	4339	Neck skin	1.95	<2.00	<2.00	1 a
	3816	Raw sausage	<1.00	<2.00	<2.00	1 b
	3880	Sausages seasoned with herbs	<1.00	<2.00	<2.00	1 b
	4651	Raw ham	2.08	2.48*	2.48*	1 b
	4772	Perche sausage	unreadable	unreadable	unreadable	1 b
	4773	Rosette	2.90	2.30*	<2.00	1 b
	3777	Wings BBQ	1.00*	<2.00	<2.00	1 c
	3779	Wings BBQ	1.00*	2.30*	2.30*	1 c
	3780	Wings BBQ	1.30*	<2.00	<2.00	1 c
	3781	Wings BBQ	1.30*	2.30*	2.00*	1 c
	3782	Wings BBQ	1.60	<2.00	<2.00	1 c
	4768	Chicken curry	3.60	3.45	<2.00	1 c
	4771	Cooked ham	3.28	3.41	<2.00	1 c
	3771	Unripened cheese made with raw cow's milk	2.54	<2.00	<2.00	2 a
	3773	Reblochon made with raw milk	<3.00	<2.00	<2.00	2 a
	3775	Saint Nectaire made with raw milk	<1.00	<2.00	<2.00	2 a
	3815	Reblochon made with raw milk	1.48*	2.30*	<2.00	2 a
	4040	Raw milk	1.00*	2.00*	2.00*	2 a
	4042	Tomme made with raw milk	1.70	2.48*	2.48*	2 a
	4336	Goat's cheese	1.30*	<2.00	<2.00	2 a
	3873	Pasteurised milk	2.48*	2.00*	2.60	2 b
	4541	Buttermilk	1.96	2.00*	2.00*	2 b
	4543	Pasteurised milk	2.95	2.30*	2.30*	2 b
	3872	Black forest	1.30*	<2.00	2.00*	2 c
	4226	Tiramisu	2.08	2.30*	2.30*	2 c
	4041	Raw salmon fillet	2.08	2.00*	2.00*	3 a
	4652	Swordfish steak	<1.00	<2.00	<2.00	3 a

\* Test conducted under accreditation

	No. Spl.	Product	Alternative method ISO 6888-2♦	Alternative method EASY STAPH Spiral method		Category	Type
				22h	72h		
Extension study	3869	Salmon duo salad	1.90	<2.00	<2.00	3	c
	3871	Crayfish salad	2.60	2.48*	2.48*	3	c
	4302	Spring roll	2.08	<2.00	<2.00	3	c
	6655	Puff pastry	2.32	2.00*	2.48*	4	a
	7447	Puff pastry with butter	<1.00	<2.00	<2.00	4	a
	7448	Puff pastry with butter	<1.00	<2.00	<2.00	4	a
	3778	Custard cream	1.78	<2.00	<2.00	4	b
	7442	Flan	<1.00	<2.00	<2.00	4	b
	7443	Apple tart	<1.00	<2.00	<2.00	4	b
	7444	Apricot tart	<1.00	<2.00	<2.00	4	b
	7681	Mixed vegetables	<1.00	<2.00	<2.00	5	a
	7682	Grated carrots	<1.00	<2.00	<2.00	5	a
	6659	Cheese and tomato pizza	2.45	2.30*	2.30*	5	b
	7684	Ham and cheese croissants	<1.00	<2.00	<2.00	5	b
	7683	Couscous	<1.00	<2.00	<2.00	5	c
	7685	Hacao with Xiu Mai chicken	<1.00	<2.00	<2.00	5	c

\*: < 4 colonies per plate

### 3.2.2 Artificial contaminants

92 samples were artificially contaminated with stressed strains, or by the seeding protocol. The strains inoculated, the injury protocol and injury measurement are given in Appendix 5.

80 samples gave results that could be processed by the spread and pour plate methods, along with 79 by the Spiral method for plates incubated for 22 h at 37 °C.

Naturally contaminated samples thus represent 20.0% for the spread method, 21.6% for the pour plate method and 12.2% for the Spiral method.

### 3.2.3 Raw results

The raw results are given in Appendix 6. An overview is given in Appendix 7.

Single samples were analysed by each of the methods such that 15 usable samples were obtained for each category.

Data were grouped into three categories:

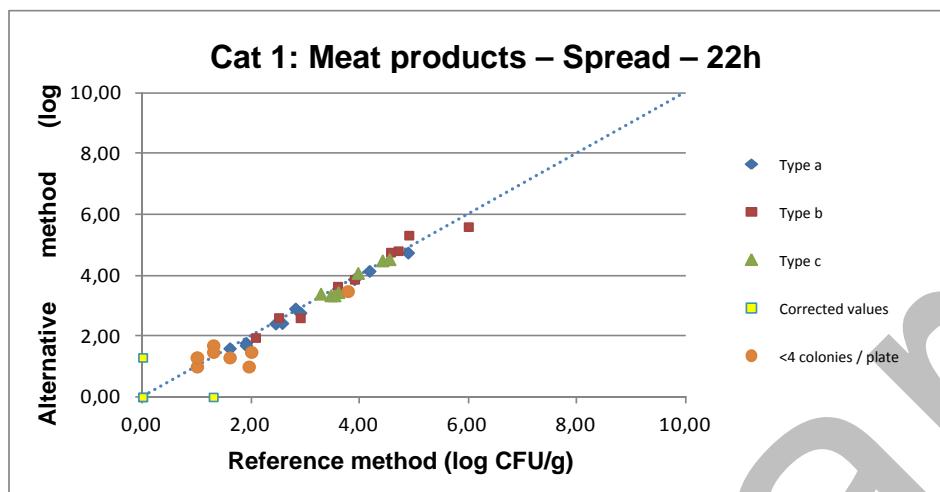
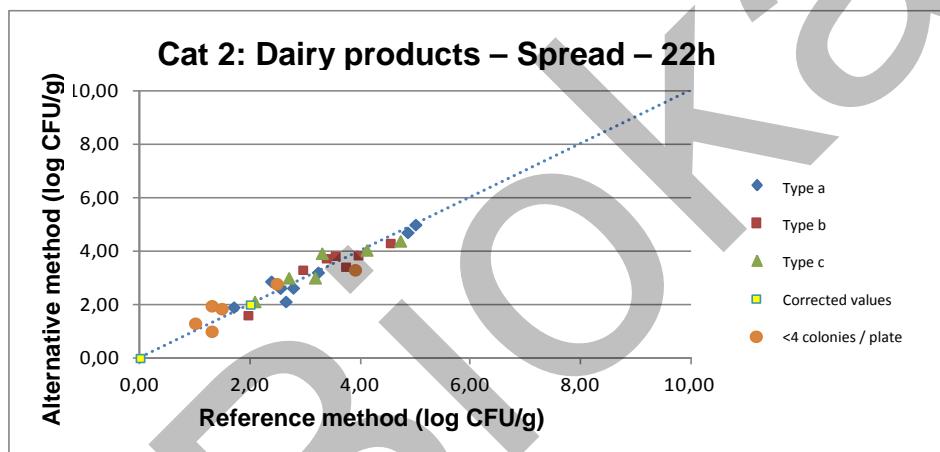
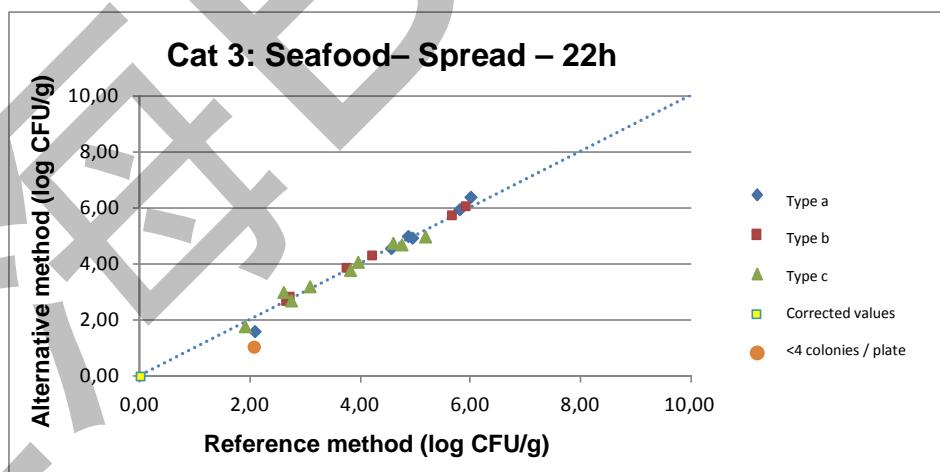
- results usable by both methods,
- results with fewer than 4 colonies per plate by one or other of the methods (highlighted by an asterisk (\*) in the raw results). These results were quantified such as to represent the actual result as accurately as possible.
- results below or above the limit of quantification by one or other of the methods.

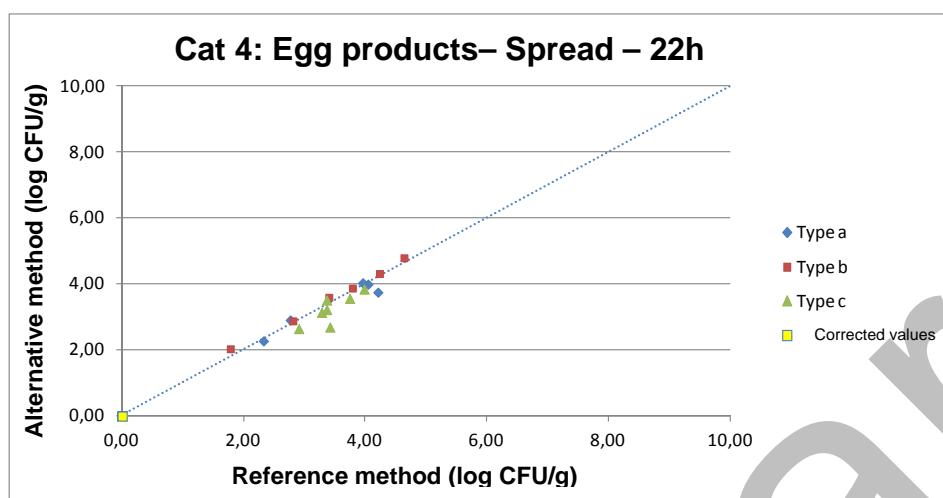
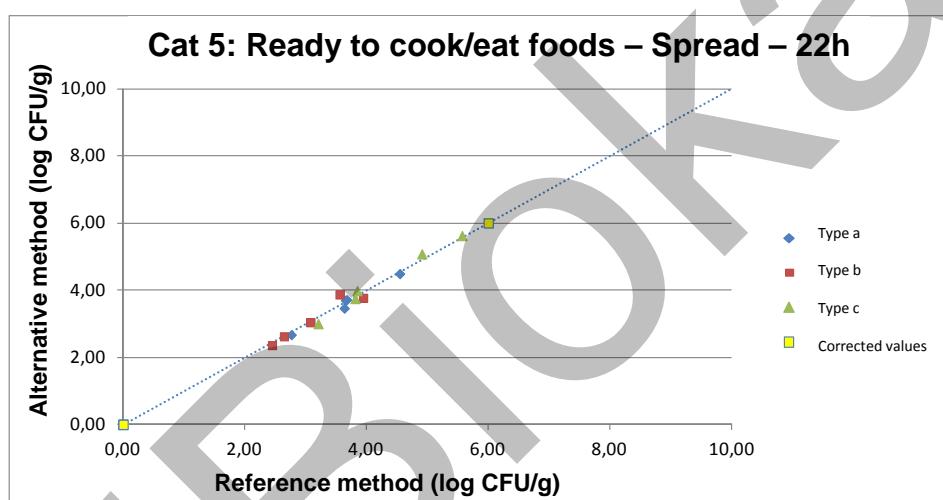
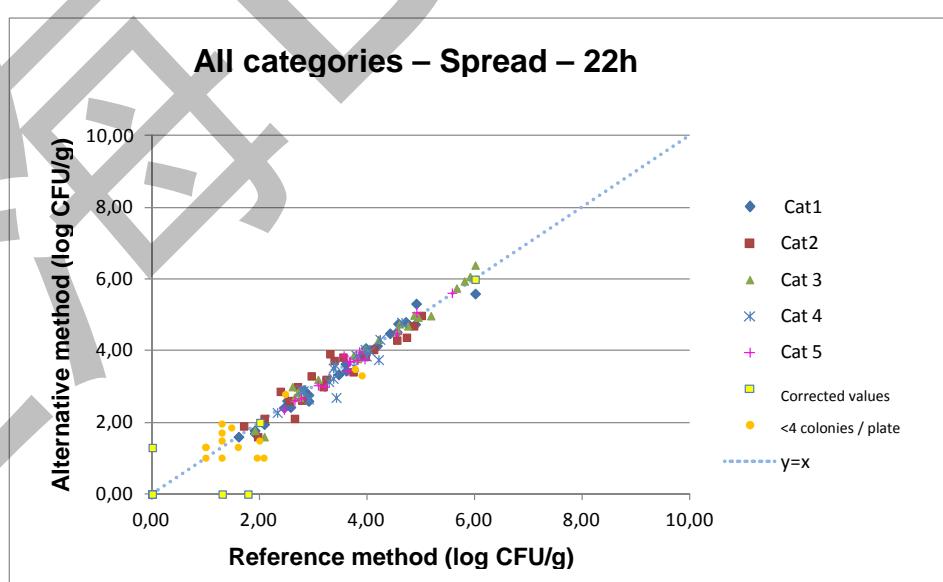
### **3.2.4 Statistical interpretation**

#### *3.2.4.1 Spreading method*

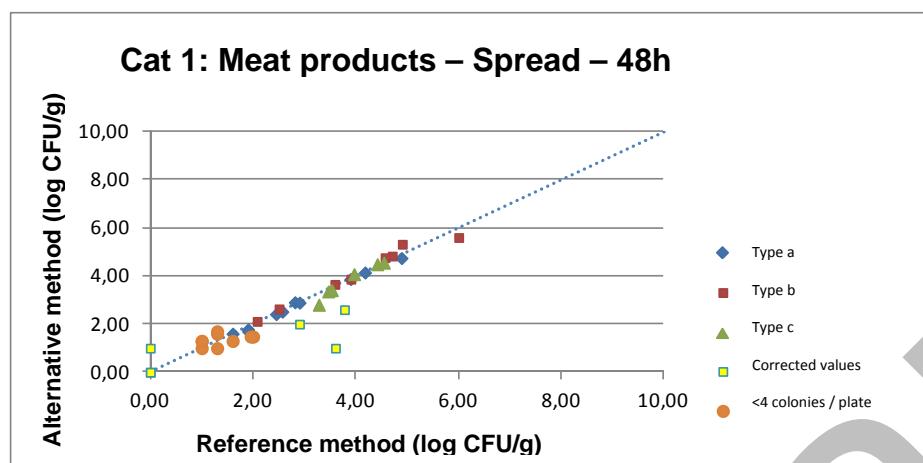
The calculations are given in **Appendix 8**.

The results pair (reference method / alternative method), both per category and for all categories, are given in Figures 4 to 9 for the 22 h incubation period and in Figures 10 to 15 for the 48 h incubation period.

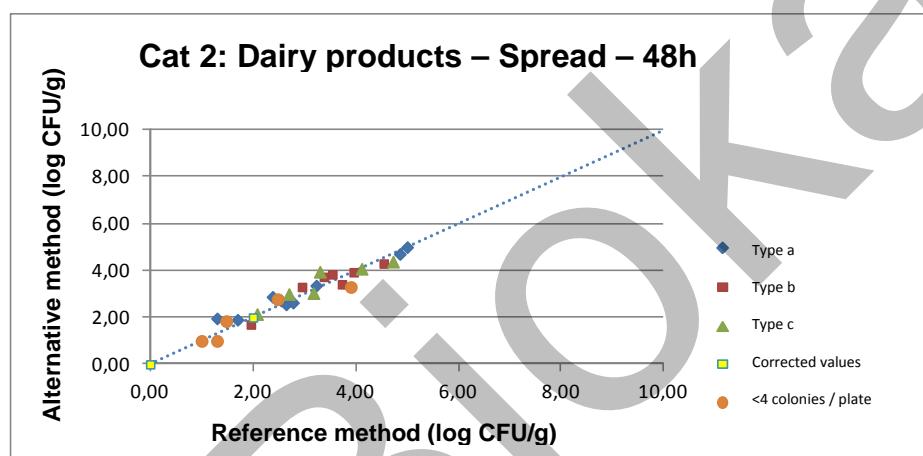
**Figure 4****Figure 5****Figure 6**

**Figure 7****Figure 8****Figure 9**

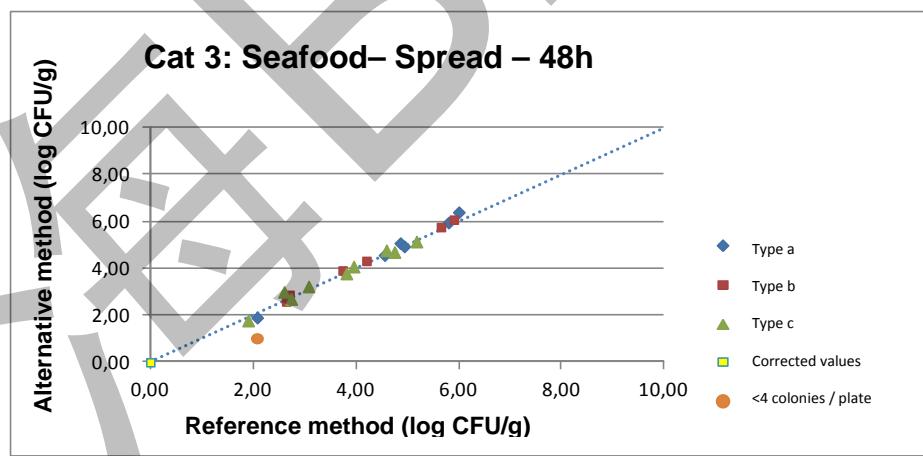
# Figure 10



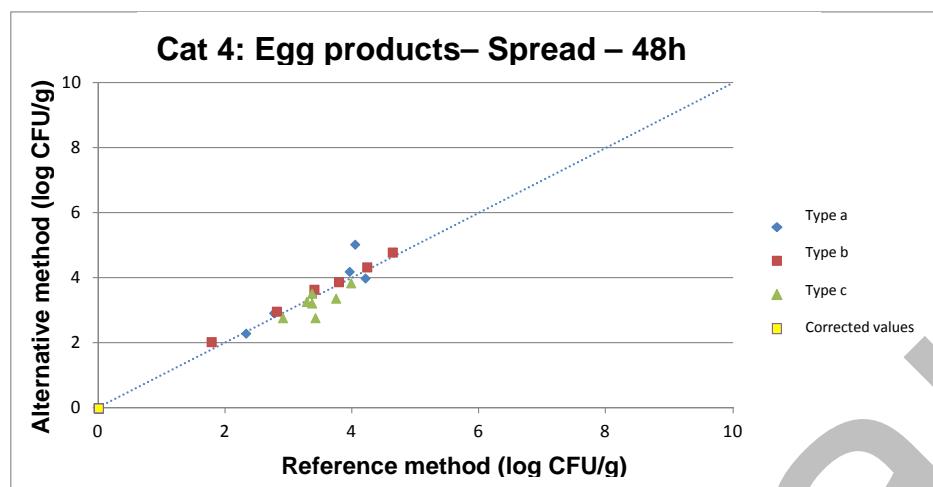
## Figure 11



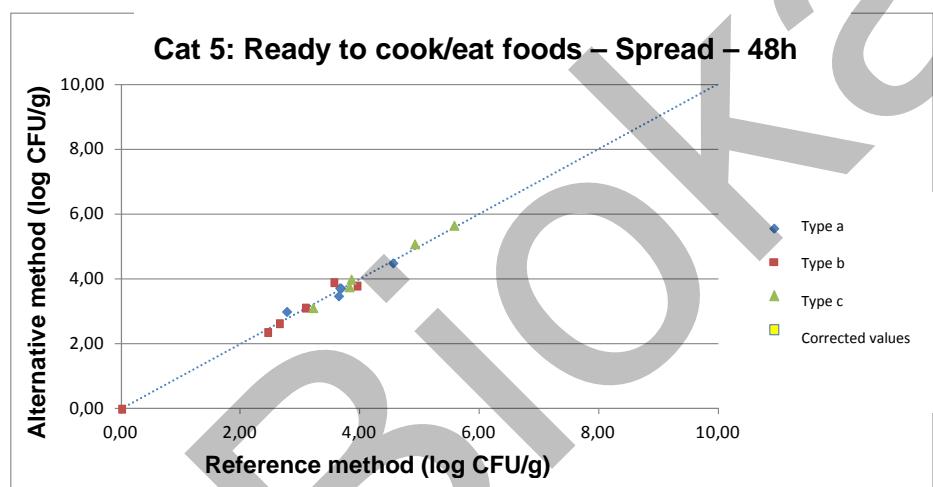
# Figure 12



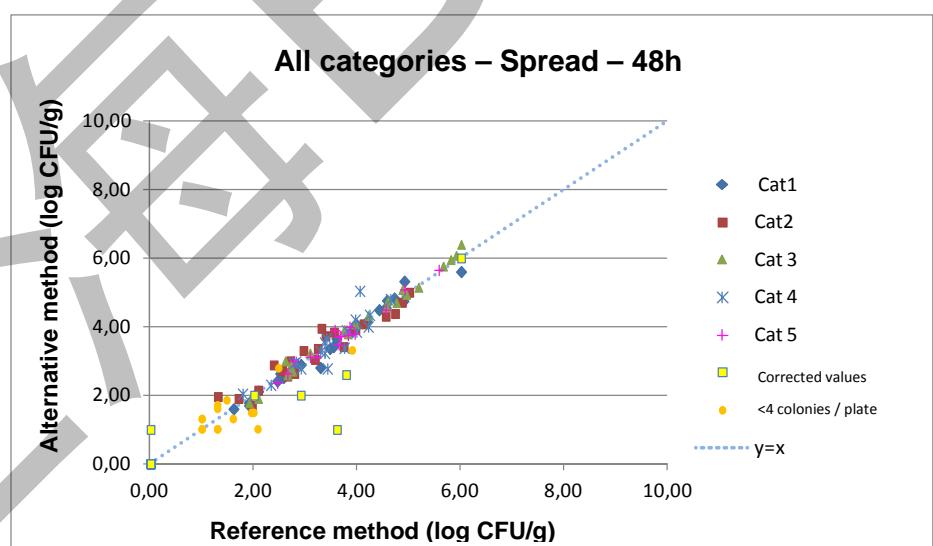
**Figure  
13**



**Figure  
14**



**Figure  
15**

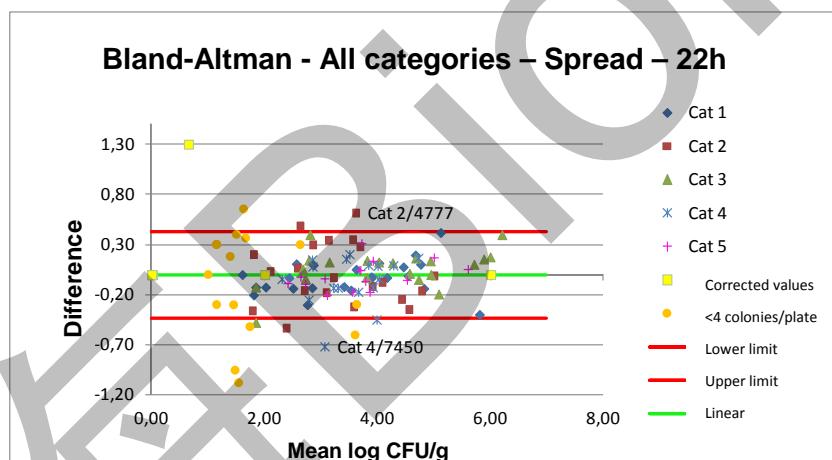
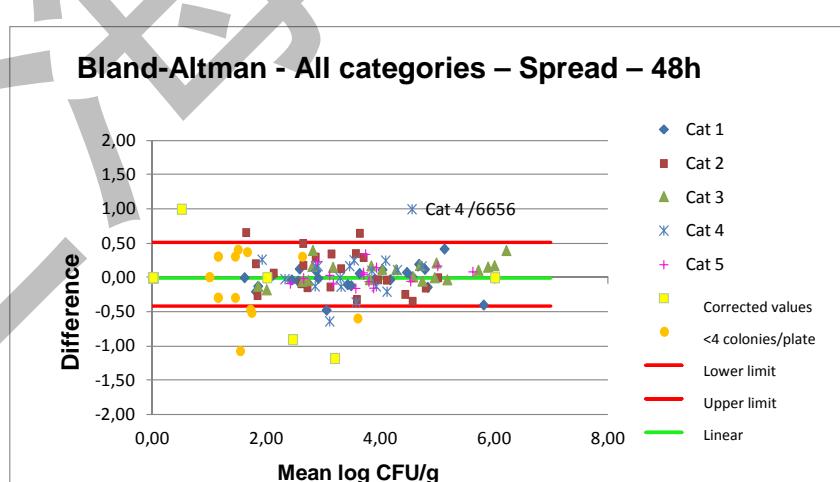


A summary of calculated values is given in table 6.

**Table 6 - Calculated values - Spread method**

Incubation period	Category	n	$\bar{D}$	$S_D$	95% lower limit	95% upper limit
22 h	1	26	- 0.03	0.17	/	/
	2	21	0.01	0.31	/	/
	3	21	0.06	0.19	/	/
	4	17	- 0.06	0.24	/	/
	5	15	- 0.01	0.14	/	/
	All categories	100	- 0.01	0.22	- 0.44	0.43
48 h	1	24	- 0.02	0.18	/	/
	2	22	0.09	0.30	/	/
	3	21	0.09	0.15	/	/
	4	18	0.10	0.14	/	/
	5	15	0.03	0.14	/	/
	All categories	100	0.05	0.23	- 0.42	0.52

The Bland-Altman plots are given in Figures 16 (for the 22 h incubation period) and 17 (for the 48 h incubation period).

**Figure  
16****Figure  
17**

Samples for which the difference in result obtained by the reference method and that obtained by the alternative method is greater or less than the limits, are entered into tables 7 and 8 with associated comments.

**Table 7 - Observed discrepancies! Spread method, 22 h incubation**

	Corrected values
	< 4 colonies per plate

Category	Type	Spl. no.	Reference method	Alternative method	Mean	Difference	Comment
1	a	3817	0.00	1.30	0.65	1.30	Limit of quantification
2	a	4336	1.30	1.95	1.63	0.65	Lower count by the reference method
2	c	4777	3.30	3.92	3.61	0.62	Lower count by the reference method
2	a	4992	2.38	2.87	2.62	0.49	Lower count by the reference method
1	a	3878	1.30	0.00	0.65	-1.30	Limit of quantification
1	a	4222	2.00	1.48	1.74	-0.52	Lower count by the EASY STAPH alternative method
1	a	4339	1.95	1.00	1.48	-0.95	Lower count by the EASY STAPH alternative method
2	a	3769	2.64	2.11	2.38	-0.53	Lower count by the EASY STAPH alternative method
2	c	4228	3.90	3.30	3.60	-0.60	Lower count by the EASY STAPH alternative method
3	a	4041	2.08	1.60	1.84	-0.48	Lower count by the EASY STAPH alternative method
3	c	4302	2.08	1.00	1.54	-1.08	Lower count by the EASY STAPH alternative method
4	a	7504	4.20	3.76	3.98	-0.45	Lower count by the EASY STAPH alternative method
4	c	7450	3.41	2.70	3.06	-0.72	Lower count by the EASY STAPH alternative method

**Table 8 - Observed discrepancies! Spread method, 48 h incubation**

Category	Type	Spl. no.	Reference method	Alternative method	Mean	Difference	Comment
1	a	3817	0.00	1.00	0.50	1.00	Limit of quantification
2	a	4336	1.30	1.96	1.63	0.66	Lower count by the reference method
2	c	4777	3.30	3.95	3.63	0.65	Lower count by the reference method
1	c	4771	3.28	2.81	3.04	-0.47	Lower count by the EASY STAPH alternative method
1	a	4339	1.95	1.48	1.72	-0.47	Lower count by the EASY STAPH alternative method
1	a	4222	2.00	1.48	1.74	-0.52	Lower count by the EASY STAPH alternative method
1	a	4223	3.78	2.60	3.19	-1.18	Limit of quantification
1	b	4773	2.90	2.00	2.45	-0.90	Limit of quantification
1	c	4768	3.60	1.00	2.30	-2.60	Limit of quantification
2	c	4228	3.90	3.30	3.60	-0.60	Lower count by the EASY STAPH alternative method
3	c	4302	2.08	1.00	1.54	-1.08	Lower count by the EASY STAPH alternative method
4	c	7450	3.41	2.78	3.10	-0.64	Lower count by the EASY STAPH alternative method

## Conclusion

For a 22 h incubation period, a lower count by the EASY STAPH alternative method was observed in 8 cases and by the reference method in 3 cases. The differences observed, however, were low for 5 samples as they were of -0.52, -0.53, -0.60, -0.48 and -0.45 log CFU/g. For two samples, there was a problem with the limit of quantification, for the ISO method in one case (sample 3817) and for the EASY STAPH alternative method in the other case (sample 3878).

For a 48 h incubation period, the EASY STAPH alternative method gave 6 results below the ISO method, while the ISO method gave 2 results below the EASY STAPH alternative method.

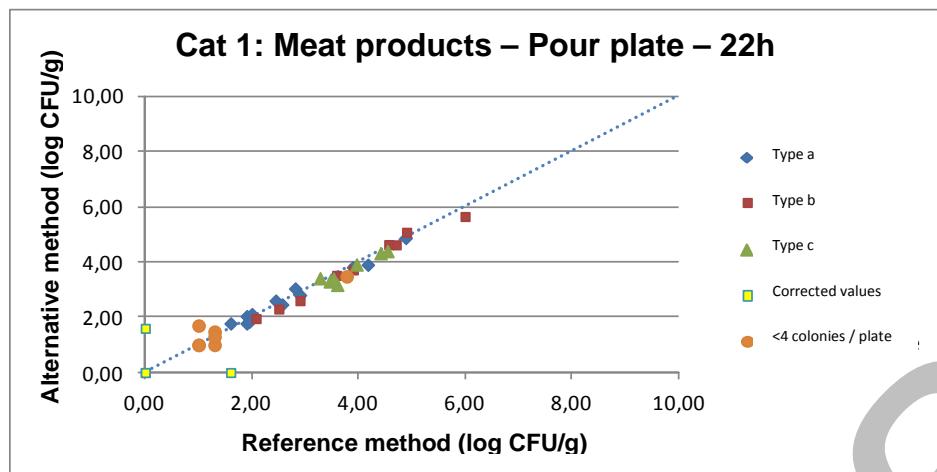
Overall, the two methods equivalent, whatever the incubation period of the EASY STAPH alternative method.

### *3.2.4.2 Pour plate method*

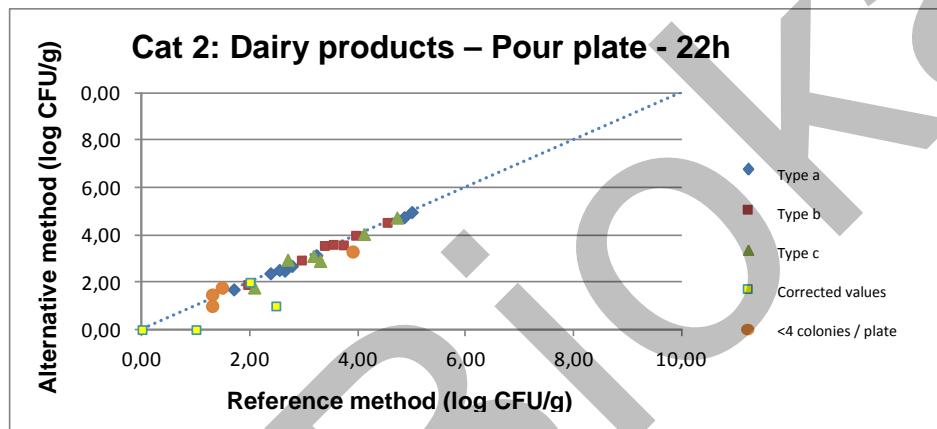
The calculations are given in **Appendix 9**.

The results pair (reference method / alternative method), both per category and for all categories, are given in Figures 18 to 23 for the 22 h incubation period and in Figures 24 to 29 for the 72 h incubation period.

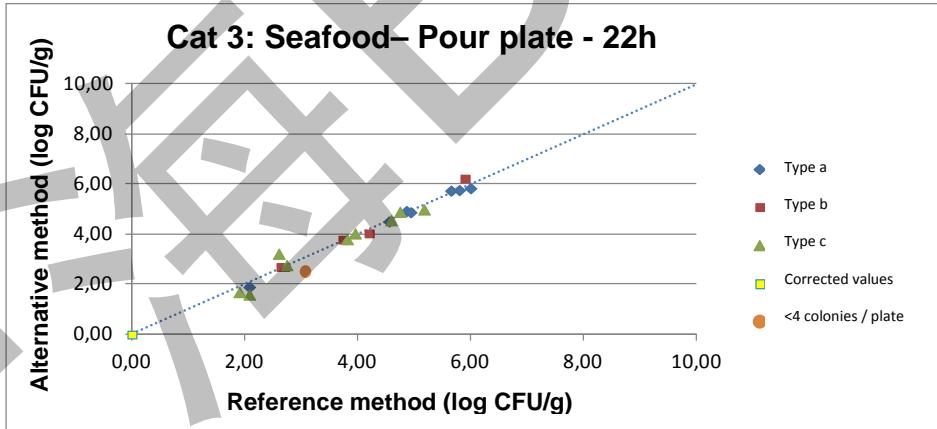
**Figure  
18**



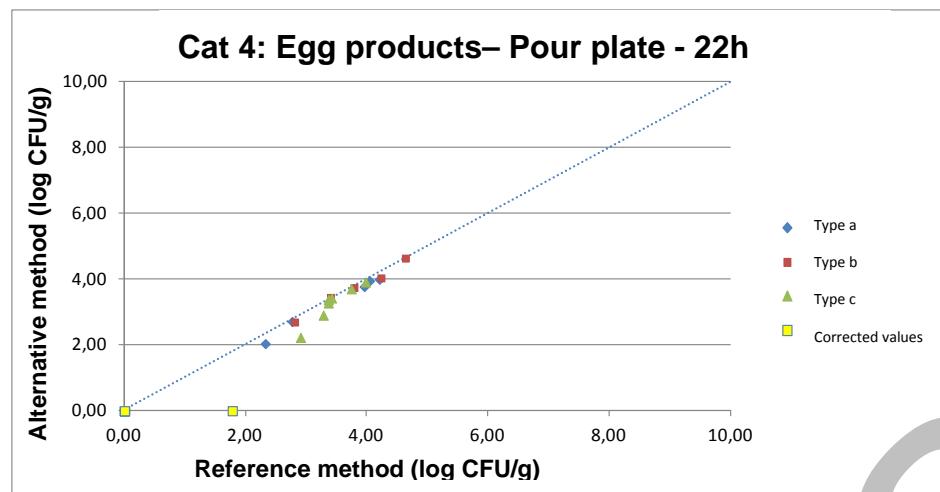
**Figure  
19**



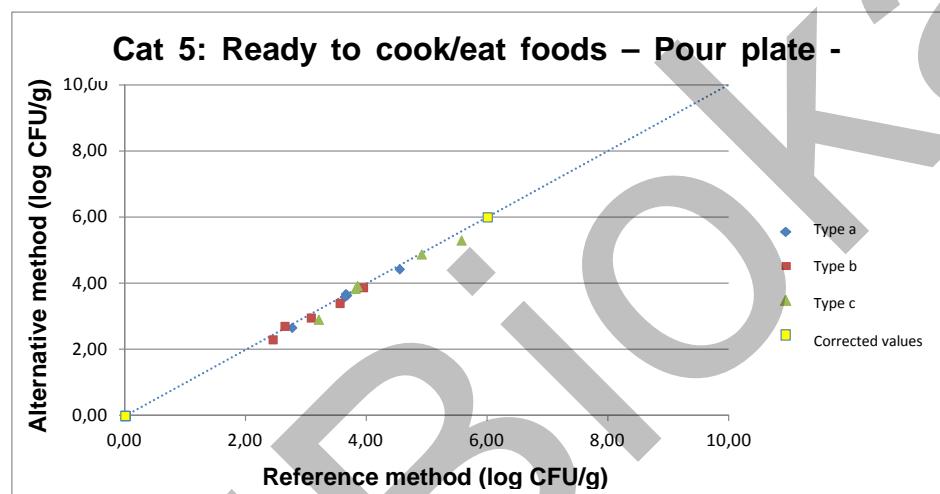
**Figure  
20**



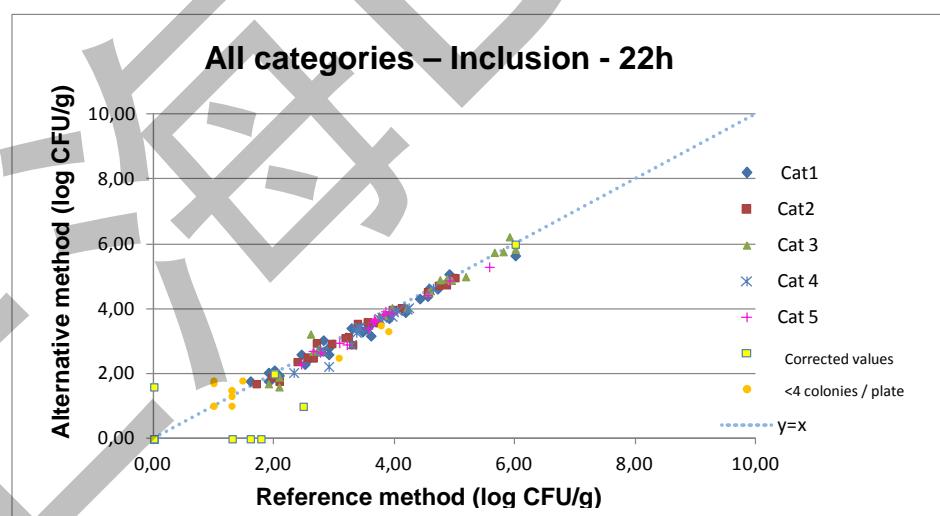
**Figure  
21**

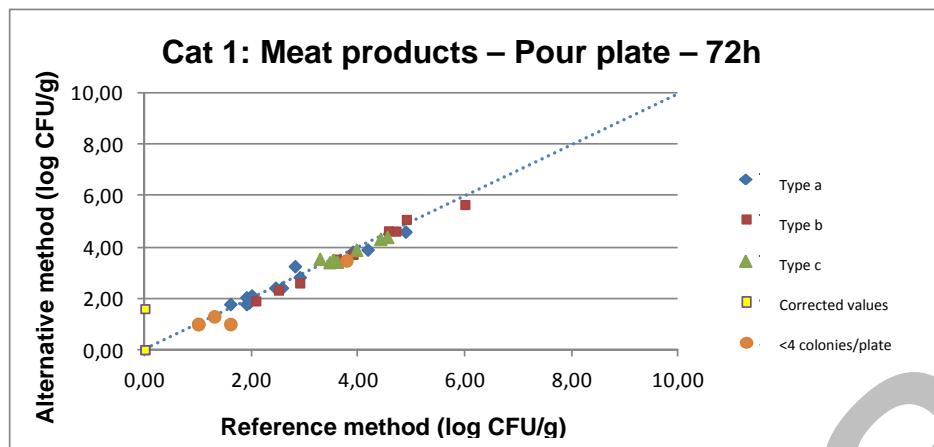
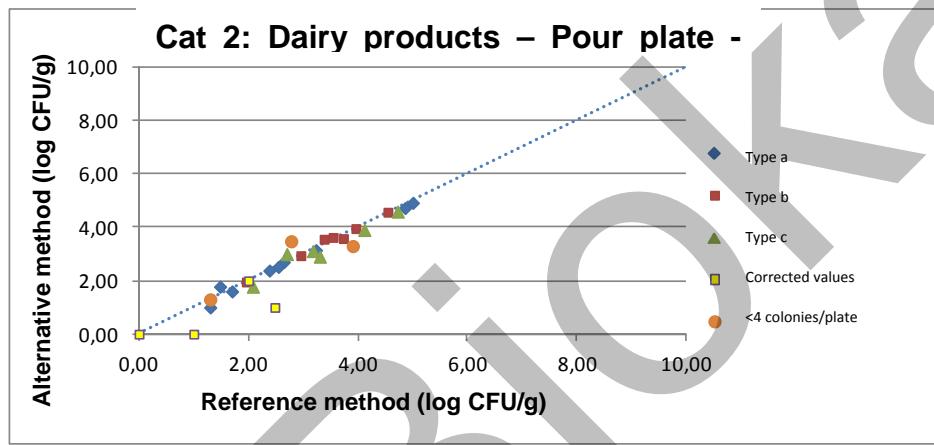
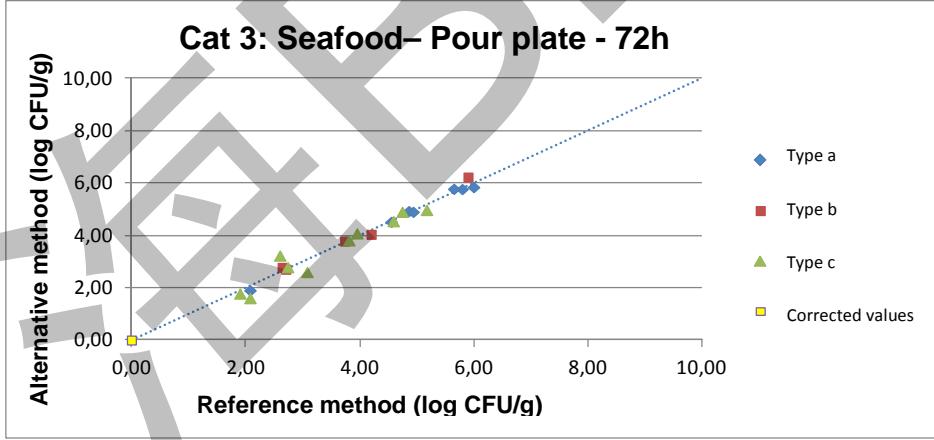
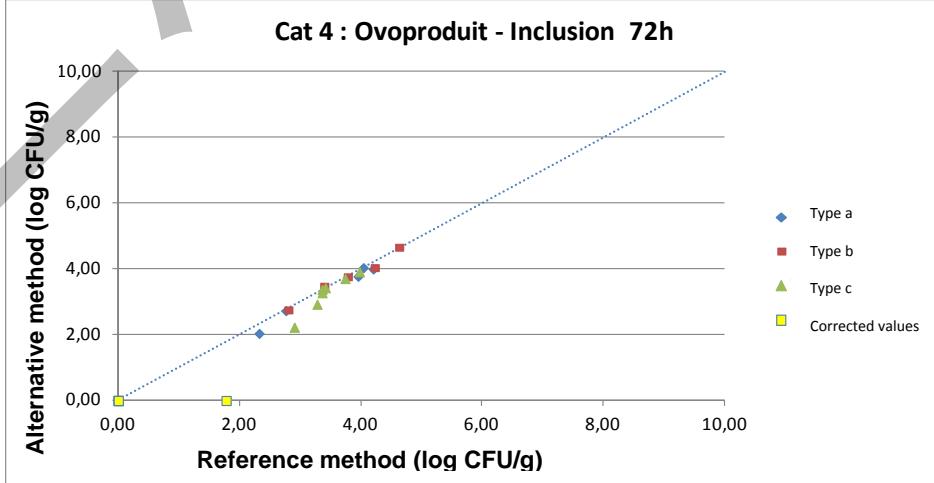


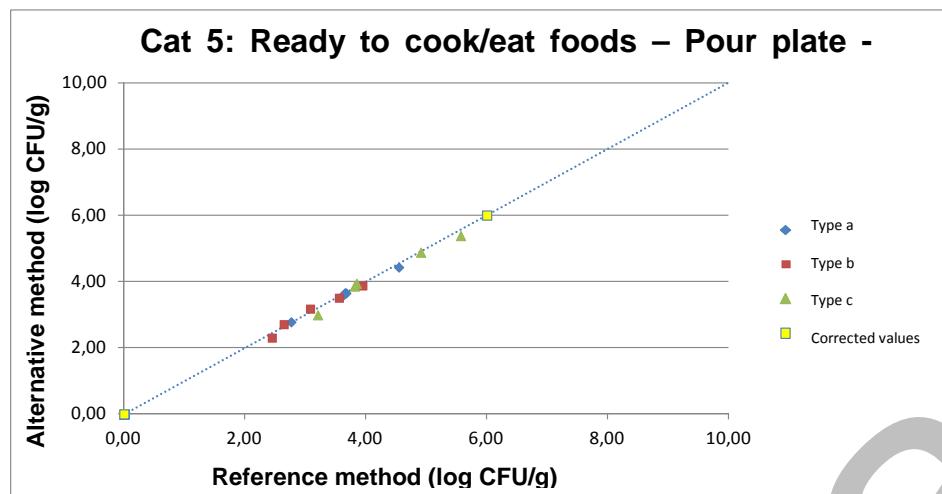
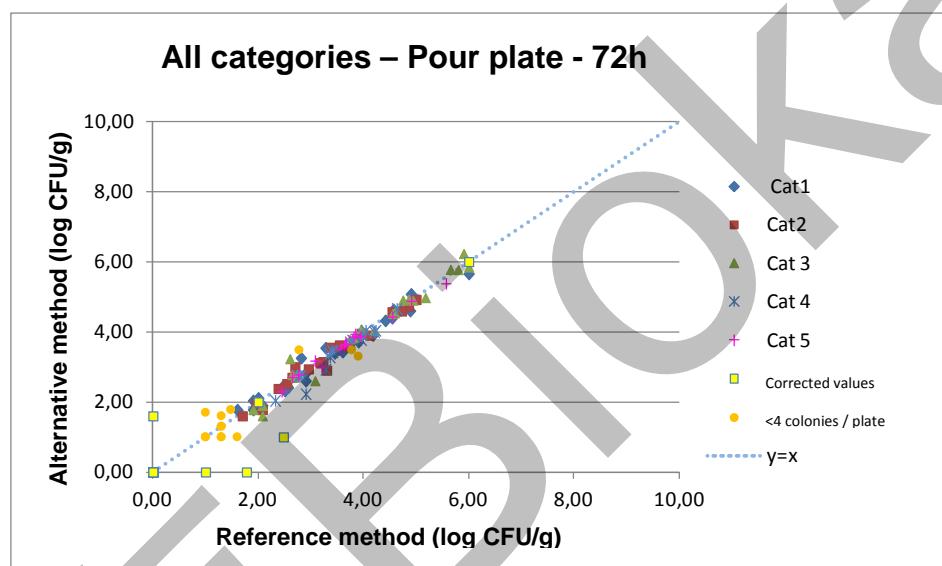
**Figure  
22**



**Figure  
23**



**Figure 24****Figure 25****Figure 26****Figure 27**

**Figure 28****Figure 29**

A summary of calculated values is given in table 9.

**Table 9 - Calculated values - Spread method**

Incubation period	Category	n	$\bar{D}$	$S_D$	95% lower limit	95% upper limit
22 h	1	28	- 0.07	0.17	/	/
	2	21	- 0.05	0.14	/	/
	3	21	0.00	0.22	/	/
	4	17	- 0.13	0.18	/	/
	5	15	- 0.08	0.11	/	/
	All categories	102	- 0.06	0.17	- 0.40	0.28
48 h	1	28	- 0.06	0.18	/	/
	2	20	- 0.05	0.15	/	/

	3	22	- 0.01	0.24	/	/
	4	17	- 0.12	0.19	/	/
	5	15	- 0.04	0.10	/	/
	All categories	102	- 0.05	0.18	- 0.41	0.31

The Bland-Altman plots are given in Figures 30 (for the 22 h incubation period) and 31 (for the 72 h incubation period).

Figure 30

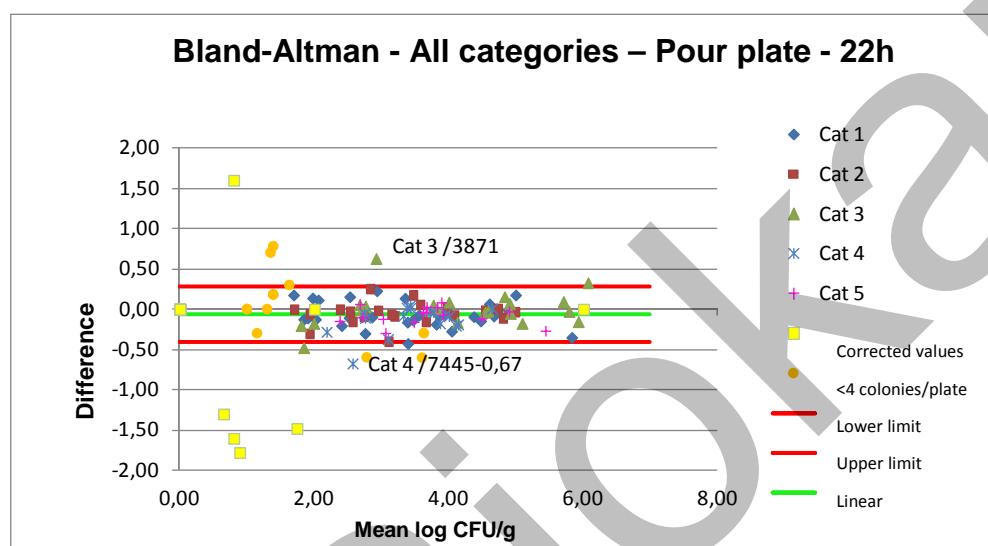
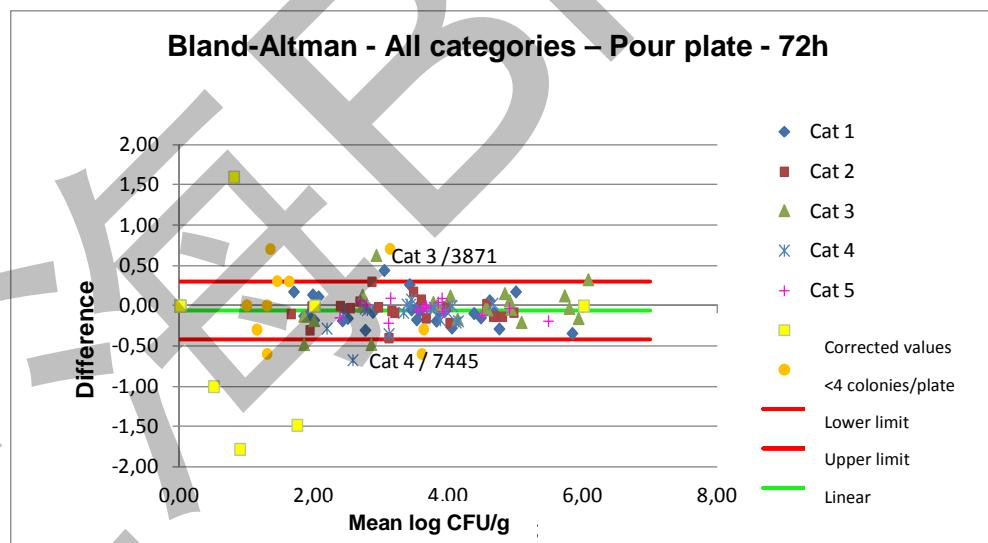


Figure 31



Samples for which the difference in result obtained by the reference method and that obtained by the alternative method is greater or less than the limits, are entered into tables 10 and 11 with associated comments.

**Table 10 - Observed discrepancies! Pour plate method, 22 h incubation**

	Corrected values
	< 4 colonies per plate

Category	Type	Spl. no.	Reference method	Alternative method	Mean	Difference		Comment
1	a	3817	0.00	1.60	0.80	1.60		Limit of quantification
1	c	3779	1.00	1.70	1.35	0.70		Lower count by the reference method
2	a	4040	1.00	1.78	1.39	0.78		Lower count by the reference method
3	b	5090	5.90	6.23	6.07	0.33		Lower count by the reference method
3	c	3871	2.60	3.23	2.92	0.63		Lower count by the reference method
1	c	3782	1.60	0.00	0.80	-1.60		Limit of quantification
1	c	4768	3.60	3.18	3.39	-0.43		Lower count by the EASY STAPH alternative method
2	c	3872	1.30	0.00	0.65	-1.30		Limit of quantification
2	c	4228	3.90	3.30	3.60	-0.60		Lower count by the EASY STAPH alternative method
2	b	3873	2.48	1.00	1.74	-1.48		Limit of quantification
3	c	4302	2.08	1.60	1.84	-0.48		Lower count by the EASY STAPH alternative method
4	b	3778	1.78	0.00	0.89	-1.78		Lower count by the EASY STAPH alternative method

**Table 11 - Observed discrepancies! Pour plate method, 72 h incubation**

Category	Type	Spl. no.	Reference method	Alternative method	Mean	Difference		Comment
1	a	3817	0.00	1.60	0.80	1.60		Limit of quantification
1	a	3772	2.81	3.26	3.03	0.44		Lower count by the reference method
1	c	3779	1.00	1.70	1.35	0.70		Lower count by the reference method
2	a	3876	2.78	3.48	3.13	0.70		Lower count by the reference method
3	b	5090	5.90	6.23	6.07	0.33		Lower count by the reference method
3	c	3871	2.60	3.23	2.92	0.63		Lower count by the reference method
1	c	3782	1.60	1.00	1.30	-0.60		Lower count by the EASY STAPH alternative method
2	a	4040	1.00	0.00	0.50	-1.00		Limit of quantification
2	b	3873	2.48	1.00	1.74	-1.48		Limit of quantification
2	c	4228	3.90	3.30	3.60	-0.60		Lower count by the EASY STAPH alternative method
3	c	3868	3.08	2.60	2.84	-0.48		Lower count by the EASY STAPH alternative method
3	c	4302	2.08	1.60	1.84	-0.48		Lower count by the EASY STAPH alternative method
4	c	7445	2.90	2.23	2.57	-0.67		Lower count by the EASY STAPH alternative method
4	b	3778	1.78	0.00	0.89	-1.78		Lower count by the EASY STAPH alternative method

## Conclusion

For a 22 h incubation period, the reference method proved deficient in 4 cases and the EASY STAPH alternative method in 4 cases, with count differences ranging from 0.33 to 0.78 log CFU/g and from -1.78 to -0.43 log CFU/g.

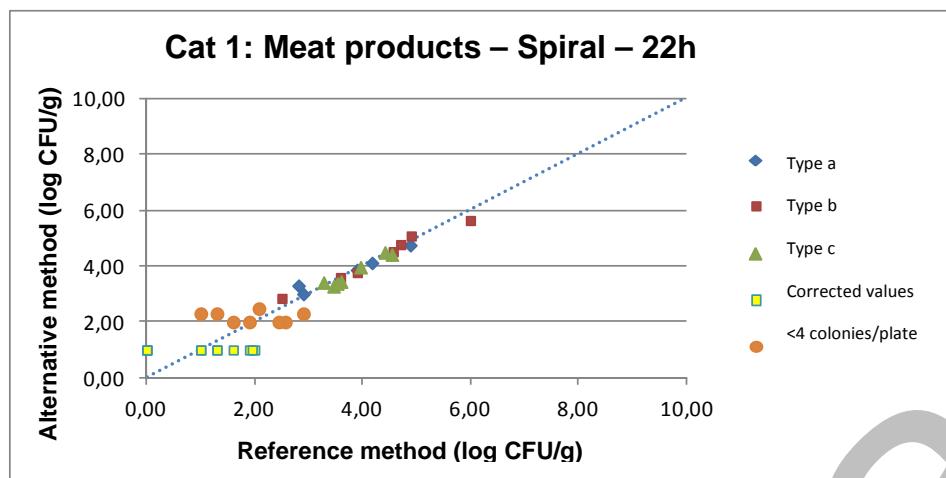
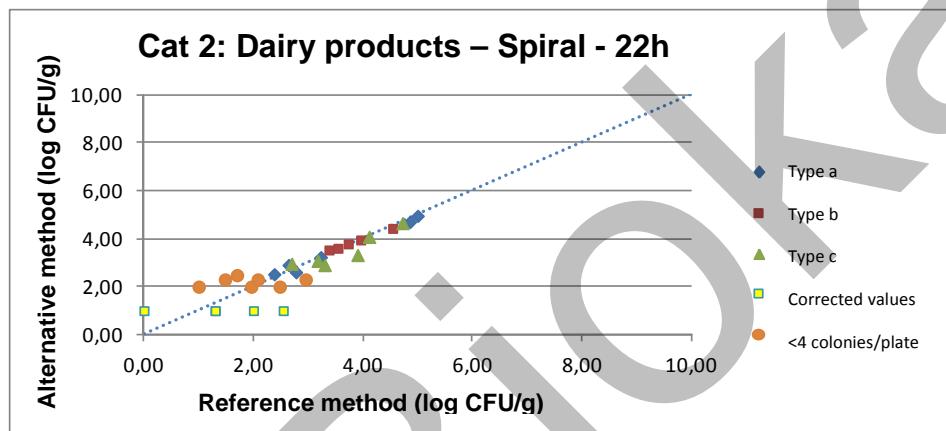
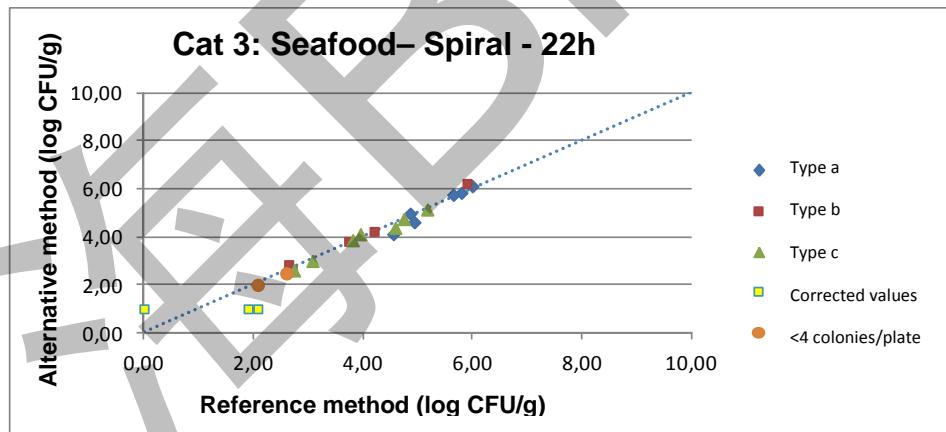
For a 72 h incubation period, the reference method proved deficient in 5 cases and the EASY STAPH alternative method in 6 cases, with count differences ranging from 0.33 to 0.70 log CFU/g and from -0.48 to -1.78 log CFU/g.

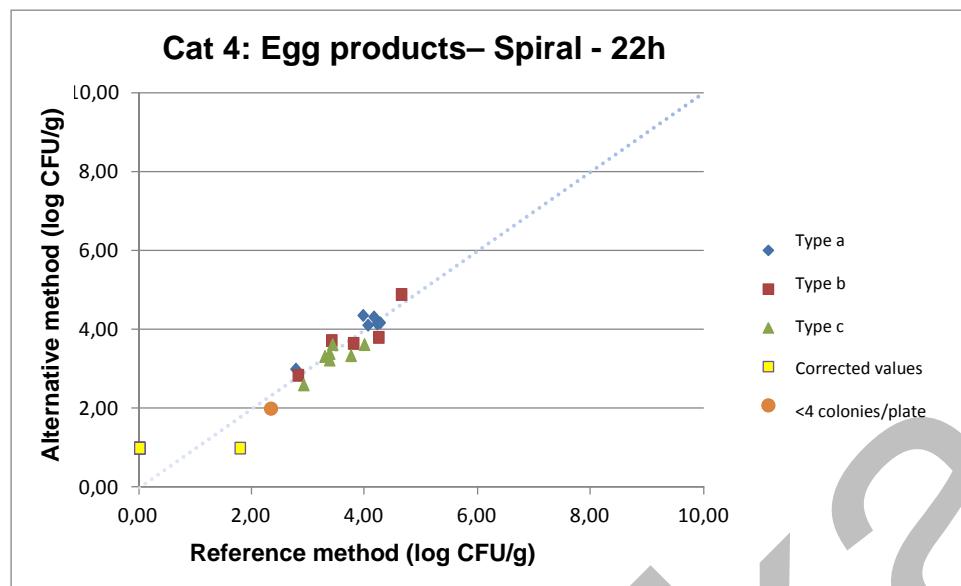
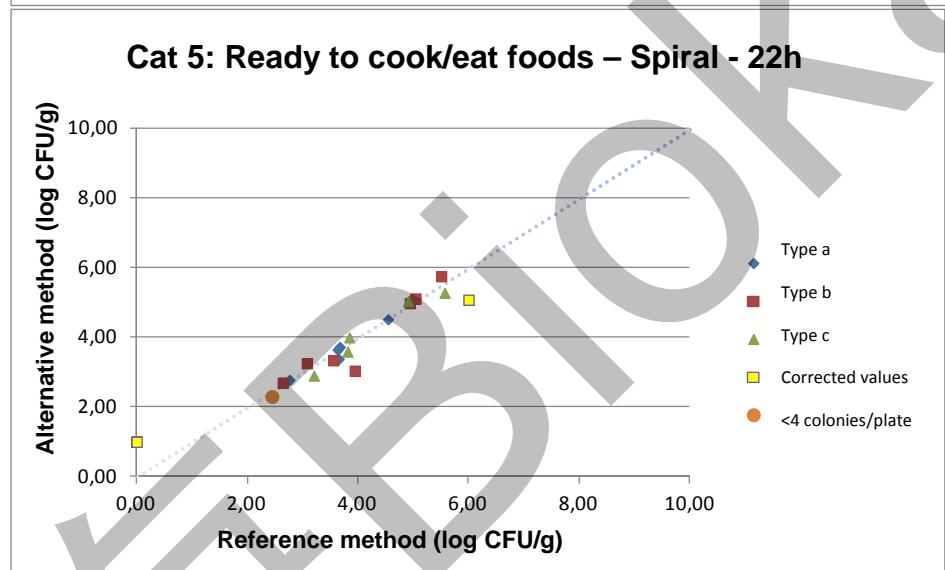
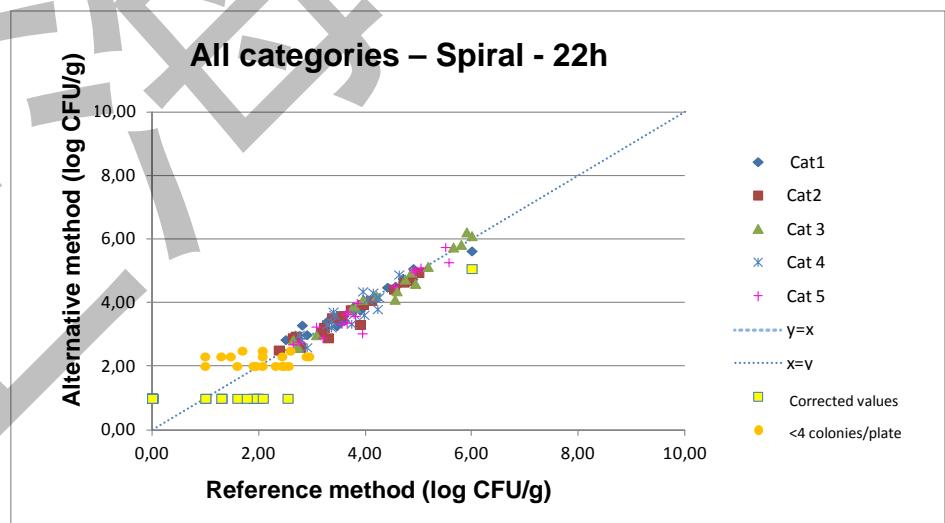
**Overall, the two methods equivalent, whatever the incubation period of the EASY STAPH plates.**

### *3.2.4.3 Spiral method*

The calculations are given in **Appendix 10**.

The results pair (reference method / alternative method), both per category and for all categories, are given in Figures 32 to 37 for the 22 h incubation period and in Figures 38 to 43 for the 72 h incubation period.

**Figure 32****Figure 33****Figure 34**

**Figure 35****Figure 36****Figure 37**

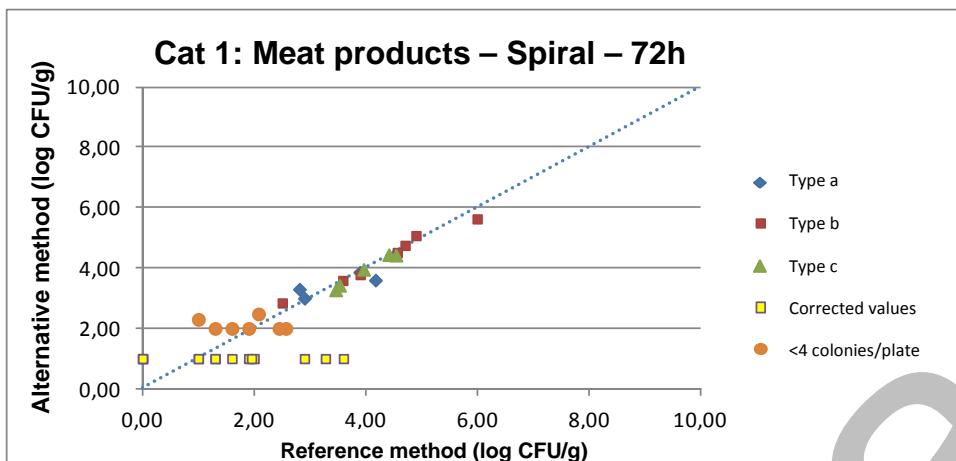
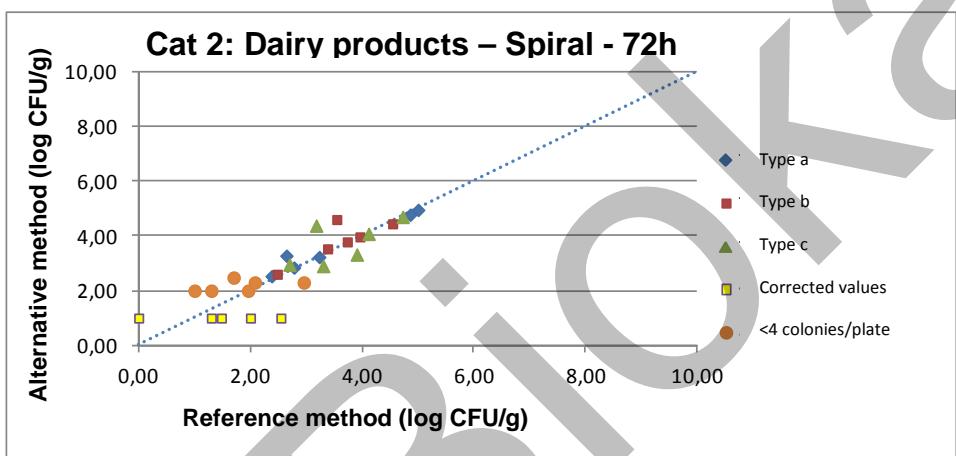
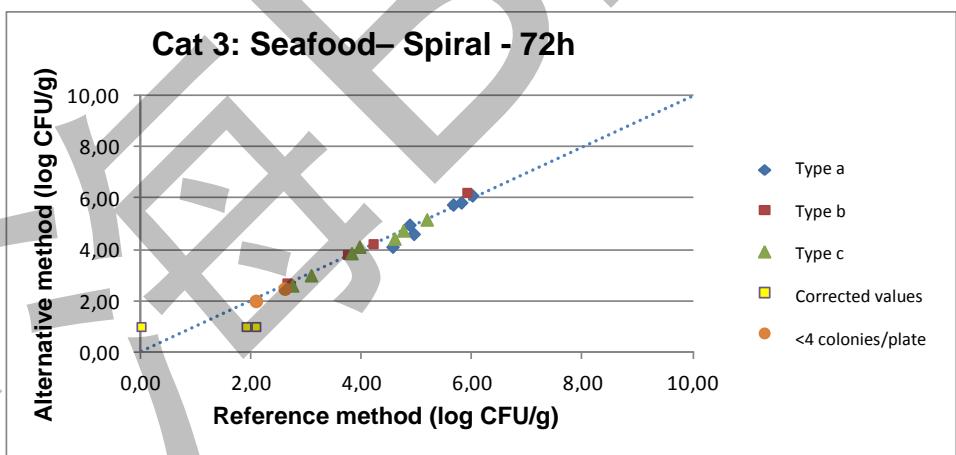
**Figure 38****Figure 39****Figure 40**

Figure 41

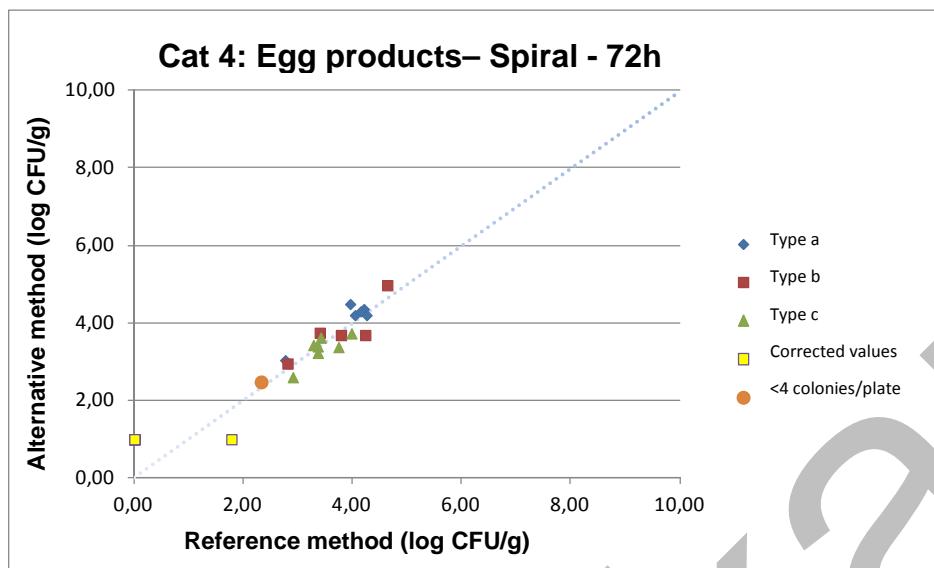


Figure 42

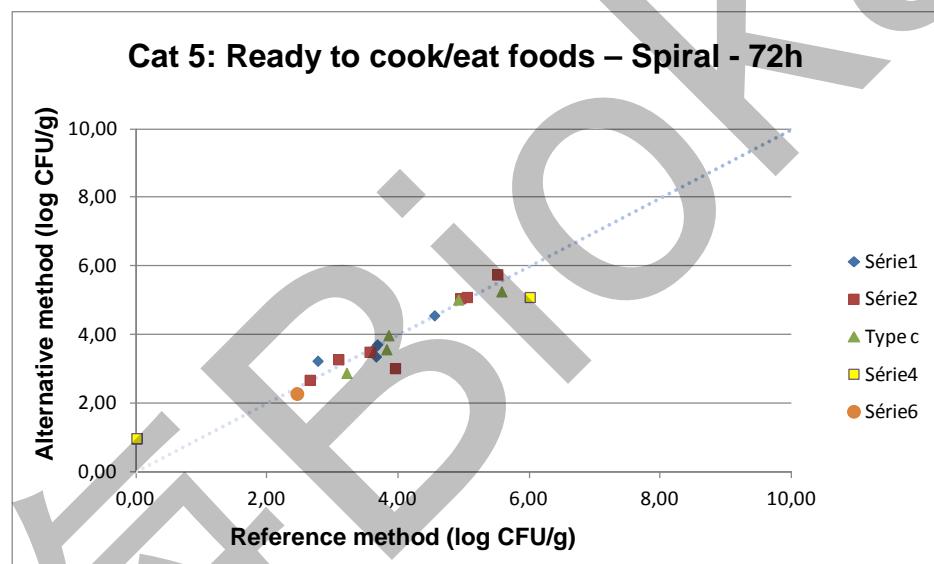
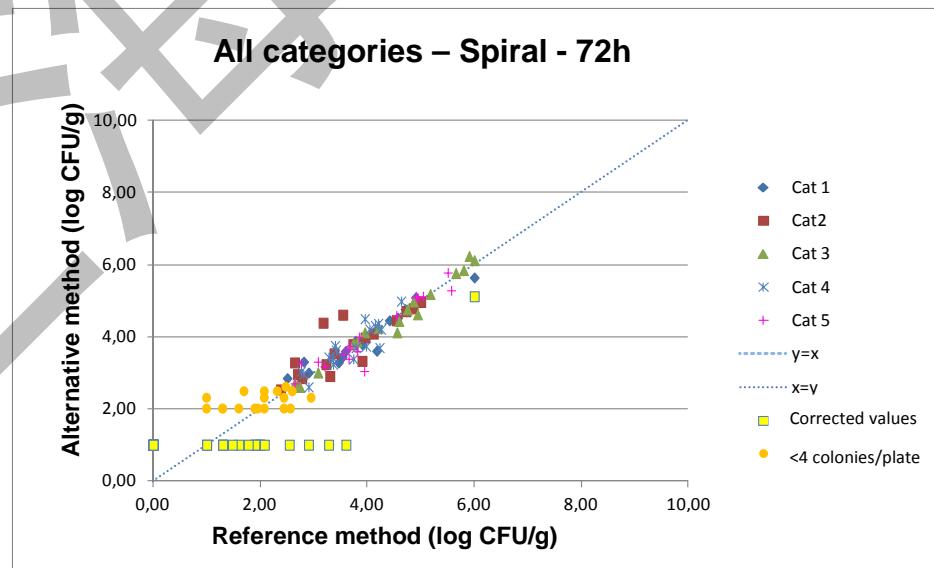


Figure 43



The Bland-Altman plots are given in Figures 44 (for the 22 h incubation period) and 45 (for the 72 h incubation period).

Figure  
44

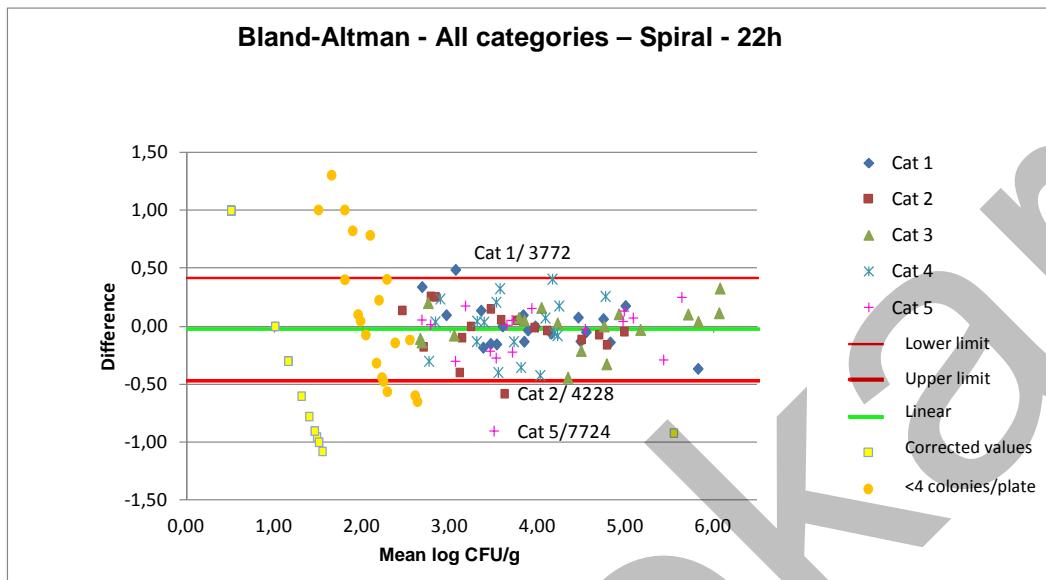
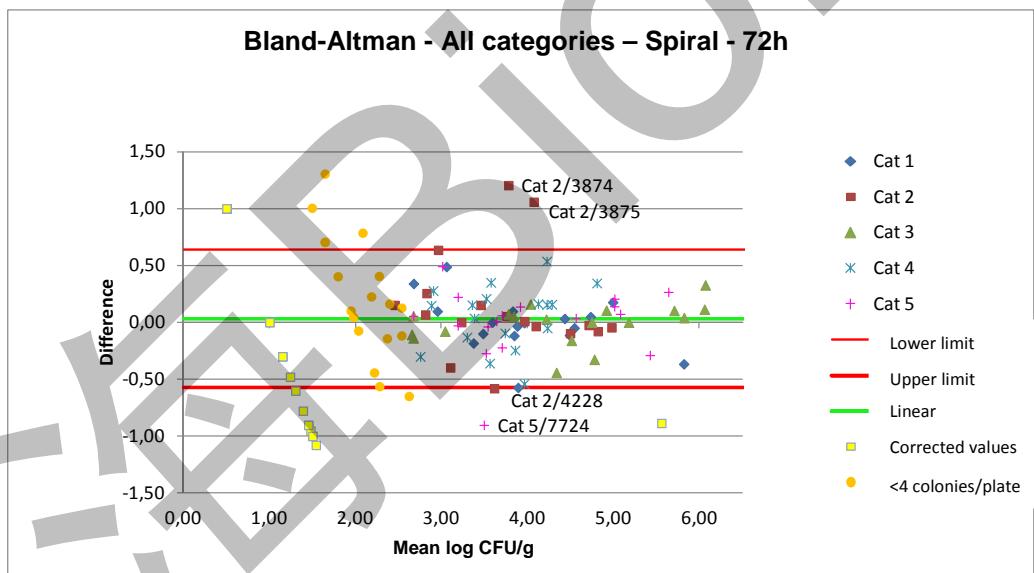


Figure  
45



A summary of calculated values is given in table 12.

**Table 12 - Calculated values - Spread method**

Incubation period	Category	n	$\bar{D}$	$S_D$	95% lower limit	95% upper limit
22 h	1	20	0.00	0.19	/	/
	2	17	- 0.05	0.21	/	/
	3	18	- 0.01	0.19	/	/
	4	18	0.00	0.25	/	/
	5	17	- 0.07	0.28	/	/
	All categories	90	- 0.02	0.22	- 0.47	0.42
48 h	1	17	- 0.02	0.24	/	/
	2	17	0.14	0.45	/	/
	3	18	- 0.01	0.18	/	/
	4	18	0.04	0.28	/	/
	5	17	0.00	0.30	/	/
	All categories	87	0.03	0.30	- 0.57	0.63

Samples for which the difference in result obtained by the reference method and that obtained by the alternative method is greater or less than the limits, are entered into tables 13 and 14 with associated comments.

**Table 13 - Observed discrepancies! Spiral method, 22 h incubation**

	Corrected values
	< 4 colonies per plate

Category	Type	Spl. no.	Reference method	Alternative method	Mean	Difference	Comment
1	a	3817	0.00	1.00	0.50	1.00	Limit of quantification
1	a	3772	2.81	3.30	3.06	0.49	Lower count by the reference method
1	c	3779	1.00	2.30	1.65	1.30	Lower count by the reference method
1	b	3816	0.00	1.00	0.50	1.00	Limit of quantification
1	b	3880	0.00	1.00	0.50	1.00	Limit of quantification
1	c	3781	1.30	2.30	1.80	1.00	Lower count by the reference method
2	a	3775	0.00	1.00	0.50	1.00	Limit of quantification
2	a	3815	1.48	2.30	1.89	0.82	Lower count by the reference method
2	a	4040	1.00	2.00	1.50	1.00	Lower count by the reference method
2	a	4042	1.70	2.48	2.09	0.78	Lower count by the reference method
3	a	4652	0.00	1.00	0.50	1.00	Limit of quantification
4	a	7447	0.00	1.00	0.50	1.00	Limit of quantification
4	a	7448	0.00	1.00	0.50	1.00	Limit of quantification
4	b	7442	0.00	1.00	0.50	1.00	Limit of quantification
4	b	7443	0.00	1.00	0.50	1.00	Limit of quantification
4	b	7444	0.00	1.00	0.50	1.00	Limit of quantification
5	a	7681	0.00	1.00	0.50	1.00	Limit of quantification
5	a	7682	0.00	1.00	0.50	1.00	Limit of quantification
5	b	7684	0.00	1.00	0.50	1.00	Limit of quantification
5	c	7683	0.00	1.00	0.50	1.00	Limit of quantification
5	c	7685	0.00	1.00	0.50	1.00	Limit of quantification
1	a	3877	1.90	1.00	1.45	-0.90	Limit of quantification of the Spiral method
1	a	4337	2.57	2.00	2.28	-0.57	Lower count by the EASY STAPH alternative method
1	a	4339	1.95	1.00	1.48	-0.95	Limit of quantification of the Spiral method
1	a	4222	2.00	1.00	1.50	-1.00	Limit of quantification of the Spiral method
1	b	4773	2.90	2.30	2.60	-0.60	Lower count by the EASY STAPH alternative method
1	c	3782	1.60	1.00	1.30	-0.60	Limit of quantification of the Spiral method
2	a	3771	2.54	1.00	1.77	-1.54	Limit of quantification of the Spiral method

Category	Type	Spl. no.	Reference method	Alternative method	Mean	Difference	Comment
2	a	3773	2.00	1.00	1.50	-1.00	Limit of quantification
2	b	3873	2.48	2.00	2.24	-0.48	Lower count by the EASY STAPH alternative method
2	b	4543	2.95	2.30	2.63	-0.65	Lower count by the EASY STAPH alternative method
2	c	4228	3.90	3.32	3.61	-0.58	Lower count by the EASY STAPH alternative method
3	a	5085	4.56	4.11	4.34	-0.44	Lower count by the EASY STAPH alternative method
3	c	3869	1.90	1.00	1.45	-0.90	Lower count by the EASY STAPH alternative method
3	c	4302	2.08	1.00	1.54	-1.08	Limit of quantification of the Spiral method
4	b	3778	1.78	1.00	1.39	-0.78	Limit of quantification of the Spiral method
5	b	7724	3.94	3.04	3.49	-0.90	Lower count by the EASY STAPH alternative method
5	c	8088	6.00	5.08	5.54	-0.92	Lower count by the reference method

**Table 14 - Observed discrepancies! Spiral method, 72 h incubation**

Category	Type	Spl. no.	Reference method	Alternative method	Mean	Difference	Comment
1	a	3817	0.00	1.00	0.5	1.00	Limit of quantification
1	b	3816	0.00	1.00	0.5	1.00	Limit of quantification
1	b	3880	0.00	1.00	0.5	1.00	Limit of quantification
1	c	3779	1.00	2.30	1.65	1.30	Lower count by the reference method
1	c	3781	1.30	2.30	1.80	1.00	Lower count by the reference method
2	a	3775	0.00	1.00	0.5	1.00	Limit of quantification
2	a	4040	1.00	2.00	1.50	1.00	Lower count by the reference method
2	a	3815	1.48	2.30	1.89	0.82	Lower count by the reference method
2	a	4042	1.70	2.48	2.09	0.78	Lower count by the reference method
3	a	4652	0.00	1.00	0.5	1.00	Limit of quantification
4	a	7447	0.00	1.00	0.5	1.00	Limit of quantification
4	a	7448	0.00	1.00	0.5	1.00	Limit of quantification
4	b	7442	0.00	1.00	0.5	1.00	Limit of quantification
4	b	7443	0.00	1.00	0.5	1.00	Limit of quantification
4	b	7444	0.00	1.00	0.5	1.00	Limit of quantification
5	a	7681	0.00	1.00	0.5	1.00	Limit of quantification
5	a	7682	0.00	1.00	0.5	1.00	Limit of quantification
5	b	7684	0.00	1.00	0.5	1.00	Limit of quantification
5	c	7683	0.00	1.00	0.5	1.00	Limit of quantification
5	c	7685	0.00	1.00	0.5	1.00	Limit of quantification
1	a	3877	1.90	1.00	1.45	-0.90	Limit of quantification of the Spiral method
1	a	4339	1.95	1.00	1.48	-0.95	Limit of quantification of the Spiral method
1	a	4222	2.00	1.00	1.50	-1.00	Limit of quantification of the Spiral method
1	b	4773	2.90	2.30	2.60	-0.60	Lower count by the EASY STAPH alternative method
1	c	3782	1.60	1.00	1.30	-0.60	Limit of quantification of the Spiral method
2	a	3771	2.54	1.00	1.77	-1.54	Limit of quantification of the Spiral method
2	a	3773	2.00	1.00	1.50	-1.00	Limit of quantification
2	c	4228	3.90	3.32	3.61	-0.58	Lower count by the EASY STAPH alternative method
2	b	4543	2.95	2.30	2.63	-0.65	Lower count by the EASY STAPH alternative method
3	c	3869	1.90	1.00	1.45	-0.90	Limit of quantification of the Spiral method
3	c	4302	2.08	1.00	1.54	-1.08	Limit of quantification of the Spiral method
4	b	3778	1.78	1.00	1.39	-0.78	Limit of quantification of the Spiral method
5	b	7724	3.94	3.04	3.49	-0.90	Lower count by the EASY STAPH alternative method
5	c	8088	6.00	5.08	5.54	-0.92	Dilutions not suited to the ISO method

## Conclusion

For a 22 h incubation period, most of the differences observed between the reference method and the alternative method were due to a limit of quantification problem with the Spiral method (7 cases), which is seven time higher than that of the reference method, or of both methods (16 cases).

In 6 cases, the ISO method gave low counts and in 8 cases, the EASY STAPH alternative method gave low counts.

After a 72 h incubation period, the same type of results were obtained.

**The results obtained for both methods were similar, though it should be noted that the Spiral inoculation method is not suitable for the enumeration of weakly contaminated products.**

### 3.3 Specificity and selectivity study

Specificity is defined as the degree to which the method is affected (or not) by the other components in a multi-component sample. It represents the method's ability to accurately measure or quantify a given analyte in a sample without interference from other non-target components, such as for example a matrix effect or background noise.

Selectivity is defined as a measure of the degree of non-interference in the presence of non-target analytes. A method is said to be selective if it can be used to detect the desired analyte and if it is certain that the detected signal is generated exclusively by the concerned analyte.

The purpose of this study was to ascertain whether the positive strains were indeed counted by the alternative method and that the negative strains were not.

***This point was covered during initial validation.***

#### 3.3.1 Protocols

Specificity: 51 strains of coagulase-positive *Staphylococcus* were tested and enumerated in parallel by the ISO 6888-2 method and by the alternative method (pour plate method). A count was also performed by pour plate in PCA agar.

Selectivity: 30 negative strains were enumerated as previously described.

#### 3.3.2 Results

The results are given in **Appendix 11**.



##### Specificity

Of the 51 strains tested, 48 gave characteristic colonies on BP + RPF agar (ISO 6888-2) and on EASY STAPH agar.

One strain (*Staphylococcus aureus* Ad 907) gave characteristic colonies with halo only after incubation for 48 h on EASY STAPH agar.

Two strains (*Staphylococcus aureus* Ad 908 and Ad 909) failed to give any typical colonies, either on BP + RPF agar in 48 h, or on EASY STAPH agar

after incubation for 72 h. These two strains gave a positive coagulase test in rabbit plasma according to ISO 6888-1.

For the strain *Staphylococcus aureus* Ad 155, a disappearance of the opaque halo was observed for colonies at the surface of the agar when incubation was extended beyond 72 h.

 **Selectivity**

None of the 30 strains tested gave typical colonies, either on BP + RPF agar, or on EASY STAPH agar.

### 3.3.3 Conclusion

The results observed on both BP + RPF and EASY STAPH agar are similar; the EASY STAPH alternative method is both specific and selective.

### 3.4 Practicability

Practicability was evaluated according to the criteria defined in the validation study requirements:

✓ Conditioning of the method elements	<ul style="list-style-type: none"> <li>- Kit-based medium: 2-8 °C</li> <li>- Complete pre-poured medium: 2-8 °C</li> <li>- The expiry date is displayed on the box label.</li> </ul>		
✓ Conditions of use after first use	<ul style="list-style-type: none"> <li>- Observe the storage conditions mentioned on the box label.</li> </ul>		
✓ Time to result	Step	Reference method	Alternative method
	Sampling, crushing, analysis	D0	D0
	Reading	D2	D1*
<i>* Incubation can be extended to D3</i>			
✓ Steps common with the reference method	<p>The sampling and crushing steps are common with those of the reference method.</p>		

## 4 INTER-LABORATORY STUDY

### 4.1 Study organisation

14 laboratories took part in the inter-laboratory study. The expert laboratory provided detailed instructions to these laboratories.

The matrix used was a Scallop terrine inoculated with a *Staphylococcus aureus* Ad 901 strain isolated from cod.

The target inoculation rates were as follows, considering that the first inoculation rate was chosen to avoid small number estimates:

- 0 CFU/g,
- 500 CFU/g,
- 5,000 CFU/g,
- 50,000 CFU/g.

10 g of sample were allocated to each bag. Two samples per inoculation rate and per laboratory were prepared, i.e. 8 samples per laboratory. An additional bag was appended to the package for enumeration of the aerobic mesophilic flora via the NF ISO 4833-1 method.

The stability of the strain inoculated into the matrix was studied to ensure that there were no changes during transport.

An inoculum homogeneity test was conducted on ten samples per inoculation rate.

A coagulase-positive staphylococcus count was performed on the matrix to ensure that the level was less than 10 CFU/ml.

The coded samples (code known only to the expert laboratory) were placed in isothermal boxes containing refrigerant blocks and shipped to the various laboratories by means of an express transport system.

A bottle containing a temperature probe was added to each package in order to monitor sample temperature during transport and storage by the laboratories.

The samples were delivered to the partner laboratories within 24 to 48 h.

All partner laboratories and the expert laboratory analysed the samples on Wednesday 21 October 2015 using one of the alternative method protocols and the reference method.

**In order to facilitate the task of the partner laboratories, the same inoculation technique for both the EASY STAPH alternative method and the reference method - i.e. the pour plate method - was used. This choice was validated by the Technical Bureau.**

## 4.2 Experimental parameter control

### 4.2.1 Strain stability during transport

Two samples per inoculation rate were analysed by the ISO6888-2 reference method and the EASY STAPH alternative method on the day of inoculation, then after storage for 24 and 48 h at 2-8 °C.

The results are given in table 15.

**Table 15 - Enumeration of Staphylococcus aureus(CFU/g)**

	Reference method ISO 6888-2		Alternative method EASY STAPH		Aerobic mesophilic flora	
	Sample 1	Sample 2	Sample 1	Sample 2		
	D0	1,700	2,100	1,300	1,600	580
D1	10,000	10,000	11,000	12,000	500	
	110,000	110,000	80,000	90,000		
D2	1,400	900	1,200	1,100	350	
	6,700	13,000	11,000	8,400		
	110,000	80,000	88,000	97,000		
	500	1,100	920	1,200		
	9,600	10,000	8,000	12,000		
	150,000	100,000	120,000	99,000		

No changes to the inoculated strain were observed between the day of inoculation and the 48 h of storage at 2-8 °C.

#### 4.2.2 ***Sample temperature upon receipt***

The temperatures measured upon receipt of the samples are given in table 16.

**Table 16 - Sample temperature upon receipt**

Laboratories	Temperature measured by the temperature probe (°C)	Temperature measured upon receipt (°C)	Time to receipt of samples
A	3.0	5.5	20/10/2015 - 2:30pm
B	/	/	23/10/2015 - 8:19am
C	2.5	7.1	20/10/2015 - 11:30am
D	<i>Not received</i>	3.5	20/10/2015 - 12pm
E	3.5	5.9	20/10/2015 - 11am
F	1.0	2.4	20/10/2015 - 11am
G	3.0	5.1	20/10/2015 - 10am
H	3.0	3.5	20/10/2015 - 11:45am
I	3.5	5.0	21/10/2015 - 9am
J	1.5	8.1	20/10/2015 - 12:15pm
K	3.5	3.4	20/10/2015 - 11:05am
L	2.0	6.3	20/10/2015 - 8:30am
M	2.5	6.8	21/10/2015 - 9:30am
N	1.5	4.7	20/10/2015 - 9:19am

All of the laboratories received their samples on time, with the exception of Laboratory B, that received its package only on Friday 23 October 2015; this laboratory did not therefore perform the analyses.

#### 4.2.3 ***Sample temperature during transport***

No anomalies were observed during transport; the temperature measured during transport was between 0 and 3.5 °C. Laboratory J measured a temperature of 8.1 °C upon receipt, though the temperature recording indicates a temperature of 1.5 °C upon receipt.

#### 4.2.4 ***Inoculum homogeneity***

Homogeneity tests were conducted according to the ISO/TS 22117 standard. Ten samples per inoculation rate were analysed in duplicate using the reference method. The results are given in **Appendix 12**. The results of this test indicated that the inoculum was homogeneous at all three contamination levels.

## 4.3 Calculations, summary and interpretation of data

### 4.3.1 Expert laboratory results

The results obtained were slightly higher than the target values, in agreement with the results obtained by the partner laboratories.

A summary of these results is given in table 17.

**Table 17 - Summary of results**

		Reference method		Alternative method Incubation for 24 h ± 2 h		Alternative method Incubation for 72 h	
		CFU/g	Log (CFU/g)	CFU/g	Log (CFU/g)	CFU/g	Log (CFU/g)
Level 0	Duplicate 1	<10	<1.00	<10	<1.00	<10	<1.00
	Duplicate 2	<10	<1.00	<10	<1.00	<10	<1.00
Low level	Duplicate 1	500	2.70	918	2.96	920	2.96
	Duplicate 2	1100	3.04	1182	3.08	1200	3.08
Intermediate rate	Duplicate 1	9600	3.98	8000	3.90	8000	3.90
	Duplicate 2	10000	4.00	11818	4.08	12000	4.08
High rate	Duplicate 1	150000	5.18	115455	5.08	120000	5.08
	Duplicate 2	100000	5.00	99091	5.00	99000	5.00

### 4.3.2 Partner laboratory results

A summary of results is given in table 18 (CFU/g and log CFU/g at 24 h ±2 h incubation) and in table 19 (CFU/g and log CFU/g at 72 h incubation).

**Table 18 - Summary of results - 24 h ± 2 h incubation**

Laboratories	Raw data (CFU/g)															
	Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method	
	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2
	Level 0				Low level				Intermediate rate				High rate			
Lab A	<10	<10	<10	<10	1200	1900	1200	990	12000	10000	16000	10000	100000	140000	100000	150000
Lab C	<10	<10	<10	<40	1100	820	690	630	9200	6500	9100	6000	66000	78000	70000	72000
Lab D	<10	<10	<10	<10	1100	1000	800	1000	18000	17000	12000	15000	100000	120000	110000	110000
Lab E	<10	<10	<10	<10	1100	1800	1000	1500	26000	13000	20000	13000	160000	190000	60000	150000
Lab F	<10	<10	<10	<10	1200	910	1100	1000	6600	9400	11000	9000	95000	59000	120000	85000
Lab G	<100	<100	<100	<100	900	1400	1300	700	11000	8100	6000	10000	110000	150000	100000	77000
Lab H	<10	<10	<10	<10	1000	1300	1000	1700	23000	10000	16000	9100	160000	140000	220000	210000
Lab I	<10	<10	<10	<10	770	800	730	760	10000	17000	8500	10000	94000	90000	90000	76000
Lab J	<10	<10	<10	<10	940	1100	960	700	7600	11000	9200	8000	69000	77000	97000	91000
Lab K	<10	<10	<10	<10	840	940	880	600	10000	9700	8400	11000	98000	82000	99000	89000
Lab L	<10	<10	<10	<10	1000	1100	1000	1600	9800	13000	12000	10000	110000	96000	97000	98000
Lab M	<10	<10	<10	<10	1000	1200	1500	1200	21000	14000	12000	11000	190000	110000	120000	100000
Lab N	<10	<10	<10	<10	930	1500	980	820	9600	9100	10000	15000	110000	130000	150000	150000

Laboratories	Raw data (log CFU/g)															
	Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method	
	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2
	Level 0				Low level				Intermediate rate				High rate			
Lab A	<1.00	<1.00	<1.00	<1.00	3.08	3.28	3.08	3.00	4.08	4.00	4.20	4.00	5.00	5.15	5.00	5.18
Lab C	<1.00	<1.00	<1.00	<1.60	3.04	2.91	2.84	2.80	3.96	3.81	3.96	3.78	4.82	4.89	4.85	4.86
Lab D	<1.00	<1.00	<1.00	<1.00	3.04	3.00	2.90	3.00	4.26	4.23	4.08	4.18	5.00	5.08	5.04	5.04
Lab E	<1.00	<1.00	<1.00	<1.00	3.04	3.26	3.00	3.18	4.41	4.11	4.30	4.11	5.20	5.28	4.78	5.18
Lab F	<1.00	<1.00	<1.00	<1.00	3.08	2.96	3.04	3.00	3.82	3.97	4.04	3.95	4.98	4.77	5.08	4.93
Lab G	<2.00	<2.00	<2.00	<2.00	3.00	3.15	3.11	2.85	4.04	3.91	3.78	4.00	5.04	5.18	5.00	4.89
Lab H	<1.00	<1.00	<1.00	<1.00	3.00	3.11	3.00	3.23	4.36	4.00	4.20	3.96	5.20	5.15	5.34	5.32
Lab I	<1.00	<1.00	<1.00	<1.00	2.89	2.90	2.86	2.88	4.00	4.23	3.93	4.00	4.97	4.95	4.95	4.88
Lab J	<1.00	<1.00	<1.00	<1.00	2.97	3.04	2.98	2.85	3.88	4.04	3.96	3.90	4.84	4.89	4.99	4.96
Lab K	<1.00	<1.00	<1.00	<1.00	2.92	2.97	2.94	2.78	4.00	3.99	3.92	4.04	4.99	4.91	5.00	4.95
Lab L	<1.00	<1.00	<1.00	<1.00	3.00	3.04	3.00	3.20	3.99	4.11	4.08	4.00	5.04	4.98	4.99	4.99
Lab M	<1.00	<1.00	<1.00	<1.00	3.00	3.08	3.18	3.08	4.32	4.15	4.08	4.04	5.28	5.04	5.08	5.00
Lab N	<1.00	<1.00	<1.00	<1.00	2.97	3.18	2.99	2.91	3.98	3.96	4.00	4.18	5.04	5.11	5.18	5.18

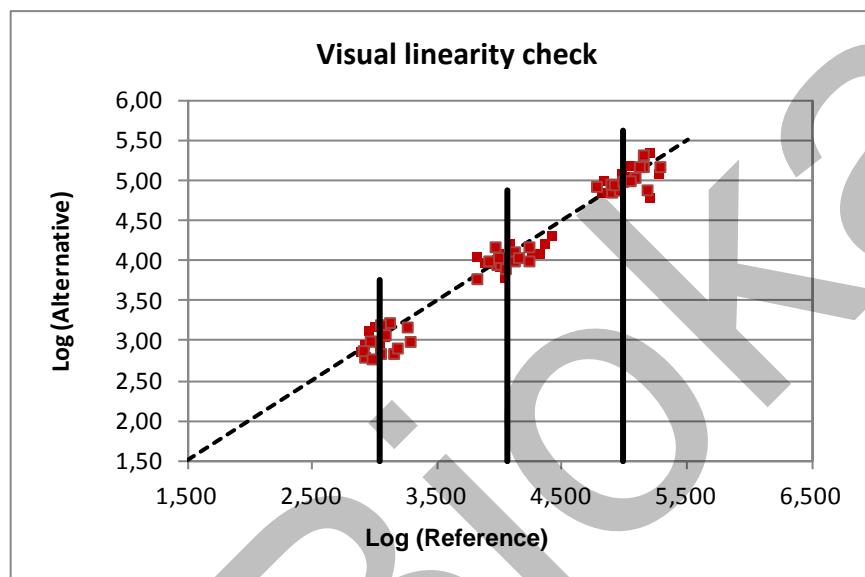
**Table 19 - Summary of results - 72 h incubation**

Laboratories	Raw data (CFU/g)															
	Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method	
	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2
	Level 0				Low level				Intermediate rate				High rate			
Lab A	<10	<10	<10	<10	1200	1900	1200	990	12000	10000	16000	10000	100000	140000	100000	150000
Lab C	<10	<10	<10	<40	1100	820	700	630	9200	6500	9300	5900	66000	78000	70000	72000
Lab D	<10	<10	<10	<10	1100	1000	800	1000	18000	17000	12000	16000	100000	12000	110000	110000
Lab E	<10	<10	<10	<10	1100	1800	1100	1800	26000	13000	19000	13000	160000	190000	100000	180000
Lab F	<10	<10	<10	<10	1200	910	1300	1000	6600	9400	10000	9100	95000	59000	140000	86000
Lab G	<100	<100	<100	<100	900	1400	1300	700	11000	8100	7000	13000	110000	150000	100000	79000
Lab H	<10	<10	<10	<10	1000	1300	1000	1700	23000	10000	16000	9100	160000	140000	220000	210000
Lab I	<10	<10	<10	<10	770	800	800	860	10000	17000	8500	15000	94000	90000	100000	80000
Lab J	<10	<10	<10	<10	940	1100	980	700	7600	11000	9800	12000	69000	77000	98000	93000
Lab K	<10	<10	<10	<10	840	940	900	800	10000	9700	8500	13000	98000	82000	100000	92000
Lab L	<10	<10	<10	<10	1000	1100	1000	1600	9800	13000	12000	10000	110000	96000	97000	98000
Lab M	<10	<10	<10	<10	1000	1200	1500	1200	21000	14000	12000	11000	190000	110000	120000	100000
Lab N	<10	<10	<10	<10	930	1500	1000	900	9600	9100	12000	16000	110000	130000	150000	170000

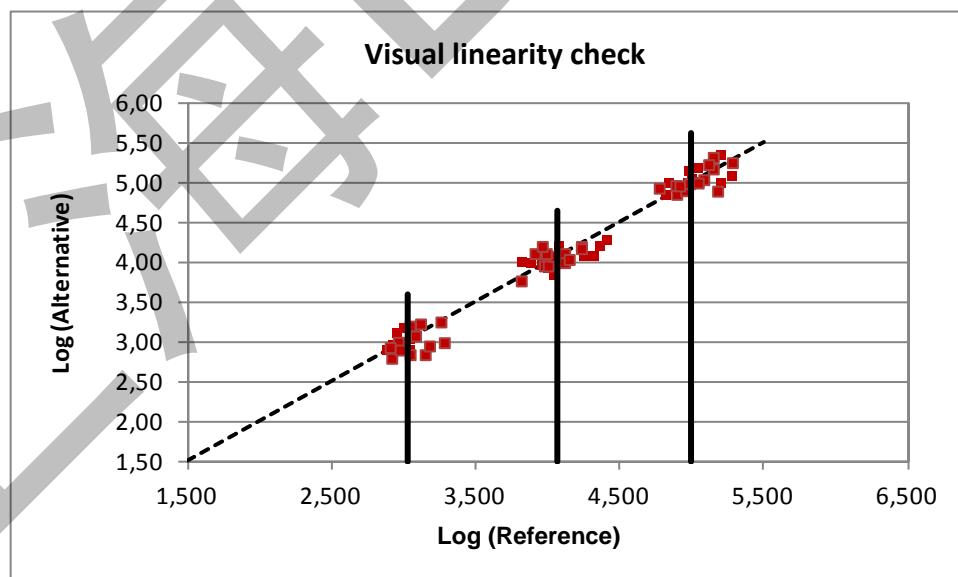
Laboratories	Raw data (log CFU/g)															
	Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method		Reference method		Alternative method	
	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2	Duplicate 1	Duplicate 2
	Level 0				Low level				Intermediate rate				High rate			
Lab A	<1.00	<1.00	<1.00	<1.00	3.08	3.28	3.08	3.00	4.08	4.00	4.20	4.00	5.00	5.15	5.00	5.18
Lab C	<1.00	<1.00	<1.00	<1.60	3.04	2.91	2.85	2.80	3.96	3.81	3.97	3.77	4.82	4.89	4.85	4.86
Lab D	<1.00	<1.00	<1.00	<1.00	3.04	3.00	2.90	3.00	4.26	4.23	4.08	4.20	5.00	5.08	5.04	5.04
Lab E	<1.00	<1.00	<1.00	<1.00	3.04	3.26	3.04	3.26	4.41	4.11	4.28	4.11	5.20	5.28	5.00	5.26
Lab F	<1.00	<1.00	<1.00	<1.00	3.08	2.96	3.11	3.00	3.82	3.97	4.00	3.96	4.98	4.77	5.15	4.93
Lab G	<2.00	<2.00	<2.00	<2.00	3.00	3.15	3.11	2.85	4.04	3.91	3.85	4.11	5.04	5.18	5.00	4.90
Lab H	<1.00	<1.00	<1.00	<1.00	3.00	3.11	3.00	3.23	4.36	4.00	4.20	3.96	5.20	5.15	5.34	5.32
Lab I	<1.00	<1.00	<1.00	<1.00	2.89	2.90	2.90	2.93	4.00	4.23	3.93	4.18	4.97	4.95	5.00	4.90
Lab J	<1.00	<1.00	<1.00	<1.00	2.97	3.04	2.99	2.85	3.88	4.04	3.99	4.08	4.84	4.89	4.99	4.97
Lab K	<1.00	<1.00	<1.00	<1.00	2.92	2.97	2.95	2.90	4.00	3.99	3.93	4.11	4.99	4.91	5.00	4.96
Lab L	<1.00	<1.00	<1.00	<1.00	3.00	3.04	3.00	3.20	3.99	4.11	4.08	4.00	5.04	4.98	4.99	4.99
Lab M	<1.00	<1.00	<1.00	<1.00	3.00	3.08	3.18	3.08	4.32	4.15	4.08	4.04	5.28	5.04	5.08	5.00
Lab N	<1.00	<1.00	<1.00	<1.00	2.97	3.18	3.00	2.95	3.98	3.96	4.08	4.20	5.04	5.11	5.18	5.23

The data after  $\log_{10}$  transformation are represented in Figure 46 (24 h  $\pm 2$  h) and Figure 47 (72 h). This graphical representation confirms that the results obtained with the alternative method are proportional to those obtained with the reference method. The data are grouped around the first bisector, with a slope of 1.

**Figure 46 - Incubation for 24 h  $\pm 2$  h**



**Figure 47 - Incubation for 72 h**



Statistical analyses were conducted using the Excel workbook available from <http://standards.iso.org/ISO/16140>. A summary of the statistical test is given in table for a 24  $\pm 2$  h incubation period and in table 21 for 72 h incubation.

**Table 20 - Incubation for 24 h ± 2 h**

Tolerance probability (beta)	80%	80%	80%			
Acceptability limit in log (lambda)	0.5	0.5	0.5			
Levels	Low	Medium	High	Alternative method	Reference method	
Target value	3.033	4.063	4.992			
Number of participants (K)	13	13	13			
Average for alternative method	2.988	4.026	5.023			
Repeatability standard deviation (sr)	0.104	0.107	0.096			
Between-labs standard deviation (sL)	0.073	0.063	0.102			
Reproducibility standard deviation (sR)	0.127	0.124	0.140			
Corrected number of dof	21.975	22.970	18.880			
Coverage factor	1.355	1.351	1.367			
Interpolated Student t	1.321	1.320	1.328			
Tolerance interval standard deviation	0.1300	0.1269	0.1440			
Lower TI limit	2.816	3.859	4.832			
Upper TI limit	3.160	4.194	5.215			
Bias	-0.046	-0.036	0.031			
Upper TI limit (beta = 80%)	-0.218	-0.204	-0.160			
Lower TI limit (beta = 80%)	0.126	0.131	0.223			
Lower Acceptability limit	-0.50	-0.50	-0.50			
Upper Acceptability limit	0.50	0.50	0.50			

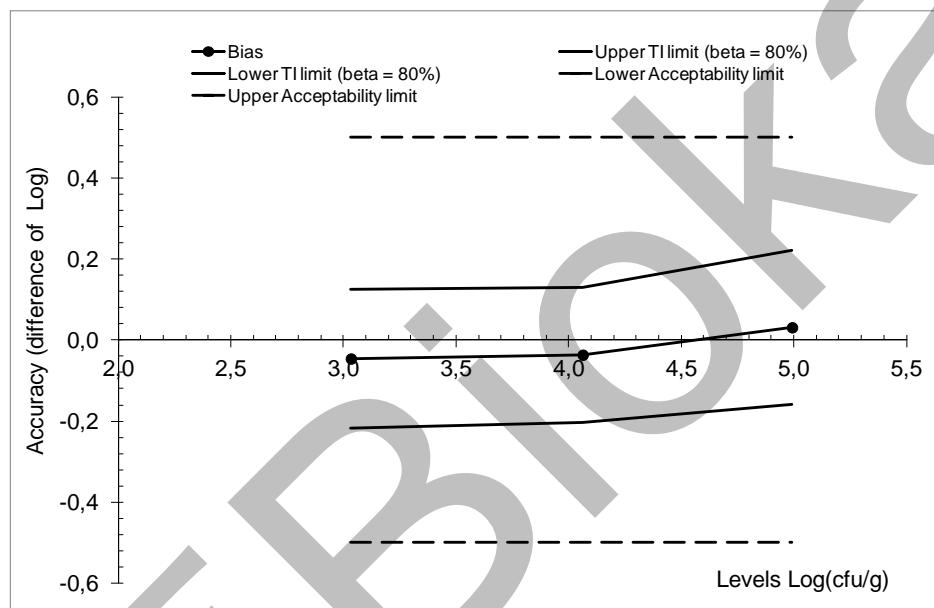
**Table 21 - Incubation for 72 h**

Tolerance probability (beta)	80%	80%	80%			
Acceptability limit in log (lambda)	0.5	0.5	0.5			
Levels	Low	Medium	High	Alternative method	Reference method	
Target value	3.033	4.063	4.992			
Number of participants (K)	13	13	13			
Average for alternative method	3.006	4.054	5.044			
Repeatability standard deviation (sr)	0.104	0.121	0.081			
Between-labs standard deviation (sL)	0.067	0.000	0.109			
Reproducibility standard deviation (sR)	0.124	0.121	0.136			
Corrected number of dof	22.454	24.960	17.037			
Coverage factor	1.353	1.341	1.375			
Interpolated Student t	1.320	1.316	1.333			
Tolerance interval standard deviation	0.1269	0.1238	0.1406			
Lower TI limit	2.839	3.891	4.857			
Upper TI limit	3.174	4.217	5.232			
Bias	-0.027	-0.009	0.052			
Upper TI limit (beta = 80%)	-0.195	-0.172	-0.135			
Lower TI limit (beta = 80%)	0.141	0.154	0.240			
Lower Acceptability limit	-0.50	-0.50	-0.50			
Upper Acceptability limit	0.50	0.50	0.50			

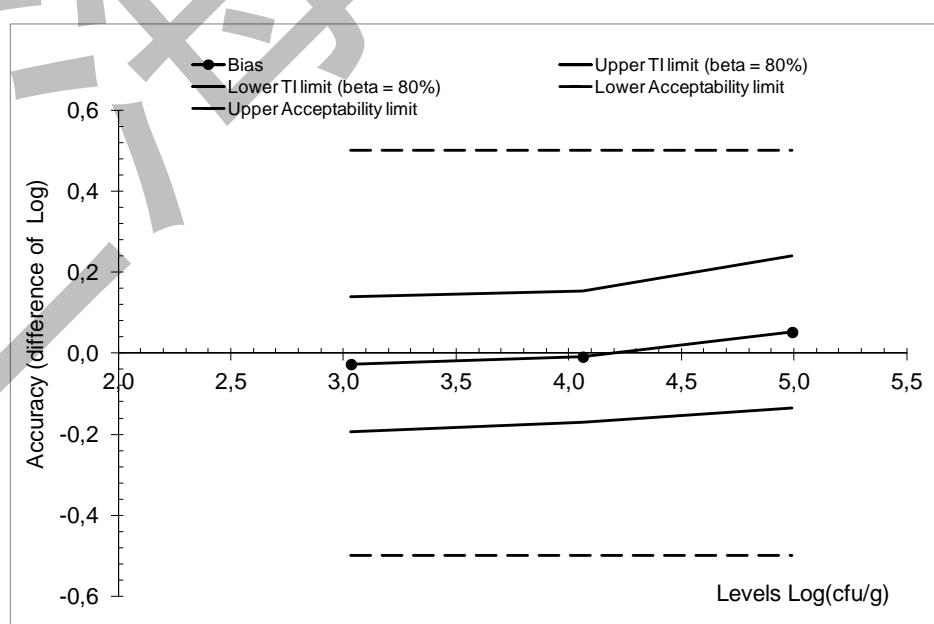
These values are grouped in a graphical representation with acceptability limits (AL) (see figure 48 for  $24 \pm 2$  h incubation and figure 49 for 72 h incubation).

None of the inoculation rates tested was below the acceptability limit set at 0.5 Log. The alternative method and the reference method give comparable results according to the ISO/FDIS 16140-2 (2015) standard.

**Figure 48 - Incubation for  $24 \text{ h} \pm 2 \text{ h}$**



**Figure 49 - Incubation for 72 h**



## 5 CONCLUSION

### Method comparative study

The method comparative study concerns the following categories: meat and poultry products, dairy products, seafood, egg products and composite foods.

The following incubation periods were tested for the different inoculation methods:

- 22 to 48 h for the spread technique,
- 22 to 72 h for the pour plate technique,
- 22 to 72 h for the Spiral technique,

The EASY STAPH method gave satisfactory accuracy profiles, whatever the inoculation method.

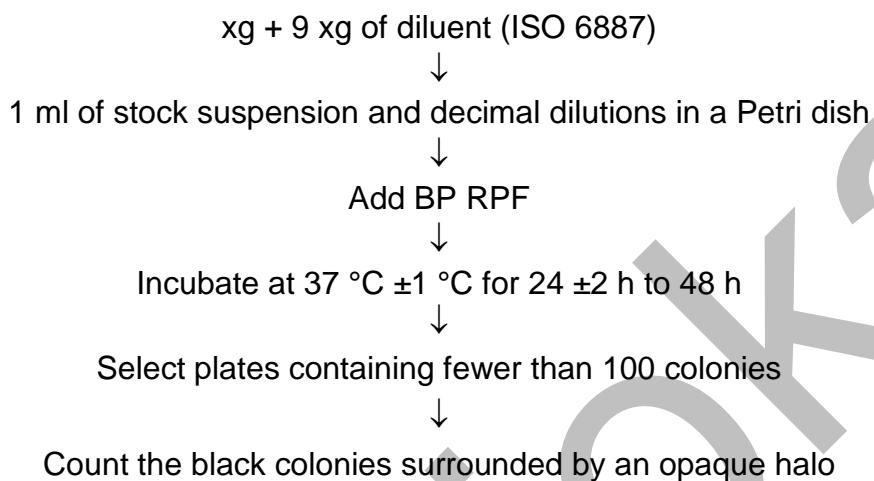
The accuracy study also gave satisfactory results with an incubation period of 22 to 48 h for the spread inoculation method and with an incubation period of 22 to 72 h for the pour plate and Spiral inoculator methods.

The EASY STAPH method is specific and selective.

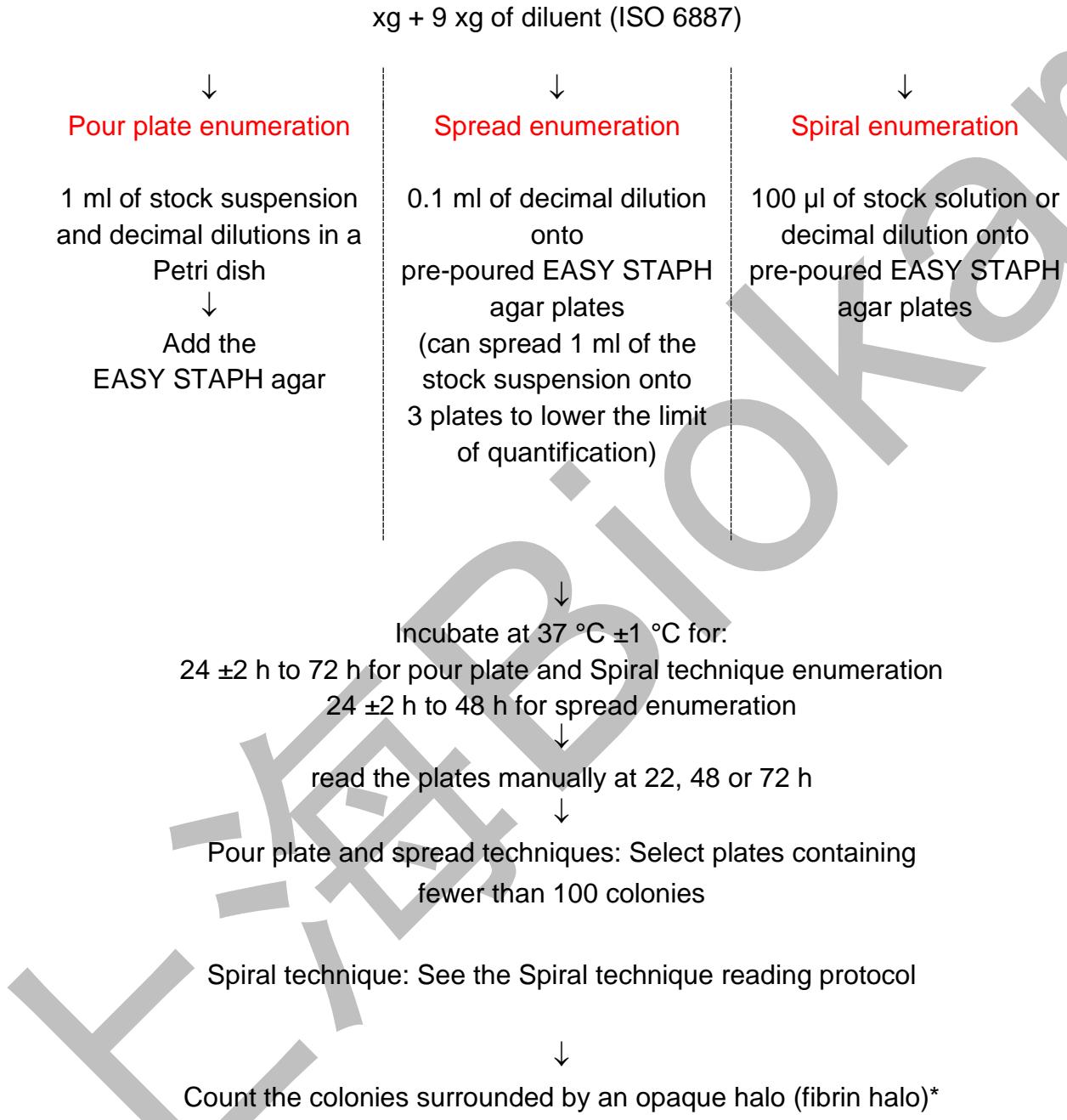
### Inter-laboratory study

None of the inoculation rates tested was below the acceptability limit set at 0.5. The alternative method and the reference method give comparable results according to the ISO/FDIS 16140-2 (2015) standard.

**Appendix 1 - ISO 6888-2 reference method:  
Horizontal method for the enumeration of coagulase-positive staphylococci  
(*Staphylococcus aureus* and other species) - Part 2: Technique using rabbit  
plasma fibrinogen agar medium**



## Appendix 2 - EASY STAPH alternative method protocol



\*: In the context of the validation study, the tube coagulase test was performed on one typical colony per selected plate

## Appendix 3 - Accuracy profile study: raw results

Matrix	Strain	Level	No. Spl.	ISO 6888-2 reference method*				Alternative method: EASY STAPH												
				Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h								
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g
Raw milk Total flora: $3.4 \times 10^7$ CFU/g	Staphylococcus aureus Ad905	1	5354	10	13	130	2.11	10	21	210	2.32	10	11	100	2.00					
				100	1			100	2			100	0							
			5355	10	9	90	1.95	10	25	240	2.38	10	11	110	2.04					
				100	2			100	1			100	1							
			5356	10	12	130	2.11	10	22	210	2.32	10	17	170	2.23					
				100	2			100	1			100	2							
			5357	10	12	120	2.08	10	24	230	2.36	10	15	170	2.23					
		2		100	1			100	1			100	4							
			5358	10	9	110	2.04	10	11	120	2.08	10	11	110	2.04					
				100	3			100	2			100	1							
			5175	10	92	900	2.95	10	>100	1700	3.23	10	91	870	2.94	10	st	9	900	2.95
				100	7			100	17			100	5							Ne
			5176	10	92	960	2.98	10	>100	1700	3.23	10	104	1000	3.00	10	st	8	800	2.90
				100	13			100	17			100	9							Ne
		3	5177	10	113	1000	3.00	10	>100	1700	3.23	10	109	1100	3.04	10	st	10	1000	3.00
				100	10			100	17			100	9							
			5178	10	92	910	2.96	10	>100	1400	3.15	10	93	930	2.97	10	st	9	900	2.95
				100	8			100	14			100	9							
			5179	10	71	810	2.91	10	>100	1000	3.00	10	84	840	2.92	10	st	11	1100	3.04
				100	12			100	10			100	8							
			4962	100	12	1200	3.08	100	12	1100	3.04	10	95	940	2.97	1	5	43	1400	3.15
		4		1000	1			1000	0			100	8							
			4963	100	11	1000	3.00	100	20	1800	3.26	100	11	1100	3.04	1	5	46	1500	3.18
				1000	0			1000	0			1000	1							
			4964	100	12	1200	3.08	100	11	1000	3.00	10	99	1000	3.00	1	6	62	1200	3.08
				1000	1			1000	0			100	16							
			4965	10	86	1000	3.00	100	16	1500	3.18	10	94	950	2.98	1	6	61	1200	3.08
				100	24			1000	0			100	10							
		5	4966	10	89	860	2.93	100	8	800	2.90	10	100	990	3.00	1	6	55	1100	3.04
				100	6			1000	0			100	9							
			4967	1000	15	15000	4.18	1000	11	11000	4.04	100	16	1500	3.18	10	6	47	9600	3.98
				10000	1			10000	1			1000	1							
			4968	1000	15	15000	4.18	1000	17	16000	4.20	1000	12	12000	4.08	10	6	66	13000	4.11
				10000	2			10000	1			10000	1							
			4969	1000	15	14000	4.15	1000	12	11000	4.04	1000	19	18000	4.26	10	6	57	12000	4.08
		4		10000	0			10000	0			10000	1							
			4970	1000	11	12000	4.08	1000	15	14000	4.15	100	97	10000	4.00	10	6	58	12000	4.08
				10000	2			10000	0			1000	13							
			4971	1000	14	15000	4.18	1000	8	8000	3.90	100	90	9500	3.98	10	4	34	19000	4.28
				10000	2			10000	0			1000	14							
			4972	10000	13	120000	5.08	10000	14	140000	5.15	1000	96	95000	4.98	10	2	67	130000	5.11
				100000	0			100000	1			100000	10							
		5	4973	10000	9	91000	4.96	10000	14	130000	5.11	1000	85	86000	4.93	10	2	51	100000	

Matrix	Strain	Level	No. Spl.	ISO 6888-2 reference method*				Alternative method: EASY STAPH												
								Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h				
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g
Raw milk Total flora: $3.1 \times 10^7$ CFU/g	Staphylococcus aureus Ad905	1	5359	10	13	120	2.08	10	19	180	2.26	10	18	170	2.23					
				100	0			100	1			100	1							
			5360	10	14	90	1.95	10	20	190	2.28	10	10	91	1.96					
				100	3	Ne		100	1			100	0							
			5361	10	12	150	2.18	10	21	210	2.32	10	10	100	2.00					
				100	4			100	2			100	1							
			5362	10	7	70	1.85	10	36	360	2.56	10	22	230	2.36					
				100	0	Ne		100	3			100	3							
		5363	10	14	150	2.18	10	16	150	2.18	10	11	130	2.11						
			100	2			100	0			100	3								
		2	5180	10	86	860	2.93	10	>100	2300	3.36	10	115	1100	3.04	10	st	11	1100	3.04
				100	9			100	23			100	6							
			5181	10	81	800	2.90	10	>100	1600	3.20	10	>100	1900	3.28	10	st	14	1400	3.15
				100	7			100	16			100	19							
			5182	10	97	1000	3.00	10	>100	1900	3.28	10	119	1200	3.08	10	st	12	1200	3.08
				100	16			100	19			100	9							
			5183	10	89	880	2.94	10	>100	1400	3.15	10	>100	1200	3.08	10	st	11	1100	3.04
				100	8			100	14			100	12							
		3	5184	10	91	910	2.96	10	>100	1600	3.20	10	>100	1200	3.08	10	st	5	500	2.70
				100	9			100	16			100	12						Ne	
			4977	100	12	1400	3.15	100	11	1500	3.18	10	110	1100	3.04	1	5	36	1200	3.08
				1000	3			1000	5			100	12							
			4978	10	117	1100	3.04	100	13	1200	3.08	10	97	1000	3.00	1	5	42	1400	3.15
				100	8			1000	0			100	13							
			4979	100	20	1800	3.26	100	14	1500	3.18	100	16	1500	3.18	1	5	41	1400	3.15
				1000	0			1000	3			1000	1							
		4980	100	20	1900	3.28	100	25	2300	3.36	10	106	1000	3.00	1	6	63	1300	3.11	
			1000	1			1000	0			100	8								
		4981	100	13	1400	3.15	100	25	2500	3.40	100	12	1300	3.11	1	6	69	1400	3.15	
			1000	2			1000	2			1000	2								
		4	4982	1000	5	5000	3.70	1000	10	13000	4.11	1000	15	14000	4.15	10	5	36	12000	4.08
				10000	0	Ne		10000	4			10000	0							
			4983	100	101	9600	3.98	1000	12	13000	4.11	100	96	9800	3.99	10	5	39	13000	4.11
				1000	5			10000	2			1000	12							
			4984	1000	12	11000	4.04	1000	8	8000	3.90	100	118	11000	4.04	10	5	33	11000	4.04
				10000	0			10000	0			1000	5							
		4985	1000	9	9000	3.95	1000	8	8000	3.90	1000	13	12000	4.08	10	5	45	15000	4.18	
			10000	1	Ne		10000	0			10000	0								
		4986	1000	12	15000	4.18	1000	11	11000	4.04	1000	93	96000	4.98	10	6	61	12000	4.08	
			10000	5			10000	1			10000	13								
		5	4987	10000	13	140000	5.15	10000	19	200000	5.30	1000	93	96000	4.98	10	2	53	100000	5.00
				100000	2			100000	3			100000	13							

Matrix	Strain	Level	No. Spl.	ISO 6888-2 reference method*				Alternative method: EASY STAPH												
				Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h								
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g
Salmon terine Total flora: <100 CFU/g	Staphylococcus aureus Ad899	1	5374	10	31	320	2.51	10	20	190	2.28	10	28	270	2.43					
			5374	100	4			100	1			100	2							
			5375	10	10	100	2.00	10	28	300	2.48	10	19	200	2.30					
			5375	100	1			100	5			100	3							
			5376	10	22	230	2.36	10	21	220	2.34	10	24	250	2.40					
			5376	100	3			100	3			100	3							
			5377	10	21	200	2.30	10	23	230	2.36	10	22	210	2.32					
		2	5377	100	1			100	2			100	1							
			5378	10	25	240	2.38	10	15	140	2.15	10	16	160	2.20					
			5378	100	1			100	0			100	2							
			5185	10	>100	1200	3.08	10	155	1500	3.18	10	>100	1800	3.26	10	st	17	1700	3.23
			5185	100	12			100	14			100	18							
			5186	10	>100	1500	3.18	10	153	1700	3.23	10	>100	1400	3.15	10	st	18	1800	3.26
			5186	100	15			100	29			100	14							
			5187	10	>100	1000	3.00	10	170	1700	3.23	10	>100	1000	3.00	10	st	20	2000	3.30
		3	5187	100	10			100	20			100	10							
			5188	10	>100	1000	3.00	10	144	1500	3.18	10	>100	1500	3.18	10	st	8	800	2.90
			5188	100	10			100	22			100	15							
			5189	10	>100	1200	3.08	10	183	1900	3.28	10	>100	1600	3.20	10	st	27	2700	3.43
			5189	100	12			100	27			100	16							
			5020	100	36	3500	3.54	100	30	2900	3.46	100	27	2500	3.40	10	st	18	1800	3.26
			5020	1000	2			1000	2			1000	1							
		4	5021	100	27	2500	3.40	100	29	3000	3.48	100	27	2500	3.40	10	st	30	3000	3.48
			5021	1000	0			1000	4			1000	1							
			5022	100	22	2100	3.32	100	27	2600	3.41	100	27	2700	3.43	10	st	40	4000	3.60
			5022	1000	1			1000	2			1000	3							
			5023	100	27	2500	3.40	100	24	2200	3.34	100	27	2500	3.40	10	st	30	3000	3.48
		5	5023	1000	1			1000	0			1000	1							
			5024	100	24	2300	3.36	100	38	3700	3.57	100	26	2500	3.40	10	st	12	1200	3.08
			5024	1000	1			1000	3			1000	1							
			5025	1000	20	18000	4.26	1000	25	24000	4.38	1000	25	23000	4.36	10	4	53	30000	4.48
			5025	10000	0			10000	1			10000	0							
		5	5026	1000	21	20000	4.30	1000	18	16000	4.20	1000	20	23000	4.36	10	4	39	22000	4.34
			5026	10000	1			10000	0			10000	5							
			5027	1000	23	22000	4.34	1000	24	24000	4.38	1000	21	21000	4.32	10	5	52	17000	4.23
			5027	10000	1			10000	2			10000	2							
		5	5028	1000	23	22000	4.34	1000	17	16000	4.20	1000	24	24000	4.38	10	4	39	22000	4.34
			5028	10000	1			10000	1			10000	2							
			5029	1000	24	23000	4.36	1000	24	24000	4.38	1000	24	22000	4.34	10	4	44	24000	4.38
			5029	10000	1			10000	2			10000	0							
		5	5030	10000	21	200000	5.30	10000	21	210000	5.32	10000	31	340000	5.53	10	1	50	250000	5.40
			5030	100000	1			100000	2			100000								

Matrix	Strain	Level	No. Spl.	ISO 6888-2 reference method*				Alternative method: EASY STAPH																				
				Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h																
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g								
Salmon terrine Total flora: 400 CFU/g	Staphylococcus aureus Ad899	1	5034	10000	28	280000	5.45	10000	26	240000	5.38	10000	13	150000	5.18	10	1	38	190000	5.28								
				100000	3			100000	0			100000	3															
			5379	10	20	220	2.34	10	24	220	2.34	10	20	210	2.32													
				100	4			100	0			100	3															
			5380	10	23	230	2.36	10	24	270	2.43	10	25	260	2.41													
				100	2			100	6			100	4															
			5381	10	25	260	2.41	10	21	240	2.38	10	17	160	2.20													
				100	3			100	5			100	0															
			5382	10	21	210	2.32	10	16	190	2.28	10	28	270	2.43													
				100	2			100	5			100	2															
			5383	10	23	230	2.36	10	20	230	2.36	10	32	320	2.51													
				100	2			100	5			100	3															
Staphylococcus aureus Ad899	2	5190	10	>100	1300	3.11	10	134	1400	3.15	10	>100	1800	3.26 N'	10	st	18	1800	3.26									
			100	13			100	17			100	18																
		5191	10	>100	1400	3.15	10	139	1700	3.23	10	>100	1400	3.15 N'	10	st	13	1300	3.11									
			100	14			100	43			100	14																
		5192	10	>100	800	2.90	10	162	1800	3.26	10	>100	1000	3.00 N'	10	st	17	1700	3.23									
			100	8			100	31			100	10																
		5193	10	>100	1000	3.00	10	122	1400	3.15	10	>100	1500	3.18 N'	10	st	24	2400	3.38									
			100	10			100	32			100	15																
		5194	10	>100	1000	3.00	10	157	1600	3.20	10	>100	1000	3.00 N'	10	st	18	1800	3.26									
			100	10			100	15			100	16																
Staphylococcus aureus Ad899	3	5035	100	26	2500	3.40	100	27	2700	3.43	100	22	2100	3.32 N'	10	st	33	3300	3.52									
			1000	1			1000	3			1000	1																
		5036	100	24	2400	3.38	100	31	2900	3.46	100	22	2300	3.36	10	st	21	2100	3.32									
			1000	2			1000	1			1000	3																
		5037	100	26	2500	3.40	100	21	2100	3.32	100	24	2300	3.36	10	st	32	3200	3.51									
			1000	2			1000	2			1000	1																
		5038	100	22	2300	3.36	100	28	2600	3.41	100	20	1800	3.26	10	st	23	2300	3.36									
			1000	3			1000	1			1000	0																

Matrix	Strain	Level	No. Spl.	ISO 6888-2 reference method*				Alternative method: EASY STAPH												
				Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h								
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g
Cooked ham Total flora: 1.0x10 <sup>4</sup> CFU/g	Staphylococcus aureus Ad161	1	5364	10	8	80	1.90	10	8	80	1.90	10	4	40	1.60					
				100	0	Ne		100	0	Ne		100	0	Ne						
			5365	10	14	140	2.15	10	15	140	2.15	10	12	120	2.08					
				100	1			100	0			100	1							
			5366	10	9	90	1.95	10	6	60	1.78	10	13	130	2.11					
				100	1	Ne		100	1	Ne		100	1							
			5367	10	8	80	1.90	10	12	120	2.08	10	9	90	1.95					
		2		100	0	Ne		100	1			100	1							
			5145	10	100	970	2.99	10	58	620	2.79	10	66	680	2.83	10	st	5	500	2.70
				100	7			100	10			100	9			Ne				
			5146	10	86	870	2.94	100	14	1300	3.11	10	80	790	2.90	10	st	6	600	2.78
				100	10			1000	0			100	7			NE				
			5147	10	100	990	3.00	10	92	940	2.97	10	73	710	2.85	10	st	7	700	2.85
				100	9			100	11			100	5			Ne				
		3	5148	100	16	1500	3.18	10	109	1000	3.00	100	12	1300	3.11	10	st	9	900	2.95
				1000	0			100	6			1000	2			Ne				
			5149	10	85	860	2.93	100	18	1800	3.26	10	75	780	2.89	10	st	7	700	2.85
				100	9			1000	2			1000	11			Ne				
			5150	100	112	11000	4.04	1000	8	7300	3.86	1000	17	16000	4.20	10	6	77	15000	4.18
				1000	6			10000	0			10000	1							
			5151	1000	10	9100	3.96	1000	12	12000	4.08	1000	19	17000	4.23	10	6	50	10000	4.00
		4		10000	0			10000	1			10000	0							
			5152	1000	12	11000	4.04	1000	15	14000	4.15	1000	12	12000	4.08	10	5	55	18000	4.26
				10000	0			10000	0			10000	1							
			5153	1000	12	13000	4.11	1000	14	13000	4.11	1000	11	11000	4.04	10	5	45	15000	4.18
				10000	2			10000	0			10000	1							
			5154	100	99	10000	4.00	1000	10	9100	3.96	100	107	10000	4.00	10	6	56	11000	4.04
				1000	12			10000	0			1000	7							
			5155	10000	10	110000	5.04	10000	28	250000	5.40	10000	11	110000	5.04	10	2	64	120000	5.08
				100000	2			100000	0			100000	1							
		5	5156	10000	7	70000	4.85	10000	20	180000	5.26	10000	16	160000	5.20	100	5	52	170000	5.23
				100000	0			100000	0			100000	2							
			5157	10000	15	150000	5.18	10000	11	100000	5.00	1000	96	97000	4.99	10	2	70	140000	5.15
				100000	2			100000	0			10000	11							
		6	5158	10000	8	80000	4.90	10000	14	130000	5.11	1000	99	98000	4.99	10	2	66	130000	5.11
				100000	0			100000	0			10000	9							
			5159	10000	13	130000	5.11	10000	24	270000	5.43	10000	10	100000	5.00	10	2	74	140000	5.15
				100000	1			100000	6			100000	1							

Matrix	Strain	Level	No. Spl.	ISO 6888-2 reference method*				Alternative method: EASY STAPH												
								Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h				
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g
Cooked ham Total flora: <100 CFU/g	Staphylococcus aureus Ad161	1	5369	10	14	130	2.11	10	7	70	1.85	10	6	60	1.78					
				100	0			100	4			100	1							
			5370	10	8	80	1.90	10	9	90	1.95	10	13	130	2.11					
				100	2			100	1			100	1							
			5371	10	10	120	2.08	10	21	200	2.30	10	8	80	1.90					
				100	3			100	1			100	2							
			5372	10	14	130	2.11	10	16	160	2.20	10	14	130	2.11					
				100	0			100	1			100	0							
		5373	10	15	160	2.20	10	10	100	2.00	10	12	130	2.11						
			100	2	100		1	100	2											
		2	5160	10	100	970	2.99	10	110	1100	3.04	10	96	950	2.98	10	st	16	1600	3.20
				100	7			100	9			100	8							
			5161	10	63	610	2.79	10	63	660	2.82	10	79	780	2.89	10	st	9	900	2.95
				100	4			100	9			100	7							
			5162	10	79	920	2.96	10	100	980	2.99	10	85	890	2.95	10	st	17	1700	3.23
				100	11			100	8			100	13							
			5163	10	91	930	2.97	10	98	960	2.98	10	103	1000	3.00	10	st	6	600	2.78
				100	11			100	8			100	7							
		3	5164	100	10	910	2.96	10	108	1100	3.04	100	8	820	2.91	10	st	15	1500	3.18
				1000	0			100	6			1000	1							
			5165	1000	9	9000	3.95	1000	18	17000	4.23	1000	12	11000	4.04	10	6	68	14000	4.15
				10000	1			10000	1			10000	0							
			5166	1000	18	16000	4.20	1000	16	15000	4.18	1000	13	14000	4.15	10	5	53	18000	4.26
				10000	0			10000	1			10000	2							
			5167	1000	8	8000	3.90	1000	20	18000	4.26	1000	13	12000	4.08	10	5	51	17000	4.23
				10000	1			10000	0			10000	0							
		4	5168	1000	15	15000	4.18	1000	12	12000	4.08	1000	15	15000	4.18	10	6	69	14000	4.15
				10000	2			10000	1			10000	1							
			5169	1000	17	16000	4.20	1000	8	8200	3.91	1000	15	15000	4.18	10	6	71	14000	4.15
				10000	1			10000	1			10000	2							
			5170	10000	20	190000	5.28	10000	14	150000										

Matrix	Strain	Level	Spl. no.	ISO 6888-2 reference method*				Alternative method: EASY STAPH															
				Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h											
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area						
Pasteurised liquid egg portion Total flora: <10 CFU/g	Staphylococcus aureus Ad910	1	6713	10	24	260	2.41	10	17	160	2.20	10	13	150	2.18								
				100	4			100	0			100	3										
			6714	10	18	180	2.26	10	22	240	2.38	10	21	230	2.36								
				100	2			100	4			100	4										
			6715	10	19	190	2.28	10	17	170	2.23	10	18	170	2.23								
				100	2			100	2			100	1										
			6716	10	15	150	2.18	10	17	170	2.23	10	19	170	2.23								
				100	1			100	2			100	0										
		2	6717	10	11	120	2.08	10	20	200	2.30	10	14	140	2.15								
				100	2			100	2			100	1										
			6718	10	65	660	2.82			#NOMBRE!	10			#NOMBRE!	-1	St	7	700	2.85				
				100	7							100											
			6719	10	82	810	2.91			#NOMBRE!	10			#NOMBRE!	-1	St	7	700	2.85				
				100	7							100											
			6720	10	94	950	2.98			#NOMBRE!	10			#NOMBRE!	-1	St	10	1000	3.00				
				100	10							100											
		3	6721	10	74	770	2.89			#NOMBRE!	10			#NOMBRE!	-1	St	12	1200	3.08				
				100	11							100											
			6722	10	66	680	2.83			#NOMBRE!	10			#NOMBRE!	-1	St	10	1000	3.00				
				100	9							100											
			6723	100	61	6100	3.79	100	103	9900	4.00	100	55	5500	3.74	-1	St	67	6700	3.83			
				1000	6			1000	6			1000	5										
			6724	100	69	6600	3.82	100	129	4000	3.60	100	67	6100	3.79	-1	St	70	7000	3.85			
				1000	4			1000	4			1000	0										
		4	6725	100	52	5100	3.71	100	94	9000	3.95	100	64	6500	3.81	-1	St	67	6700	3.83			
				1000	4			1000	5			1000	7										
			6726	100	52	5100	3.71	100	112	11000	4.04	100	52	5100	3.71	-1	St	60	6000	3.78			
				1000	4			1000	8			1000	4										
			6727	100	60	5900	3.77	100	72	7700	3.89	100	55	5800	3.76	-1	St	71	7100	3.85			
				1000	5			1000	13			1000	9										
			6728	10000	18	180000	5.26	10000	11	130000	5.11	10000	13	150000	5.18	-1	1	55	270000	5.43			
				100000	2			100000	3			100000	3										
		4	6729	10000	20	210000	5.32	10000	29	270000													

Matrix	Strain	Level	Spl. no.	ISO 6888-2 reference method*				Alternative method: EASY STAPH															
								Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h							
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g			
Pasteurised liquid egg portion Total flora: <10 CFU/g	Staphylococcus aureus Ad910	1	6733	10	15	150	2.18	10	18	200	2.30	10	20	200	2.30								
				100	1			100	4			100	2										
			6734	10	14	160	2.20	10	21	230	2.36	10	17	160	2.20								
				100	3			100	4			100	1										
			6735	10	13	120	2.08	10	17	180	2.26	10	17	160	2.20								
				100	0			100	3			100	0										
			6736	10	17	180	2.26	10	15	160	2.20	10	13	140	2.15								
				100	3			100	3			100	2										
			6737	10	17	160	2.20	10	14	130	2.11	10	19	190	2.28								
				100	0			100	0			100	2										
		2	6738	10	40	440	2.64			#NOMBRE!	10			#NOMBRE!	-1	St	7	700	2.85				
				100	8							100											
			6739	10	79	790	2.90			#NOMBRE!	10			#NOMBRE!	-1	St	11	1100	3.04				
				100	8							100											
			6740	10	50	510	2.71			#NOMBRE!	10			#NOMBRE!	-1	St	5	500	2.70				
				100	6							100											
		3	6741	10	55	570	2.76			#NOMBRE!	10			#NOMBRE!	-1	St	10	1000	3.00				
				100	8							100											
			6742	10	64	640	2.81			#NOMBRE!	10			#NOMBRE!	-1	St	8	800	2.90				
				100	6							100											
			6743	100	39	4000	3.60	100	70	6700	3.83	100	35	3400	3.53	-1	St	63	6300	3.80			
				1000	5			1000	4			1000	2										
			6744	100	51	5200	3.72	100	116	11000	4.04	100	47	4500	3.65	-1	St	58	5800	3.76			
				1000	6			1000	7			1000	2										
			6745	100	28	2900	3.46	100	59	6500	3.81	100	48	4500	3.65	-1	St	37	3700	3.57			
				1000	4			1000	13			1000	2										
			6746	100	47	4300	3.63	100	82	8300	3.92	100	37	3700	3.57	-1	St	50	5000	3.70			
				1000	0			1000	9			1000	4										
			6747	100	37	3500	3.54	100	65	6500	3.81	100	36	3800	3.58	-1	St	53	5300	3.72			
				1000	2			1000	7			1000	6										
		4	6748	10000	9	90000	4.95	10000	19	170000	5.23	10000	11	110000	5.04	-1	1	59	300000	5.48			

Matrix	Strain	Level	Spl. no.	ISO 6888-2 reference method♦				EASY STAPH alternative method																
								Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h								
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g				
Leek quiche Total flora: <10 CFU/g	Staphylococcus aureus Ad166	1	7150	10	19	210	2.32	10	31	300	2.48	10	22	230	2.36									
				100	4			100	2			100	3											
			7151	10	25	270	2.43	10	28	270	2.43	10	29	270	2.43									
				100	5			100	2			100	1											
			7152	10	26	250	2.40	10	20	190	2.28	10	19	190	2.28									
				100	1			100	1			100	2											
			7153	10	26	260	2.41	10	19	200	2.30	10	15	150	2.18									
				100	2			100	3			100	1											
		2	7154	10	24	230	2.36	10	23	250	2.40	10	20	200	2.30									
				100	1			100	4			100	2											
			7155	10	75	760	2.88									10	st	15	1500	3.18				
				100	9																			
			7156	10	80	830	2.92									10	st	7	700	2.85 Ne				
				100	11																			
			7157	10	72	720	2.86									10	st	14	1400	3.15				
				100	7																			
			7158	10	90	910	2.96									10	st	7	700	2.85 Ne				
				100	10																			
			3	10	85	870	2.94									10	st	18	1800	3.26				
				100	11																			
			7160	100	67	6600	3.82	100	56	5900	3.77	100	62	6200	3.79	10	6	44	4400	3.64				
				1000	6			1000	9			1000	6											
			7161	100	64	6600	3.82	100	71	7500	3.88	100	57	5700	3.76	10	6	41	4100	3.61				
				1000	9			1000	12			1000	6											
			7162	100	71	6700	3.83	100	82	7600	3.88	100	53	5400	3.73	10	6	40	4000	3.60				
				1000	3			1000	2			1000	6											
			7163	100	51	5500	3.74	100	91	9100	3.96	100	58	5500	3.74	10	6	48	4800	3.68				
				1000	10			1000	9			1000	2											
			7164	100	59	6200	3.79	100	83	8600	3.93	100	58	6000	3.78	10	6	47	4700	3.67				
				1000	9			1000	12			1000	8											
		4	7165	10000	17	160000	5.20	10000	18	190000	5.28	10000	15	160000	5.20	10	1	51	5100	3.71				

Matrix	Strain	Level	Spl. no.	ISO 6888-2 reference method♦				EASY STAPH alternative method																							
								Spread method - 22 h				Pour plate method - 22 h				Spiral method - 22 h															
				Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	reading area	CFU/plate	CFU/g	log CFU/g											
Leek quiche Batch 2 Total flora: <10 CFU/g	Staphylococcus aureus Ad166	1	7170	10	36	360	2.56	10	30	290	2.46	10	30	300	2.48																
				100	3			100	2			100	3																		
				10	33	340	2.53	10	32	320	2.51	10	38	360	2.56																
				100	4			100	3			100	2																		
				10	34	330	2.52	10	37	430	2.63	10	28	270	2.43																
				100	2			100	10			100	2																		
				10	28	270	2.43	10	27	280	2.45	10	18	230	2.36																
				100	2			100	4			100	7																		
				10	37	360	2.56	10	27	310	2.49	10	35	340	2.53																
				100	2			100	7			100	2																		
		2	7175	10	103	1000	3.00									10	st	17	1700	3.23											
				100	12																										
			7176	10	89	940	2.97									10	st	7	700	2.85											
				100	14											Ne															
			7177	10	119	1200	3.08									10	st	14	1400	3.15											
				100	9																										
			7178	10	116	1200	3.08									10	st	21	2100	3.32											
				100	12																										
		3	7179	10	116	1100	3.04									10	st	10	1000	3.00											
				100	9																										
			7180	100	75	7100	3.85	100	119	11000	4.04	100	67	6500	3.81	10	st	57	5700	3.76											
				1000	3			1000	7			1000	4																		
			7181	100	81	7900	3.90	100	130	8000	3.90	100	90	9200	3.96	10	6	52	5200	3.72											
				1000	6			1000	8			1000	11																		
			7182	100	93	9500	3.98	100	123	22000	4.34	100	66	6400	3.81	10	6	42	4200	3.62											
				1000	11			1000	22			1000	4																		
			7183	100	87	8500	3.93	100	144	15000	4.18	100	70	7700	3.89	10	6	55	5500	3.74											
				1000	7			1000	15			1000	15																		
			7184	100	67	6600	3.82	100	128	16000	4.20	100	79	7600	3.88	10	6	91	9100	3.96											
				1000	6			1000	16			1000	5																		
		4	7185	10000	17	200000	5.30	10000	43	440000	5.64	10000	33	330000	5.52	10	st	60	6000	3.78											
				100000	5			100000	5			100000	3																		
			7186	10000	20</td																										

## Appendix 4 - Accuracy profile study: Statistical calculations

### Spread method, 22 h incubation,

(Food) Category 1	Meat products				
(Food) Type c	Cooked delicatessens and ready-made meals				

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
5364-5365	Ham	1	1.90	2.15	1.95	1.90	2.11	1.90	2.15	1.78	2.08	2.04	1.95	0.119	0.014	0.112	2.04	0.149	0.022	0.147	5	8	0.090	0.161	1.694	0.273	-0.183	0.363
5369-5373	Ham	1	2.11	1.90	2.08	2.11	2.20	1.85	1.95	2.30	2.20	2.00	2.11	0.110	0.012	0.112	2.00	0.185	0.034	0.147	5	8	-0.110	0.161	1.694	0.273	-0.383	0.163
5145-5149	Ham	2	2.99	2.94	3.00	3.18	2.93	2.79	3.11	2.97	3.00	3.26	2.99	0.101	0.010	0.112	3.00	0.174	0.030	0.147	5	8	0.010	0.161	1.694	0.273	-0.263	0.283
5160-5164	Ham	2	2.99	2.79	2.96	2.97	2.96	3.04	2.82	2.99	2.98	3.04	2.96	0.081	0.007	0.112	2.99	0.090	0.008	0.147	5	8	0.030	0.161	1.694	0.273	-0.243	0.303
5150-5154	Ham	3	4.04	3.96	4.04	4.11	4.00	3.86	4.08	4.15	4.11	3.96	4.04	0.056	0.003	0.112	4.08	0.119	0.014	0.147	5	8	0.040	0.161	1.694	0.273	-0.233	0.313
5165-5169	Ham	3	3.95	4.20	3.90	4.18	4.20	4.23	4.18	4.26	4.08	3.91	4.18	0.148	0.022	0.112	4.18	0.142	0.020	0.147	5	8	0.000	0.161	1.694	0.273	-0.273	0.273
5155-5159	Ham	4	5.04	4.85	5.18	4.90	5.11	5.40	5.26	5.00	5.11	5.43	5.04	0.139	0.019	0.112	5.26	0.185	0.034	0.147	5	8	0.220	0.161	1.694	0.273	-0.053	0.493
5170-5174	Ham	4	5.28	5	5.08	5	5.08	5.18	5.23	5	5.18	5.04	5.09	0.115	0.013	0.112	5.13	0.100	0.010	0.147	5	8	0.038	0.123	1.694	0.208	-0.170	0.246

(Food) Category 2	Dairy products				
(Food) Type a	Raw milk and raw milk-based dairy products				

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
5354-5358	Raw milk	1	2.11	1.95	2.11	2.08	2.04	2.32	2.38	2.32	2.36	2.08	2.08	0.067	0.004	0.091	2.32	0.121	0.015	0.116	5	10	0.240	0.127	1.684	0.213	0.027	0.453
5359-5363	Raw milk	1	2.08	1.95	2.18	1.85	2.18	2.26	2.28	2.32	2.56	2.18	2.08	0.145	0.021	0.091	2.28	0.144	0.021	0.116	5	10	0.200	0.127	1.684	0.213	-0.013	0.413
5175-5179	Raw milk	2	2.95	2.98	3.00	2.96	2.91	3.23	3.23	3.23	3.15	3.00	2.96	0.034	0.001	0.091	3.23	0.100	0.010	0.116	5	10	0.270	0.127	1.684	0.213	0.057	0.483
5180-5184	Raw milk	2	2.93	2.90	3.00	2.94	2.96	3.36	3.20	3.28	3.15	3.20	2.94	0.037	0.001	0.091	3.20	0.083	0.007	0.116	5	10	0.260	0.127	1.684	0.213	0.047	0.473
4962-4966	Raw milk	3	3.08	3.00	3.08	3.00	2.93	3.04	3.26	3.00	3.18	2.90	3.00	0.063	0.004	0.091	3.04	0.144	0.021	0.116	5	10	0.040	0.127	1.684	0.213	-0.173	0.253
4977-4981	Raw milk	3	3.15	3.04	3.26	3.28	3.15	3.18	3.08	3.18	3.36	3.40	3.15	0.097	0.009	0.091	3.18	0.135	0.018	0.116	5	10	0.030	0.127	1.684	0.213	-0.183	0.243
4982-4986	Raw milk	4	3.70	3.98	4.04	3.95	4.18	4.11	4.11	3.90	3.90	4.04	3.98	0.175	0.031	0.091	4.11	0.106	0.011	0.116	5	10	0.130	0.127	1.684	0.213	-0.083	0.343
4967-4971	Raw milk	4	4.18	4.18	4.15	4.08	4.18	4.04	4.20	4.04	4.15	3.90	4.18	0.043	0.002	0.091	4.15	0.116	0.013	0.116	5	10	-0.030	0.127	1.684	0.213	-0.243	0.183
4972-4976	Raw milk	5	5.08	4.96	5.00	4.96	5.08	5.15	5.11	5.00	5.18	5.08	5.00	0.061	0.004	0.091	5.11	0.069	0.005	0.116	5	10	0.110	0.127	1.684	0.213	-0.103	0.323
4987-4991	Raw milk	5	5.15	5.00	5.04	5.15	5.00	5.30	4.99	5.18	5.20	5.11	5.04	0.077	0.006	0.091	5.18	0.115	0.013	0.116	5	10	0.140	0.127	1.684	0.213	-0.073	0.353

(Food) Category 3	Seafood				
(Food) Type c	Ready-made meals, terrines				

			Reference method result					Alternative method result												
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2</th											

(Food) Category 4	Egg products	
(Food) Type b	Raw dough, liquid egg portions	

			Reference method result					Alternative method result				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
6733-6737	Liquid egg portions	1	2.18	2.20	2.08	2.26	2.20	2.30	2.36	2.26	2.20	2.11
6713-6717	Liquid egg portions	1	2.41	2.26	2.28	2.18	2.08	2.20	2.38	2.23	2.23	2.30
6743-6747	Liquid egg portions	2	3.60	3.72	3.46	3.63	3.54	3.83	4.04	3.81	3.92	3.81
6723-6727	Liquid egg portions	2	3.39	3.82	3.71	3.71	3.77	4.00	3.60	3.95	4.04	3.89
6748-6752	Liquid egg portions	3	4.95	5.08	5.15	5.15	5.32	5.23	5.20	4.95	5.40	5.32
6728-6732	Liquid egg portions	3	5.26	5.32	5.15	5.15	5.30	5.11	5.43	5.54	5.34	5.45

Reference method result				Alternative method result											
Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
2.20	0.065	0.004	0.117	2.26	0.096	0.009	0.136	5	6	0.060	0.149	1.318	0.196	-0.136	0.256
2.26	0.123	0.015	0.117	2.23	0.073	0.005	0.136	5	6	-0.030	0.149	1.318	0.196	-0.226	0.166
3.60	0.097	0.009	0.117	3.83	0.099	0.010	0.136	5	6	0.230	0.149	1.318	0.196	0.034	0.426
3.71	0.169	0.028	0.117	3.95	0.175	0.031	0.136	5	6	0.240	0.149	1.318	0.196	0.044	0.436
5.15	0.134	0.018	0.117	5.23	0.170	0.029	0.136	5	6	0.080	0.149	1.318	0.196	-0.116	0.276
5.26	0.081	0.007	0.117	5.43	0.164	0.027	0.136	5	6	0.170	0.149	1.318	0.196	-0.026	0.366

(Food) Category 5	Composite food	
(Food) Type 5	Pizzas, quiches	

			Reference method result					Alternative method result				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
7150-7154	Leek quiche	1	2.32	2.43	2.4	2.41	2.36	2.48	2.43	2.28	2.3	2.4
7170-7174	Vegetable quiche	1	2.56	2.53	2.52	2.43	2.56	2.46	2.51	2.63	2.45	2.79
7160-7164	Vegetable quiche	2	3.82	3.82	3.83	3.74	3.79	3.77	3.88	3.88	3.96	3.93
7180-7184	Vegetable quiche	2	3.85	3.9	3.98	3.93	3.82	4.04	3.9	4.34	4.18	4.2
7165-7169	Vegetable quiche	3	5.2	5.2	5.2	5.18	5.18	5.28	5.54	5.43	5.49	5.51
7185-7189	Vegetable quiche	3	5.3	5.26	5.38	5.34	5.32	5.64	5.32	5.63	5.58	5.48

Reference method result				Alternative method result											
Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
2.40	0.044	0.002	0.045	2.40	0.086	0.007	0.122	5	6	0.000	0.134	1.318	0.176	-0.176	0.176
2.53	0.053	0.003	0.045	2.51	0.143	0.021	0.122	5	6	-0.020	0.134	1.318	0.176	-0.196	0.156
3.82	0.037	0.001	0.045	3.88	0.072	0.005	0.122	5	6	0.060	0.134	1.318	0.176	-0.116	0.236
3.90	0.063	0.004	0.045	4.18	0.168	0.028	0.122	5	6	0.280	0.134	1.318	0.176	0.104	0.456
5.20	0.011	0.000	0.045	5.49	0.103	0.011	0.122	5	6	0.290	0.134	1.318	0.176	0.114	0.466
5.32	0.045	0.002	0.045	5.58	0.133	0.018	0.122	5	6	0.260	0.134	1.318	0.176	0.084	0.436

### Pour plate method, 22 h incubation

(Food) Category 1	Meat products				
(Food) Type c	Cooked delicatessens and ready-made meals				

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
5364-5365	Ham	1	1.90	2.15	1.95	1.90	2.11	1.6	2.08	2.11	1.95	1.85	1.95	0.119	0.014	0.111	1.95	0.206	0.042	0.088	5	6	0.000	0.097	1.711	0.166	-0.166	0.166
5369-5373	Ham	1	2.11	1.90	2.08	2.11	2.20	1.78	2.11	1.9	2.11	2.11	2.11	0.110	0.012	0.111	2.11	0.154	0.024	0.088	5	6	0.000	0.097	1.711	0.166	-0.166	0.166
5145-5149	Ham	2	2.99	2.94	3.00	3.18	2.93	2.83	2.90	2.85	3.11	2.89	2.99	0.101	0.010	0.111	2.89	0.112	0.013	0.088	5	6	-0.100	0.097	1.711	0.166	-0.266	0.066
5160-5164	Ham	2	2.99	2.79	2.96	2.97	2.96	2.98	2.89	2.95	3.00	2.91	2.96	0.081	0.007	0.111	2.95	0.046	0.002	0.088	5	6	-0.010	0.097	1.711	0.166	-0.176	0.156
5150-5154	Ham	3	4.04	3.96	4.04	4.11	4.00	4.20	4.23	4.08	4.04	4.00	4.04	0.056	0.003	0.111	4.08	0.100	0.010	0.088	5	6	0.040	0.097	1.711	0.166	-0.126	0.206
5165-5169	Ham	3	3.95	4.20	3.90	4.18	4.20	4.04	4.15	4.08	4.18	4.18	4.18	0.148	0.022	0.111	4.15	0.063	0.004	0.088	5	6	-0.030	0.097	1.711	0.166	-0.196	0.136
5155-5159	Ham	4	5.04	4.85	5.18	4.90	5.11	5.04	5.20	4.99	4.99	5.00	5.04	0.139	0.019	0.111	5.00	0.090	0.008	0.088	5	6	-0.040	0.097	1.711	0.166	-0.206	0.126
5170-5174	Ham	4	5.28	5	5.08	5	5.08	5.11	5.04	4.91	5.18	5.08	5.09	0.115	0.013	0.111	5.06	0.100	0.010	0.088	5	6	-0.024	0.122	1.711	0.209	-0.233	0.185

(Food) Category 2	Dairy products				
(Food) Type a	Raw milk and raw milk-based dairy products				

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
5354-5358	Raw milk	1	2.11	1.95	2.11	2.08	2.04	2.00	2.04	2.23	2.23	2.04	2.08	0.067	0.004	0.091	2.04	0.113	0.013	0.100	5	10	-0.040	0.110	1.684	0.185	-0.225	0.145
5359-5363	Raw milk	1	2.08	1.95	2.18	1.85	2.18	2.23	1.96	2.00	2.36	2.11	2.08	0.145	0.021	0.091	2.18	0.165	0.027	0.100	5	10	0.100	0.110	1.684	0.185	-0.085	0.285
5175-5179	Raw milk	2	2.95	2.98	3.00	2.96	2.91	2.94	3.00	3.04	2.97	2.92	2.96	0.034	0.001	0.091	2.97	0.048	0.002	0.100	5	10	0.010	0.110	1.684	0.185	-0.175	0.195
5180-5184	Raw milk	2	2.93	2.90	3.00	2.94	2.96	3.04	3.28	3.08	3.08	3.08	2.94	0.037	0.001	0.091	3.08	0.095	0.009	0.100	5	10	0.140	0.110	1.684	0.185	-0.045	0.325
4962-4966	Raw milk	3	3.08	3.00	3.08	3.00	2.93	2.97	3.04	3.00	2.98	3.00	3.00	0.063	0.004	0.091	2.98	0.027	0.001	0.100	5	10	-0.020	0.110	1.684	0.185	-0.205	0.165
4977-4981	Raw milk	3	3.15	3.04	3.26	3.28	3.15	3.04	3.00	3.18	3.00	3.11	3.15	0.097	0.009	0.091	3.04	0.078	0.006	0.100	5	10	-0.110	0.110	1.684	0.185	-0.295	0.075
4982-4986	Raw milk	4	3.70	3.98	4.04	3.95	4.18	4.11	4.11	3.90	3.90	4.04	3.98	0.175	0.031	0.091	4.11	0.106	0.011	0.100	5	10	0.130	0.110	1.684	0.185	-0.055	0.315
4967-4971	Raw milk	4	4.18	4.18	4.15	4.08	4.18	4.04	4.20	4.04	4.15	3.90	4.18	0.043	0.002	0.091	4.15	0.116	0.013	0.100	5	10	-0.030	0.110	1.684	0.185	-0.215	0.155
4972-4976	Raw milk	5	5.08	4.96	5.00	4.96	5.08	5.15	5.11	5.00	5.18	5.08	5.00	0.061	0.004	0.091	5.11	0.069	0.005	0.100	5	10	0.110	0.110	1.684	0.185	-0.075	0.295
4987-4991	Raw milk	5	5.15	5.00	5.04	5.15	5.00	5.30	4.99	5.18	5.20	5.11	5.04	0.077	0.006	0.091	5.18	0.115	0.013	0.100	5	10	0.140	0.110	1.684	0.185	-0.045	0.325

(Food) Category 3	Seafood				
(Food) Type c	Ready-made meals, terrines				

			Reference method result					Alternative method result												
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5													

(Food) Category 4	Egg products
(Food) Type b	Raw dough, liquid egg portions

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
6733-6737	Liquid egg portions	1	2.18	2.20	2.08	2.26	2.20	2.30	2.36	2.26	2.20	2.11	2.20	0.065	0.004	0.117	2.26	0.096	0.009	0.136	5	6	0.060	0.149	1.318	0.196	-0.136	0.256
6713-6717	Liquid egg portions	1	2.41	2.26	2.28	2.18	2.08	2.20	2.38	2.23	2.23	2.30	2.26	0.123	0.015	0.117	2.23	0.073	0.005	0.136	5	6	-0.030	0.149	1.318	0.196	-0.226	0.166
6743-6747	Liquid egg portions	2	3.60	3.72	3.46	3.63	3.54	3.83	4.04	3.81	3.92	3.81	3.60	0.097	0.009	0.117	3.83	0.099	0.010	0.136	5	6	0.230	0.149	1.318	0.196	0.034	0.426
6723-6727	Liquid egg portions	2	3.39	3.82	3.71	3.71	3.77	4.00	3.60	3.95	4.04	3.89	3.71	0.169	0.028	0.117	3.95	0.175	0.031	0.136	5	6	0.240	0.149	1.318	0.196	0.044	0.436
6748-6752	Liquid egg portions	3	4.95	5.08	5.15	5.15	5.32	5.23	5.20	4.95	5.40	5.32	5.15	0.134	0.018	0.117	5.23	0.170	0.029	0.136	5	6	0.080	0.149	1.318	0.196	-0.116	0.276
6728-6732	Liquid egg portions	3	5.26	5.32	5.15	5.15	5.30	5.11	5.43	5.54	5.34	5.45	5.26	0.081	0.007	0.117	5.43	0.164	0.027	0.136	5	6	0.170	0.149	1.318	0.196	-0.026	0.366

(Food) Category 5	Composite food
(Food) Type 5	Pizzas, quiches

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
7150-7154	Leek quiche	1	2.32	2.43	2.4	2.41	2.36	2.48	2.43	2.28	2.3	2.4	2.40	0.044	0.002	0.045	2.40	0.086	0.007	0.122	5	6	0.000	0.134	1.318	0.176	-0.176	0.176
7170-7174	Vegetable quiche	1	2.56	2.53	2.52	2.43	2.56	2.46	2.51	2.63	2.45	2.79	2.53	0.053	0.003	0.045	2.51	0.143	0.021	0.122	5	6	-0.020	0.134	1.318	0.176	-0.196	0.156
7160-7164	Vegetable quiche	2	3.82	3.82	3.83	3.74	3.79	3.77	3.88	3.88	3.96	3.93	3.82	0.037	0.001	0.045	3.88	0.072	0.005	0.122	5	6	0.060	0.134	1.318	0.176	-0.116	0.236
7180-7184	Vegetable quiche	2	3.85	3.9	3.98	3.93	3.82	4.04	3.9	4.34	4.18	4.2	3.90	0.063	0.004	0.045	4.18	0.168	0.028	0.122	5	6	0.280	0.134	1.318	0.176	0.104	0.456
7165-7169	Vegetable quiche	3	5.2	5.2	5.2	5.18	5.18	5.28	5.54	5.43	5.49	5.51	5.20	0.011	0.000	0.045	5.49	0.103	0.011	0.122	5	6	0.290	0.134	1.318	0.176	0.114	0.466
7185-7189	Vegetable quiche	3	5.3	5.26	5.38	5.34	5.32	5.64	5.32	5.63	5.58	5.48	5.32	0.045	0.002	0.045	5.58	0.133	0.018	0.122	5	6	0.260	0.134	1.318	0.176	0.084	0.436

### Spiral method, 22 h incubation

(Food) Category 1	Meat products				
(Food) Type c	Cooked delicatessens and ready-made meals				

			Reference method result					Alternative method result				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
5145-5149	Ham	1	2.99	2.94	3.00	3.18	2.93	2.70	2.78	2.85	2.95	2.85
5160-5164	Ham	1	2.99	2.79	2.96	2.97	2.96	3.20	2.95	3.23	2.78	3.18
5150-5154	Ham	2	4.04	3.96	4.04	4.11	4.00	4.18	4.00	4.26	4.18	4.04
5165-5169	Ham	2	3.95	4.20	3.90	4.18	4.20	4.15	4.26	4.23	4.15	4.15
5155-5159	Ham	3	5.04	4.85	5.18	4.90	5.11	5.08	5.23	5.15	5.11	5.15
5170-5174	Ham	3	5.28	5	5.08	5	5.08	5.15	5.2	5.11	5.18	5.04

Reference method result				Alternative method result											
Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
2.99	0.101	0.010	0.111	2.85	0.093	0.009	0.107	5	6	-0.140	0.117	1.711	0.200	-0.340	0.060
2.96	0.081	0.007	0.111	3.18	0.196	0.038	0.107	5	6	0.220	0.117	1.711	0.200	0.020	0.420
4.04	0.056	0.003	0.111	4.18	0.108	0.012	0.107	5	6	0.140	0.117	1.711	0.200	-0.060	0.340
4.18	0.148	0.022	0.111	4.15	0.053	0.003	0.107	5	6	-0.030	0.117	1.711	0.200	-0.230	0.170
5.04	0.139	0.019	0.111	5.15	0.056	0.003	0.107	5	6	0.110	0.117	1.711	0.200	-0.090	0.310
5.09	0.115	0.013	0.111	5.14	0.063	0.004	0.107	5	6	0.048	0.122	1.711	0.209	-0.161	0.257

(Food) Category 2	Dairy products				
(Food) Type a	Raw milk and raw milk-based dairy products				

			Reference method result					Alternative method result				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
5175-5179	Raw milk	1	2.95	2.98	3.00	2.96	2.91	2.95	2.90	3.00	2.95	3.04
5180-5184	Raw milk	1	2.93	2.90	3.00	2.94	2.96	3.04	3.15	3.08	3.04	2.70
4962-4966	Raw milk	2	3.08	3.00	3.08	3.00	2.93	3.15	3.18	3.08	3.08	3.04
4977-4981	Raw milk	2	3.15	3.04	3.26	3.28	3.15	3.08	3.15	3.15	3.11	3.15
4982-4986	Raw milk	3	3.70	3.98	4.04	3.95	4.18	4.08	4.11	4.04	4.18	4.08
4967-4971	Raw milk	3	4.18	4.18	4.15	4.08	4.18	3.98	4.11	4.08	4.08	4.28
4972-4976	Raw milk	4	5.08	4.96	5.00	4.96	5.08	5.11	5.00	5.15	5.28	5.20
4987-4991	Raw milk	4	5.15	5.00	5.04	5.15	5.00	5.00	5.04	5.11	5.04	

Reference method result				Alternative method result											
Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
2.96	0.034	0.001	0.085	2.95	0.054	0.003	0.090	5	8	-0.010	0.099	1.694	0.167	-0.177	0.157
2.94	0.037	0.001	0.085	3.04	0.175	0.031	0.090	5	8	0.100	0.099	1.694	0.167	-0.067	0.267
3.00	0.063	0.004	0.085	3.08	0.057	0.003	0.090	5	8	0.080	0.099	1.694	0.167	-0.087	0.247
3.15	0.097	0.009	0.085	3.15	0.032	0.001	0.090	5	8	0.000	0.099	1.694	0.167	-0.167	0.167
3.98	0.175	0.031	0.085	4.11	0.052	0.003	0.090	5	8	0.130	0.099	1.694	0.167	-0.037	0.297
4.18	0.043	0.002	0.085	4.08	0.109	0.012	0.090	5	8	-0.100	0.099	1.694	0.167	-0.267	0.067
5.00	0.061	0.004	0.085	5.11	0.104	0.011	0.090	5	8	0.110	0.099	1.694	0.167	-0.057	0.277
5.04	0.077	0.006	0.085	5.04	0.040	0.002	0.090	5	8	0.000	0.099	1.694	0.167	-0.167	0.167

(Food) Category 3	Seafood				
(Food) Type c	Ready-made meals, terrines				

			Reference method result					Alternative method result				
Sample Name	(Food) item	Level	Rep									

(Food) Category 4	Egg products
(Food) Type b	Raw dough, liquid egg portions

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
6738-6742	Liquid egg portions	1	2.64	2.90	2.71	2.76	2.81	2.85	3.04	2.70	3.00	2.90	2.76	0.099	0.010	0.113	2.90	0.134	0.018	0.092	5	6	0.140	0.101	1.318	0.133	0.007	0.273
6718-6722	Liquid egg portions	1	2.82	2.91	2.98	2.89	2.83	2.85	2.85	3.00	3.08	3.00	2.89	0.065	0.004	0.113	3.00	0.102	0.010	0.092	5	6	0.110	0.101	1.318	0.133	-0.023	0.243
6743-6747	Liquid egg portions	2	3.60	3.72	3.46	3.63	3.54	3.53	3.65	3.65	3.57	3.58	3.60	0.097	0.009	0.113	3.58	0.053	0.003	0.092	5	6	-0.020	0.101	1.318	0.133	-0.153	0.113
6723-6727	Liquid egg portions	2	3.39	3.82	3.71	3.71	3.77	3.74	3.79	3.81	3.71	3.76	3.71	0.169	0.028	0.113	3.76	0.040	0.002	0.092	5	6	0.050	0.101	1.318	0.133	-0.083	0.183
6748-6752	Liquid egg portions	3	4.95	5.08	5.15	5.15	5.32	5.04	5.18	5.11	5.00	5.20	5.15	0.134	0.018	0.113	5.11	0.086	0.007	0.092	5	6	-0.040	0.101	1.318	0.133	-0.173	0.093
6728-6732	Liquid egg portions	3	5.26	5.32	5.15	5.15	5.30	5.18	5.30	5.08	5.11	5.04	5.26	0.081	0.007	0.113	5.11	0.102	0.010	0.092	5	6	-0.150	0.101	1.318	0.133	-0.283	-0.017

(Food) Category 5	Composite food
(Food) Type 5	Pizzas, quiches

			Reference method result					Alternative method result																				
Sample Name	(Food) item	Level	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Central value	Sref	Vref	sref	Central value	Salt	Valt	salt	n	q	Bias	sn	t	Tsn	L-Median	U-Median
7155-7159	Leek quiche	1	2.88	2.92	2.86	2.96	2.94	3.18	2.85	3.15	2.85	3.26	2.92	0.041	0.002	0.044	3.15	0.194	0.038	0.127	5	6	0.230	0.139	1.318	0.183	0.047	0.413
7175-7179	Vegetable quiche	1	3	2.97	3.08	3.08	3.04	3.23	2.85	3.15	3.32	3	3.04	0.049	0.002	0.044	3.15	0.187	0.035	0.127	5	6	0.110	0.139	1.318	0.183	-0.073	0.293
7160-7164	Vegetable quiche	2	3.82	3.82	3.83	3.74	3.79	3.79	3.76	3.73	3.74	3.78	3.82	0.037	0.001	0.044	3.76	0.025	0.001	0.127	5	6	-0.060	0.139	1.318	0.183	-0.243	0.123
7180-7184	Vegetable quiche	2	3.85	3.9	3.98	3.93	3.82	3.81	3.96	3.81	3.89	3.88	3.90	0.063	0.004	0.044	3.88	0.063	0.004	0.127	5	6	-0.020	0.139	1.318	0.183	-0.203	0.163
7165-7169	Vegetable quiche	3	5.2	5.2	5.2	5.18	5.18	5.2	5.34	5.18	5.26	5.26	5.20	0.011	0.000	0.044	5.26	0.063	0.004	0.127	5	6	0.060	0.139	1.318	0.183	-0.123	0.243
7185-7189	Vegetable quiche	3	5.3	5.26	5.38	5.34	5.32	5.52	5.43	5.4	5.38	5.18	5.32	0.045	0.002	0.044	5.40	0.125	0.016	0.127	5	6	0.080	0.139	1.318	0.183	-0.103	0.263

## Appendix 5 - Accuracy study: artificial contamination of samples

Sample no.	Product	Artificial inoculations-Strain	Origin	Stress applied	Stress evaluation
5085	Scampi	Staphylococcus aureus A00M071	Frozen cooked tuna	Seeding 48h 4 °C	/
5086	Raw prawn tails	Staphylococcus aureus A00M071	Frozen cooked tuna	Seeding 48h 4 °C	/
6659	Cheese and tomato pizza	Staphylococcus aureus A00M072	Frozen cooked tuna	Seeding 48h 4 °C	/
4545	Ling fillets	Staphylococcus aureus A00M074	Tuna	Seeding 48h 4 °C	/
4546	Smoked herring with condiments	Staphylococcus aureus A00M074	Tuna	Seeding 48h 4 °C	/
4547	Smoked salmon	Staphylococcus aureus A00M078	Tuna	Seeding 48h 4 °C	/
4548	Smoked trout	Staphylococcus aureus A00M078	Tuna	Seeding 48h 4 °C	/
5089	Pollack fillet	Staphylococcus aureus A00M078	Frozen cooked tuna	Seeding 48h 4 °C	/
5090	Chopped smoked salmon with dill and lemon	Staphylococcus aureus A00M078	Frozen cooked tuna	Seeding 48h 4 °C	/
8089	Steamed shrimp portions	Staphylococcus aureus A00M079	Frozen cooked tuna	Spiking TT 10 min. 56 °C	1.05
8090	Seafood tagliatelles	Staphylococcus aureus A00M079	Frozen cooked tuna	Spiking TT 10 min. 56 °C	1.05
4538	Duck breast with tomato	Staphylococcus aureus Ad 153	Rabbit	Seeding 48h 4 °C	/
3868	Scallop terrine	Staphylococcus aureus Ad 154	Hake fillet	Seeding 48h 4 °C	/
3869	Salmon duo salad	Staphylococcus aureus Ad 154	Hake fillet	Seeding 48h 4 °C	/
5794	Chicken curry	Staphylococcus aureus Ad 155	Turkey MSM	HT 10 min. 56 °C	1.9
5796	Flan	Staphylococcus aureus Ad 155	Turkey MSM	HT 10 min. 56 °C	1.9
4539	Duck breast with tomato	Staphylococcus aureus Ad 157	Chicken skin	Seeding 48h 4 °C	/
6654	Pasteurised whole liquid egg portion	Staphylococcus aureus Ad 157	Chicken skin	Seeding 48h 4 °C	/
6655	Puff pastry	Staphylococcus aureus Ad 157	Chicken skin	Seeding 48h 4 °C	/
4768	Chicken curry	Staphylococcus aureus Ad 158	Chicken thigh	Seeding 48h 4 °C	/
4771	Cooked ham	Staphylococcus aureus Ad 158	Chicken thigh	Seeding 48h 4 °C	/
4540	Sliced duck breast	Staphylococcus aureus Ad 159	Chicken	Seeding 48h 4 °C	/
7452	Fresh tagliatelles	Staphylococcus aureus Ad 159	Chicken	Seeding 48h 4 °C	/
7504	Shortcrust pastry	Staphylococcus aureus Ad 159	Poultry	TT 10min. 56 °C	0.97
4222	Beef carpaccio with pistou sauce	Staphylococcus aureus Ad 160	Minced steak	Seeding 48h 4 °C	/
4223	Beef carpaccio with basil	Staphylococcus aureus Ad 160	Minced steak	Seeding 48h 4 °C	/
5093	Cured ham	Staphylococcus aureus Ad 161	Merguez	Seeding 48h 4 °C	/
5094	Rosette	Staphylococcus aureus Ad 161	Merguez	Seeding 48h 4 °C	/
3870	Salmon terrine	Staphylococcus aureus Ad 163	Crayfish roe	Seeding 48h 4 °C	/
3871	Crayfish salad	Staphylococcus aureus Ad 163	Crayfish roe	Seeding 48h 4 °C	/

Sample no.	Product	Artificial inoculations-Strain	Origin	Stress applied	Stress evaluation
4770	Country terrine	Staphylococcus aureus Ad 165	Raw smoked pork belly	Seeding 48h 4 °C	/
5798	Quiche lorraine with smoked lardoons	Staphylococcus aureus Ad 165	Raw smoked pork belly	HT 10 min. 56 °C	2.4
4769	Caramel pork	Staphylococcus aureus Ad 166	Chicken thigh	Seeding 48h 4 °C	/
4774	Smoked duck breast	Staphylococcus aureus Ad 166	Chicken thigh	Seeding 48h 4 °C	/
6658	Flan	Staphylococcus aureus Ad 166	Chicken thigh	Seeding 48h 4 °C	/
7450	Fresh buckwheat pasta	Staphylococcus aureus Ad 166	Chicken	Seeding 48h 4 °C	/
7451	Fresh tagliatelles	Staphylococcus aureus Ad 166	Chicken	Seeding 48h 4 °C	/
7502	Apricot tart	Staphylococcus aureus Ad 166	Chicken	TT 10min. 56 °C	1.1
7503	Puff pastry	Staphylococcus aureus Ad 166	Chicken	TT 10min. 56 °C	1.1
4224	Tex Mex pork chops	Staphylococcus aureus Ad 167	Smoked pork belly	Seeding 48h 4 °C	/
4225	Provençale style grilled pork	Staphylococcus aureus Ad 167	Smoked pork belly	Seeding 48h 4 °C	/
4772	Perche sausage	Staphylococcus aureus Ad 167	Raw smoked pork belly	Seeding 48h 4 °C	/
4773	Rosette	Staphylococcus aureus Ad 167	Raw smoked pork belly	Seeding 48h 4 °C	/
5799	Bouchées à la reine	Staphylococcus aureus Ad 167	Raw smoked pork belly	HT 10 min. 56 °C	0.7
5795	Roast chicken sandwich	Staphylococcus aureus Ad 168	Minced poultry meat	HT 10 min. 56 °C	2.8
5797	Tagliatelles with fresh eggs	Staphylococcus aureus Ad 168	Minced poultry meat	HT 10 min. 56 °C	2.8
7722	Chicken salad sandwich	Staphylococcus aureus Ad 168	Minced poultry meat	Seeding 4 °C 48h	/
7723	Caesar salad	Staphylococcus aureus Ad 168	Minced poultry meat	Seeding 4 °C 48h	/
8083	Pasteurised whole liquid egg portion	Staphylococcus aureus Ad 168	Minced poultry meat	Spiking TT 10 min. 56 °C	0.43
8084	Pasteurised liquid egg portion	Staphylococcus aureus Ad 168	Minced poultry meat	Spiking TT 10 min. 56 °C	0.43
8087	Ham and cheese croissant	Staphylococcus aureus Ad 1711	Cheese	Spiking TT 10 min. 56 °C	0.54
3872	Black forest	Staphylococcus aureus Ad 467	Dairy product	Seeding 48h 4 °C	/
3873	Pasteurised milk	Staphylococcus aureus Ad 467	Dairy product	Seeding 48h 4 °C	/
4229	Shrimp egg rolls	Staphylococcus aureus Ad 899	Battered fish	Seeding 48h 4 °C	/
4230	Spicy prawns	Staphylococcus aureus Ad 899	Battered fish	Seeding 48h 4 °C	/
4231	Plain cooked shrimp	Staphylococcus aureus Ad 900	Grouper fillet	Seeding 48h 4 °C	/
5087	Raw octopus	Staphylococcus aureus Ad 900	Grouper fillet	Seeding 48h 4 °C	/
5088	Skinless whiting fillet	Staphylococcus aureus Ad 900	Grouper fillet	Seeding 48h 4 °C	/
4129	Pollack steak with lemon-rice-vegetables	Staphylococcus aureus Ad 901	Back of cod	Spiking TT 8min. 56 °C	0.89
4130	Salmon steak with mashed broccoli	Staphylococcus aureus Ad 901	Back of cod	Spiking TT 8min. 56 °C	0.89
6662	Chicken salad sandwich	Staphylococcus aureus Ad 902	Chinese ready to eat food	Seeding 48h 4 °C	/

Sample no.	Product	Artificial inoculations-Strain	Origin	Stress applied	Stress evaluation
6663	Paëlla	Staphylococcus aureus Ad 902	Chinese ready to eat food	Seeding 48h 4 °C	/
8085	Bouchées à la reine	Staphylococcus aureus Ad 902	Egg roll without pork	Spiking TT 10 min. 56 °C	0.31
8086	Leek tart	Staphylococcus aureus Ad 902	Egg roll without pork	Spiking TT 10 min. 56 °C	0.31
3874	Choux with Chantilly cream	Staphylococcus aureus Ad 904	Munster made with raw milk	Seeding 48h 4 °C	/
3875	Pasteurised Brie	Staphylococcus aureus Ad 904	Munster made with raw milk	Seeding 48h 4 °C	/
4133	Vanilla ice-cream	Staphylococcus aureus Ad 905	Munster made with raw milk	Spiking -20 °C	0.71
4134	Chocolate ice-cream	Staphylococcus aureus Ad 905	Munster made with raw milk	Spiking -20 °C	0.71
4226	Tiramisu	Staphylococcus aureus Ad 905	Munster made with raw milk	Seeding 48h 4 °C	/
4227	Panna cotta	Staphylococcus aureus Ad 905	Munster made with raw milk	Seeding 48h 4 °C	/
4541	Buttermilk	Staphylococcus aureus Ad 905	Munster made with raw milk	Seeding 48h 4 °C	/
4542	Pasteurised milk	Staphylococcus aureus Ad 905	Munster made with raw milk	Seeding 48h 4 °C	/
5091	Sausage meat	Staphylococcus aureus Ad 906	Merguez	Seeding 48h 4 °C	/
5092	Cured ham	Staphylococcus aureus Ad 906	Merguez	Seeding 48h 4 °C	/
4767	Beef bourguignon	Staphylococcus aureus Ad 907	Merguez	Seeding 48h 4 °C	/
4775	Pasteurised whole milk	Staphylococcus aureus Ad 908	Pressed cheese	Seeding 48h 4 °C	/
4776	Pasteurised buttermilk	Staphylococcus aureus Ad 908	Pressed cheese	Seeding 48h 4 °C	/
4777	Panna cotta	Staphylococcus aureus Ad 908	Pressed cheese	Seeding 48h 4 °C	/
6660	Ham and cheese pizza	Staphylococcus aureus Ad 908	Cheese	Seeding 48h 4 °C	/
6661	Three-cabbage salad, ham, comté cheese	Staphylococcus aureus Ad 908	Cheese	Seeding 48h 4 °C	/
4131	Bethmale made with raw milk	Staphylococcus aureus Ad 909	Pressed cheese	Spiking PS NaCl	0.28
4132	Mountain Tomme made with raw milk	Staphylococcus aureus Ad 909	Pressed cheese	Spiking PS NaCl	0.28
4228	Rice pudding	Staphylococcus aureus Ad 909	Pressed cheese	Seeding 48h 4 °C	/
4543	Pasteurised milk	Staphylococcus aureus Ad 909	Pressed cheese	Seeding 48h 4 °C	/
4544	Pasteurised milk	Staphylococcus aureus Ad 909	Pressed cheese	Seeding 48h 4 °C	/
8088	Couscous	Staphylococcus aureus Ad 910	Poultry	Spiking TT 10 min. 56 °C	0.36
8091	Basquaise chicken	Staphylococcus aureus Ad 910	Poultry	Spiking TT 10 min. 56 °C	0.36
6656	Shortcrust pastry	Staphylococcus aureus Ad 911	Poultry	Seeding 48h 4 °C	/
6657	Profiteroles	Staphylococcus aureus Ad 911	Poultry	Seeding 48h 4 °C	/
7449	Fresh wheat pasta	Staphylococcus aureus Ad 911	Poultry	Seeding 48h 4 °C	/
7501	Flan	Staphylococcus aureus Ad 911	Poultry	TT 10min. 56 °C	0.2

## Appendix 6 - Accuracy study: raw results

iii: Unreadable: plates unreadable due to the presence of significant secondary flora.

\*: < 4 colonies per plate

SPREAD METHOD														
MEAT AND POULTRY PRODUCTS														
Spl. no.	Product	ISO 6888-2 reference method♦				EASY STAPH alternative method 37 °C - Spread								Type
		Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	Coagulase	CFU/g	log CFU/g	CFU/plate	CFU/g	log CFU/g	
3772	Minced poultry meat	10	58	650	2.81	10	86	+	810	2.91	86	810	2.91	a
		100	13			100	3	+			3			
3774	Duck manchons	1000	75	77000	4.89	1000	54	+	56000	4.75	54	56000	4.75	a
		10000	10			10000	8	+			8			
3776	Chicken wings	1000	17	15000	4.18	1000	12	+	14000	4.15	12	14000	4.15	a
		10000	0			10000	3	+			3			
3777	Wings BBQ	10	1	10	1.00* (presence)	10	2	+	20	1.30*	2	20	1.30*	c
		100	0			100	1	+			1			
3779	Wings BBQ	10	1	10	1.00* (presence)	10	2	+	20	1.30*	2	20	1.30*	c
		100	0			100	0				0			
3780	Wings BBQ	10	2	20	1.30* (presence)	10	5	+	50	1.70	5	50	1.70	c
		100	0			100	1	+			1			
3781	Wings BBQ	10	2	20	1.30* (presence)	10	3	+	30	1.48*	1	10	1.00*	c
		100	0			100	1	+			2			
3782	Wings BBQ	10	4	40	1.60 Ne	10	2	+	20	1.30*	2	20	1.30*	c
		100	0			100	0				0			
3816	Raw sausage	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b
		100	0			100	0				0			
3817	Chicken thigh	10	0	<10	<1.00	10	2	+	20	1.30*	1	10	1.00*	a
		100	0			100	0				0			
3877	Turkey paupiette	10	8	80	1.90 Ne	10	6	+	60	1.78 Ne	6	60	1.78 Ne	a
		100	0			100	1	+			1			
3878	Turkey paupiette	10	2	20	1.30* (presence)	10	0		<10	<1.00	1	10	1.60*	a
		100	0			100	0				0			
3879	Turkey paupiette	10	4	40	1.60 Ne	10	4	+	40	1.60 Ne	4	40	1.60 Ne	a
		100	0			100	0				1			
3880	Sausages seasoned with herbs	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b
		100	0			100	0				0			
4222	Beef carpaccio with pistou sauce	10	11	100	2.00	10	3	+	30	1.48*	3	30	1.48*	a
		100	0			100	0				0			
4223	Beef carpaccio with basil	1000	6	6000	3.78 Ne	1000	3	+	3000	3.48*	3	3000	3.48*	a
		10000	0			10000	0				0			
4224	Tex Mex pork chops	10	84	800	2.90	10	55	+	590	2.77	71	780	2.89	a
		100	4			100	10	+			15			
4225	Provençale style grilled pork	100	79	7900	3.90	100	74	+	7500	3.88	74	7500	3.88	a
		1000	8			1000	8	+			8			
4303	Blanquette	10	1	10	1.00* (presence)	10	1	+	10	1.00*	1	10	1.00*	a
		100	0			100	0				0			
4304	Red meat	10	8	80	1.90 Ne	10	5	+	50	1.70 Ne	5	50	1.70 Ne	a
		100	2			100	1	+			1			

## SPREAD METHOD

MEAT AND POULTRY PRODUCTS														
Spl. no.	Product	ISO 6888-2 reference method♦				EASY STAPH alternative method 37 °C - Spread								Type
		Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	22 h reading				48 h reading			
4305	Raw ham	10	29	320	2.51	10	40	+	410	2.61	41	430	2.63	b
		100	6			100	5	+			6			
4337	Neck skin	10	35	370	2.57	10	26	+	270	2.43	32	330	2.52	a
		100	6			100	4	+			4			
4338	Neck skin	10	26	280	2.45	10	26	+	260	2.41	26	260	2.41	a
		100	5			100	2	+			2			
4339	Neck skin	10	9	90	1.95	10	1	+	10	1.00*	3	30	1.48*	a
		100	1			100	0				0			
4538	Duck breast with tomato	100	96	9200	3.96	100	>100		12000	4.08	>100	12000	4.08	c
		1000	5			1000	12	+			N'			
4539	Duck breast with tomato	100	>100	26000	4.41	100	>100		31000	4.49	>100	31000	4.49	c
		1000	26			1000	31	+			31			
4540	Sliced duck breast	1000	50	51000	4.71	1000	62	+	65000	4.81	64	67000	4.83	b
		10000	6			10000	10	+			10			
4651	Raw ham	10	12	120	2.08	10	9	+	90	1.95	11	130	2.11	b
		100	1			100	3	+			3			
4767	Beef bourguignon	100	28	2900	3.46	100	21	+	2200	3.34	22	2300	3.36	c
		1000	4			1000	3	+			3			
4768	Chicken curry	100	40	4000	3.60	100	30	+	2800	3.45	0	<100	<2.00	c
		1000	0			1000	1	+			0			
4769	Caramel pork	1000	36	35000	4.54	1000	29	+	34000	4.53	31	36000	4.56	c
		10000	3			10000	8	8			9			
4770	Country terrine	100	35	3400	3.53	100	22	+	2200	3.34	27	2600	3.41	c
		1000	2			1000	2	+			2			
4771	Cooked ham	100	19	1900	3.28	100	26	+	2500	3.40	7	640	2.81	c
		1000	2			1000	1	+			0			
4772	Perche sausage	100	ill	ill	ill	100	ill		ill	ill	ill	ill	ill	b
		1000	ill			1000	ill				ill			
4773	Rosette	100	8	800	2.90	100	4	+	400	2.60	ill	<1000	<3.00	b
		1000	0			1000	0				0			
4774	Smoked duck breast	100	36	3900	3.59	100	45	+	4400	3.64	47	4500	3.65	b
		1000	7			1000	3	+			3			
5091	Sausage meat	100	82	8000	3.90	100	72	+	7400	3.87	72	7400	3.87	b
		1000	6			1000	9	+			9			
5092	Cured ham	1000	39	37000	4.57	1000	58	+	58000	4.76	58	58000	4.76	b
		10000	2			10000	6	+			6			
5093	Cured ham	1000	>100	80000	4.90	1000	>100		210000	5.32	>100	210000	5.32	b
		10000	8			10000	21	+			21			
5094	Rosette	10000	48	1000000	6.00	10000	43	+	400000	5.60	43	400000	5.60	b
		100000	65			100000	1	+			1			

SPREAD METHOD															
DAIRY PRODUCTS															
Spl. no.	Product	ISO 6888-2 reference method♦				EASY STAPH alternative method 37 °C - Spread									Type
		Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	22 h reading			48 h reading			CFU/plate	CFU/g	
3769	Saint Nectaire made with raw milk	10	44	440	2.64	10	11	+	130	2.11	29	360	2.56	a	
		100	4			100	3	+			10				
3770	Unripened cheese made with raw cow's milk	100	18	1700	3.23	10	151	+	1600	3.20	161	2300	3.36	a	
		1000	1			100	23	+			23				
3771	Unripened cheese made with raw cow's milk	10	34	350	2.54	10	35	+	410	2.61	48	530	2.72	a	
		100	4			100	10	+			10				
3773	Reblochon made with raw milk	100	ill	<1000	<3.00	100	ill		<1000	<3.00	ill	<1000	<3.00	a	
		1000	0			1000	0				0				
3775	Saint Nectaire made with raw milk	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a	
		100	0			100	0				0				
3815	Reblochon made with raw milk	10	3	30	1.48* (presence)	10	7	+	70	1.85	7	70	1.85	a	
		100	1			100	1	+			1				
3872	Black forest	10	2	20	1.30* (presence)	10	1	+	10	1.00*	1	10	1.00*	c	
		100	0			100	1	+			3				
3873	Pasteurised milk	100	3	300	2.48* (presence)	100	6	+	600	2.78	6	600	2.78	b	
		1000	0			1000	1	+			1				
3874	Choux with Chantilly cream	100	16	1500	3.18	100	10	+	1000	3.00	10	1100	3.04	c	
		1000	1			1000	1	+			2				
3875	Pasteurised Brie	100	36	3500	3.54	100	71	+	6700	3.83	72	6900	3.84	b	
		1000	2			1000	3	+			4				
3876	Saint Nectaire made with raw milk	10	61	600	2.78	10	36	+	420	2.62	36	430	2.63	a	
		100	5			100	10	+			11				
4040	Raw milk	10	1	10	1.00* (presence)	10	2d	+/-	20	1.30*	1	10	1.00*	a	
		100	1			100	0				0				
4042	Tomme made with raw milk	10	5	50	1.70 Ne	10	8	+	80	1.90	8	80	1.90	a	
		100	2			100	0				0				
4131	Bethmale made with raw milk	1000	92	100000	5.00	1000	99	+	98000	4.99	101	100000	5.00	a	
		10000	19			10000	9	+			11				
4132	Mountain Tomme made with raw milk	1000	73	72000	4.86	1000	49	+	50000	4.70	49	51000	4.71	a	
		10000	6			10000	6	+			7				
4133	Vanilla ice-cream	100	>300	53000	4.72 N'	100	>100		24000	4.38 N'	>100	24000	4.38 N'	c	
		1000	53			1000	24	+			24				
4134	Chocolate ice-cream	100	135	13000	4.11	100	>100		11000	4.04 N'	>100	12000	4.08 N'	c	
		1000	11			1000	11	+			12				
4226	Tiramisu	10	13	120	2.08	10	13	+	130	2.11	14	140	2.15	c	
		100	0			100	1	+			1				
4227	Panna cotta	100	5	500	2.70 Ne	100	11	+	1000	3.00	11	1000	3.00	c	
		1000	1			1000	0				0				
4228	Rice pudding	1000	8	8000	3.90 Ne	1000	2	+	2000	3.30*	2	2000	3.30*	c	
		10000	0			10000	0				0				
4336	Goat's cheese	10	2	20	1.30* (presence)	10	9	+							

SPREAD METHOD															
DAIRY PRODUCTS															
Spl. no.	Product	ISO 6888-2 reference method♦				EASY STAPH alternative method 37 °C - Spread									Type
		Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	22 h reading			48 h reading			CFU/plate	CFU/g	
		100	0			100	0			Ne	0			Ne	
4542	Pasteurised milk	100	23	2400	3.38	100	51	+	5400	3.73	51	5400	3.73	b	
		1000	3			1000	8	+			8				
4543	Pasteurised milk	10	99	900	2.95	100	13	+	2000	3.30	13	2000	3.30	b	
		100	0			1000	9	+			9				
4544	Pasteurised milk	100	55	5400	3.73	100	24	+	2600	3.41	24	2600	3.41	b	
		1000	4			1000	5	+			5				
4775	Pasteurised whole milk	1000	10	9100	3.96	100	72	+	7000	3.85	88	8500	3.93	b	
		10000	0			1000	5	+			6				
4776	Pasteurised buttermilk	1000	37	35000	4.54	1000	20	+	20000	4.30	20	20000	4.30	b	
		10000	1			10000	2	+			2				
4777	Panna cotta	100	21	2000	3.30	100	83	+	8300	3.92	88	8900	3.95	c	
		1000	1			1000	8	+			Ne				
4992	Raw milk	10	22	240	2.38	10	78	+	740	2.87	80	760	2.88	a	
		100	4			100	3	+			3				

SPREAD METHOD															
SEAFOOD															
Spl. no.	Product	ISO 6888-2 reference method*				EASY STAPH alternative method 37 °C - Spread									Type
		Dilution	CFU/plate	CFU/g	log CFU/g	Dilution	CFU/plate	Coagulase	CFU/g	log CFU/g	CFU/plate	CFU/g	log CFU/g		
3814	Marinated raw salmon	10	44	440	2.64	10	46	+	500	2.70	34	390	2.59	b	
		100	4			100	9	+			9				
3868	Scallop terrine	100	12	1200	3.08	100	18	+	1600	3.20	19	1700	3.23	c	
		1000	1			1000	0				0				
3869	Salmon duo salad	10	8	80	1.90	10	6	+	60	1.78	6	60	1.78	c	
		100	0			100	0				0				
3870	Salmon terrine	100	95	9000	3.95	1000	12	+	12000	4.08	12	12000	4.08	c	
		1000	4			10000	1	+			1				
3871	Crayfish salad	100	4	400	2.60	10	97	+	1000	3.00	98	1000	3.00	c	
		1000	1			100	17	+			17				
4041	Raw salmon fillet	10	11	120	2.08	10	4	+	40	1.60	8	80	1.90	a	
		100	2			100	1	+			1				
4129	Pollack steak with lemon-rice-vegetables	1000	152	150000	5.18	1000	95	+	96000	4.98	>100	140000	5.15	c	
		10000	14			10000	11	+			14				
4130	Salmon steak with mashed broccoli	1000	34	39000	4.59	1000	55	+	57000	4.76	56	59000	4.77	c	
		10000	9			10000	8	+			9				
4229	Shrimp egg rolls	10	55	550	2.74	10	48	+	500	2.70	48	500	2.70	c	
		100	5			100	7	+			7				
4230	Spicy prawns	100	68	6500	3.81	100	57	+	6100	3.79	57	6100	3.79	c	
		1000	3			1000	10	+			10				
4231	Plain cooked shrimp	1000	58	56000	4.75	1000	50	+	50000	4.70	50	50000	4.70	c	
		10000	4			10000	5	+			5				
4302	Spring roll	10	13	120	2.08	10	1	+	10	1.00*	1	10	1.00*	c	
		100	0			100	1	+			1				
4545	Ling fillets	1000	73	73000	4.86	1000	>100		100000	5.00	>100	120000	5.08	a	
		10000	7			10000	10	+			12				
4546	Smoked herring with condiments	100	>100	16000	4.20	100	>100		21000	4.32	>100	21000	4.32	b	
		1000	16			1000	21	+			21				
4547	Smoked salmon	100	57	5500	3.74	100	76	+	7600	3.88	80	8200	3.91	b	
		1000	4			1000	8	+			10				
4548	Smoked trout	10	51	510	2.71	10	67	+	710	2.85	71	750	2.88	b	
		100	5			100	11	+			11				
4652	Swordfish steak	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a	
		100	0			100	0				0				
5085	Scampi	100	>100	36000	4.56	100	>100		37000	4.57	>100	37000	4.57	a	
		1000	36			1000	37	+			37				
5086	Raw prawn tails	1000	89	87000	4.94	1000	91	+	87000	4.94	91	87000	4.94	a	
		10000	7			10000	5	+			5				
5087	Raw octopus	10000	>100	1000000	6.00	10000	>100		2500000	6.40	>100	2500000	6.40	a	
		100000	10			100000	25	+			25				
5088	Skinless whiting fillet	1000	>100	630000	5.80	1000	>100		900000						

SPREAD METHOD														
EGG PRODUCTS														
Spl. no.	Product	ISO 6888-2 reference method♦				EASY STAPH alternative method 37 °C - Spread								Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log (CFU/g)	
3778	Custard cream	10	6	60	1.78 Ne	10	12	+	110	2.04	12	110	2.04	b
		100	0			100	0				0			
5796	Flan	10	64	640	2.81	10	75	+	770	2.89	93d	950	2.98	b
		100	6			100	10	+			11d			
5797	Tagliatelles with fresh eggs	100	20	1900	3.28	10	128	+	1400	3.15	172d	1900	3.28	c
		1000	1			100	29	+			35d			
6654	Pasteurised whole liquid egg portion	10	58	580	2.76	10	82	+	820	2.91	84	850	2.93	a
		100	6			100	8	+			9			
6655	Puff pastry	10	20	210	2.32	10	20	+	190	2.28	21	200	2.30	a
		100	3			100	1	+			1			
6656	Shortcrust pastry	100	113	11000	4.04	100	148	+	10000	4.00 N'	148	110000	5.04 N'	a
		1000	9			1000	10	+			11			
6657	Profiteroles	100	60	6100	3.79	100	78	+	7600	3.88	78	7700	3.89	b
		1000	7			1000	6	+			7			
6658	Flan	1000	42	43000	4.63	1000	63	+	63000	4.80	63	63000	4.80	b
		10000	5			10000	6	+			6			
7442	Flan	10	0	<10	<1.00	10	0		<10	<1.00	0	<1.00	<1.00	b
		100	0			100	0				0			
7443	Apple tart	10	0	<10	<1.00	10	0		<10	<1.00	0	<1.00	<1.00	b
		100	0			100	0				0			
7444	Apricot tart	10	0	<10	<1.00	10	0		<10	<1.00	0	<1.00	<1.00	b
		100	0			100	0				0			
7445	Coloured fresh pasta	100	8	800	2.90	10	38	+	450	2.65	ill	600	2.78 Ne	c
		1000	1			100	11	+			6			
7446	Fresh pasta	100	50	5500	3.74	10	113	+	3700	3.57 N'	ill	2400	3.38 N'	c
		1000	10			100	37	+			24			
7447	Puff pastry with butter	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a
		100	0			100	0				0			
7448	Puff pastry with butter	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a
		100	0			100	0				0			
7449	Fresh wheat pasta	10	>100	2300	3.36 N'	10	>100		3300	3.52	>100	3400	3.53 N'	c
		100	23			100	33	+			34			
7450	Fresh buckwheat pasta	10	>100	2600	3.41 N'	10	>100		500	2.70 Ne	>100	600	2.78 Ne	c
		100	26			100	5	+			6			
7451	Fresh tagliatelles	100	22	2300	3.36	100	19	+	1700	3.23	19	1700	3.23	c
		1000	3			1000	0				0			
7452	Fresh tagliatelles	100	93	9500	3.98	100	69	+	7100	3.85	69	7100	3.85	c
		1000	11			1000	9	+			9			
7501	Flan	100	>100	17000	4.23 N'	100	>100		21000	4.32	>100	22000	4.34	b
		1000	17			1000	21	+			22			
7502	Apricot tart	100	26	2500	3.40	100	34	+	4000	3.60	38	4500	3.65	

SPREAD METHOD														
COMPOSITE FOOD														
Spl. no.	Product	ISO 6888-2 reference method♦				EASY STAPH alternative method 37 °C - Spread								Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log (CFU/g)	
5794	Chicken curry	100	17	1600	3.20	10	101	+	1000	3.00	127d	1300	3.11	c
		1000	1			100	13	+			15d			a
5795	Roast chicken sandwich	10	55	580	2.76	10	45	+	470	2.67	99d	990	3.00	b
		100	9			100	7	+			10d			b
5798	Quiche lorraine with smoked lardoons	100	36	3600	3.56	100	75	+	7400	3.87	80	7900	3.90	b
		1000	4			1000	6	+			7			b
5799	Bouchées à la reine	100	12	1200	3.08	10	96	+	1100	3.04	110	1300	3.11	b
		1000	1			100	24	+			29			b
6659	Cheese and tomato pizza	10	29	280	2.45	10	17	+	230	2.36	17	230	2.36	b
		100	2			100	8	+			8			b
6660	Ham and cheese pizza	10	42	440	2.64	10	41	+	420	2.62	41	430	2.63	b
		100	6			100	6	+			6			b
6661	Three-cabbage salad, ham, comté cheese	100	47	4700	3.67	100	47	+	5200	3.72	47	5200	3.72	a
		1000	5			1000	10	+			10			a
6662	Chicken salad sandwich	1000	36	35000	4.54	1000	32	+	31000	4.49	32	31000	4.49	a
		10000	2			10000	2	+			2			a
6663	Paëlla	1000	84	81000	4.91	1000	134	+	120000	5.08	134	120000	5.08	c
		10000	5			10000	12	+			12			c
7681	Mixed vegetables	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a
		100	0			100	0				0			a
7682	Grated carrots	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a
		100	0			100	0				0			a
7683	Couscous	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	c
		100	0			100	0				0			c
7684	Ham and cheese croissants	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b
		100	0			100	0				0			b
7685	Hacao with Xiu Mai chicken	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	c
		100	0			100	0				0			c
7722	Chicken salad sandwich	100	46	4500	3.65	100	49	+	5000	3.70	51	5300	3.72	a
		1000	4			1000	6	+			7			a
7723	Caesar salad	100	44	4300	3.63	100	29	+	2900	3.46	30	3000	3.48	a
		1000	3			1000	3	+			3			a
7724	Toastie	100	87	8800	3.94	100	56	+	5900	3.77	59	6200	3.79	b
		1000	10			1000	9	+			9			b
8088	Couscous	100	>100	>100000	>5.00	100	>100	+	>100000	>5.00	>100	>100000	>5.00	c
		1000	>100			1000	>100	+			>100			c
8089	Steamed shrimp portions	100	68	7000	3.85	100	104	+	9600	3.98	106	9800	3.99	c
		1000	9			1000	2	+			2			c
8090	Seafood tagliatelles	100	66	6500	3.81	100	50	+	5600	3.75	51	5700	3.76	c
		1000	5			1000	12	+			12			c
8091	Basquaise chicken	1000	>100	370000	5.57	10000	>100	+	420000	5.62	>100	450000	5.65	c
		10000	37			10000	42	+			45			c

## POUR PLATE METHOD

## MEAT AND POULTRY PRODUCTS

Spl. no.	Product	ISO 6888-2 reference method♦				Alternative method: EASY STAPH 37 °C-Pour plate							Type	
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading			
							CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log (CFU/g)	
3772	Minced poultry meat	10	58	650	2.81	10	98	+	1100	3.04	ill	1800	3.26	a
		100	13			100	18	+			18			
3774	Duck manchons	1000	75	77000	4.89	1000	79	+	75000	4.88	ill	40000	4.60	a
		10000	10			10000	4	+			4			
3776	Chicken wings	1000	17	15000	4.18	1000	8	+	8000	3.90	8	8000	3.90	a
		10000	0			10000	1	+			1			
3777	Wings BBQ	10	1	10	1.00*	10	1	+	10	1.00*	1	10	1.00*	c
		100	0			100	0				0			
3779	Wings BBQ	10	1	10	1.00*	10	5	+	50	1.70	5	50	1.70	c
		100	0			100	0				0			
3780	Wings BBQ	10	2	20	1.30*	10	3	+	30	1.48*	4	40	1.60	c
		100	0			100	0				0			
3781	Wings BBQ	10	2	20	1.30*	10	2	+	20	1.30*	2	20	1.30*	c
		100	0			100	0				0			
3782	Wings BBQ	10	4	40	1.60	10	0		<10	<1.00	1	10	1.00*	c
		100	0			100	0				0			
3816	Raw sausage	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b
		100	0			100	0				0			
3817	Chicken thigh	10	0	<10	<1.00	10	4	+	40	1.60	4	40	1.60	a
		100	0			100	0				0			
3877	Turkey paupiette	10	8	80	1.90	10	12	+	110	2.04	12	110	2.04	a
		100	0			100	0				0			
3878	Turkey paupiette	10	2	20	1.30*	10	1	+	10	1.00*	1	10	1.00*	a
		100	0			100	0				0			
3879	Turkey paupiette	10	4	40	1.60	10	6	+	60	1.78	6	60	1.78	a
		100	0			100	1	+			1			
3880	Sausages seasoned with herbs	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b
		100	0			100	0				0			
4222	Beef carpaccio with pistou sauce	10	11	100	2.00	10	14	+	130	2.11	14	130	2.11	a
		100	0			100	0				0			
4223	Beef carpaccio with basil	1000	6	6000	3.78	1000	3	+	3000	3.48*	3	3000	3.48*	a
		10000	0			10000	1	+			1			
4224	Tex Mex pork chops	10	84	800	2.90	10	56	+	640	2.81	60	670	2.83	a
		100	4			100	14	+			14			
4225	Provençale style grilled pork	100	79	7900	3.90	100	64	+	6500	3.81	65	6600	3.82	a
		1000	8			1000	7	+			8			
4303	Blanquette	10	1	10	1.00*	10	1	+	10	1.00*	1	10	1.00*	a
		100	0			100	1	+			2			

## POUR PLATE METHOD

## **MEAT AND POULTRY PRODUCTS**

MEAT AND POULTRY PRODUCTS														
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Pour plate								
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading			
4304	Red meat	10	8	80	1.90	10	6	+	60	1.78	6	60	1.78	
		100	2		Ne	100	1	+		Ne			1	Ne
4305	Raw ham	10	29	320	2.51	10	18	+	200	2.30	19	210	2.32	
		100	6			100	4	+					4	
4337	Neck skin	10	35	370	2.57	10	31	+	290	2.46	28	260	2.41	
		100	6			100	1	+					1	
4338	Neck skin	10	26	280	2.45	10	41	+	400	2.60	27	260	2.41	
		100	5			100	3	+					2	
4339	Neck skin	10	9	90	1.95	10	7	+	70	1.85	7	70	1.85	
		100	1		Ne	100	0			Ne			0	Ne
4538	Duck breast with tomato	100	96	9200	3.96	100	81	+	8200	3.91	78	7900	3.90	
		1000	5			1000	9	+					9	
4539	Duck breast with tomato	100	>100	26000	4.41	100	>100		21000	4.32	>100	21000	4.32	
		1000	26			1000	21	+					21	N'
4540	Sliced duck breast	1000	50	51000	4.71	1000	45	+	42000	4.62	45	42000	4.62	
		10000	6			10000	1	+					1	
4651	Raw ham	10	12	120	2.08	10	9	+	90	1.95	8	80	1.90	
		100	1			100	1	+		Ne			1	Ne
4767	Beef bourguignon	100	28	2900	3.46	100	21	+	2000	3.30	27	2600	3.41	
		1000	4			1000	1	+					2	
4768	Chicken curry	100	40	4000	3.60	100	14	+	1500	3.18	26	2700	3.43	
		1000	0		Ne	1000	2	+					4	
4769	Caramel pork	1000	36	35000	4.54	1000	28	+	25000	4.40	28	25000	4.40	
		10000	3			10000	0						0	
4770	Country terrine	100	35	3400	3.53	100	20	+	2500	3.40	28	3200	3.51	
		1000	2			1000	7	+					7	
4771	Cooked ham	100	19	1900	3.28	100	29	+	2600	3.41	37	3500	3.54	
		1000	2			1000	0						1	
4772	Perche sausage	100	ill	ill	ill	100	ill		ill	ill	ill	ill	ill	
		1000	ill			1000	ill						ill	ill
4773	Rosette	100	8	800	2.90	100	4	+	400	2.60	4	400	2.60	
		1000	0		Ne	1000	0			Ne			4	Ne
4774	Smoked duck breast	100	36	3900	3.59	100	32	+	3300	3.52	33	3400	3.53	
		1000	7			1000	4	+					4	
5091	Sausage meat	100	82	8000	3.90	100	50	+	5200	3.72	50	5200	3.72	
		1000	6			1000	7	+					7	
5092	Cured ham	1000	39	37000	4.57	1000	40	+	43000	4.63	40	43000	4.63	
		10000	2			10000	7	+					7	
5093	Cured ham	1000	>100	80000	4.90	1000	>100		120000	5.08	>100	120000	5.08	
		10000	8			10000	12	+					12	
5094	Rosette	10000	48	1000000	6.00	10000	44	+	450000	5.65	45	460000	5.66	

# ADRIA Développement Summary report (Version 0) **EASY STAPH**

## POUR PLATE METHOD

## MEAT AND POULTRY PRODUCTS

Spl. no.	Product	ISO 6888-2 reference method*				Dilution	Alternative method: EASY STAPH 37 °C-Pour plate						Type	
		Dilution	CFU/plate	CFU/g	log (CFU/g)		22 h reading				72 h reading			
							CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log (CFU/g)	
		100000	65			100000	6	+			6			

## POUR PLATE METHOD

DAIRY PRODUCTS															
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Pour plate									Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading				
3769	Saint Nectaire made with raw milk	10	44	440	2.64	10	32	+	310	2.49	ill	500	2.70	a	
		100	4			100	2	+			5				
3770	Unripened cheese made with raw cow's milk	100	18	1700	3.23	10	>100	+	1400	3.15	ill	1400	3.15	a	
		1000	1			100	14	+			14				
3771	Unripened cheese made with raw cow's milk	10	34	350	2.54	10	31	+	330	2.52	31	330	2.52	a	
		100	4			100	5	+			5				
3773	Reblochon made with raw milk	100	ill	<1000	<3.00	100	ill		<1000	<3.00	ill	<1000	<3.00	a	
		1000	0			1000	0				0				
3775	Saint Nectaire made with raw milk	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a	
		100	0			100	0				0				
3815	Reblochon made with raw milk	10	3	30	1.48*	10	6	+	60	1.78	6	60	1.78	a	
		100	1			100	1	+			1				
3872	Black forest	10	2	20	1.30*	10	1	+	10	1.00*	2	20	1.30*	c	
		100	0			100	0				0				
3873	Pasteurised milk	100	3	300	2.48*	100	0		<100	<2.00	0	<100	<2.00	b	
		1000	0			1000	0				0				
3874	Choux with Chantilly cream	100	16	1500	3.18	100	12	+	1300	3.11	12	1300	3.11	c	
		1000	1			1000	2	+			2				
3875	Pasteurised Brie	100	36	3500	3.54	100	40	+	4000	3.60	42	4200	3.62	b	
		1000	2			1000	4	+			4				
3876	Saint Nectaire made with raw milk	10	61	600	2.78	10	53	+	490	2.69	ill	3000	3.48*	a	
		100	5			100	1	+			3				
4040	Raw milk	10	1	10	1.00*	10	0		<10	<1.00	0	<10	<1.00	a	
		100	1			100	0				0				
4042	Tomme made with raw milk	10	5	50	1.70	10	5	+	50	1.70	4d	40d	1.60d	a	
		100	2			100	0				0				
4131	Bethmale made with raw milk	1000	92	100000	5.00	1000	93	+	93000	4.97	79	83000	4.92	a	
		10000	19			10000	9	+			12				
4132	Mountain Tomme made with raw milk	1000	73	72000	4.86	1000	53	+	56000	4.75	50	53000	4.72	a	
		10000	6			10000	9	+			8				
4133	Vanilla ice-cream	100	>300	53000	4.72	100	>100		54000	4.73	>100	39000	4.59	c	
		1000	53			1000	54	+			39				
4134	Chocolate ice-cream	100	135	13000	4.11	100	111	+	11000	4.04	75	8000	3.90	c	
		1000	11			1000	13	+			13				
4226	Tiramisu	10	13	120	2.08	10	6	+	60	1.78	6	60	1.78	c	
		100	0			100	1	-			1				
4227	Panna cotta	100	5	500	2.70	100	9	+	900	2.95	9	1000	3.00	c	
		1000	1			1000	2	+			2				

## POUR PLATE METHOD

DAIRY PRODUCTS														
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Pour plate								Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading			
4228	Rice pudding	1000	8	8000	3.90 Ne	1000	2	+	2000	3.30*	2	2000	3.30*	c
		10000	0			10000	0				0			
4336	Goat's cheese	10	2	20	1.30*	10	3	+	30	1.48*	0	<10	1.00	a
		100	0			100	1	+			1			
4541	Buttermilk	10	10	91	1.96	10	8	+	80	1.90 Ne	9	90	1.95 Ne	b
		100	0			100	0				0			
4542	Pasteurised milk	100	23	2400	3.38	100	34	+	3600	3.56	34	3600	3.56	b
		1000	3			1000	6	+			6			
4543	Pasteurised milk	10	99	900	2.95	10	88	+	870	2.94	88	870	2.94	b
		100	0			10	8	+			8			
4544	Pasteurised milk	100	55	5400	3.73	100	36	+	3800	3.58	36	3800	3.58	b
		1000	4			1000	6	+			6			
4775	Pasteurised whole milk	1000	10	9100	3.96	100	100	+	9700	3.99	9(-3)	9000	3.95 Ne	b
		10000	0			1000	7	+			3 (-4)			
4776	Pasteurised buttermilk	1000	37	35000	4.54	1000	36	+	34000	4.53	39	37000	4.57	b
		10000	1			10000	1	+			2			
4777	Panna cotta	100	21	2000	3.30	100	8	+	800	2.90 Ne	8	800	2.90 Ne	c
		1000	1			1000	2	+			4			
4992	Raw milk	10	22	240	2.38	10	25	+	240	2.38	25	240	2.38	a
		100	4			100	1	+			1			

## POUR PLATE METHOD

SEAFOOD														
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Pour plate								Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading			
3814	Marinated raw salmon	10	44	440	2.64	10	51	+	500	2.70	51	600	2.78	b
		100	4			100	4	+			6			
3868	Scallop terrine	100	12	1200	3.08	100	3	+	300	2.48*	4	400	2.60	c
		1000	1			1000	2	+			2			
3869	Salmon duo salad	10	8	80	1.90	10	5	+	50	1.70	6	60	1.78	c
		100	0			100	0				0			
3870	Salmon terrine	100	95	9000	3.95	1000	12	+	11000	4.04	12	12000	4.08	c
		1000	4			10000	0				1			
3871	Crayfish salad	100	4	400	2.60	100	17	+	1700	3.23	17	1700	3.23	c
		1000	1			1000	2	+			2			
4041	Raw salmon fillet	10	11	120	2.08	10	8	+	80	1.90	8d	80d	1.90d	a
		100	2			100	1	+			1			
4129	Pollack steak with lemon-rice-vegetables	1000	152	150000	5.18	1000	101	+	100000	5.00	92	94000	4.97	c
		10000	14			10000	11	+			11			
4130	Salmon steak with mashed broccoli	1000	34	39000	4.59	1000	38	+	37000	4.57	35	35000	4.54	c
		10000	9			10000	3	+			4			
4229	Shrimp egg rolls	10	55	550	2.74	10	62	+	600	2.78	62	610	2.79	c
		100	5			100	4	+			5			
4230	Spicy prawns	100	68	6500	3.81	100	67	+	6500	3.81	67	6500	3.81	c
		1000	3			1000	5	+			5			
4231	Plain cooked shrimp	1000	58	56000	4.75	1000	84	+	80000	4.90	84	80000	4.90	c
		10000	4			10000	4	+			4			
4302	Spring roll	10	13	120	2.08	10	4	+	40	1.60	4	40	1.60	c
		100	0			100	1	+			1			
4545	Ling fillets	1000	73	73000	4.86	1000	87	+	86000	4.93	86	85000	4.93	a
		10000	7			10000	8	+			8			
4546	Smoked herring with condiments	100	>100	16000	4.20	100	>100		11000	4.04	>100	11000	4.04	b
		1000	16			1000	11	+			11			
4547	Smoked salmon	100	57	5500	3.74	100	61	+	6200	3.79	60	6100	3.79	b
		1000	4			1000	7	+			7			
4548	Smoked trout	10	51	510	2.71	10	54	+	500	2.70	55	510	2.71	b
		100	5			100	1	+			1			
4652	Swordfish steak	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a
		100	0			100	0				0			
5085	Scampi	100	>100	36000	4.56	100	>100		33000	4.52	>100	33000	4.52	a
		1000	36			1000	33	+			33			
5086	Raw prawn tails	1000	89	87000	4.94	1000	79	+	77000	4.89	80	80000	4.90	a
		10000	7			10000	6	+			8			
5087	Raw octopus	10000	>100	1000000	6.00	10000	>100		700000	5.85	>100	700000	5.85	a

## POUR PLATE METHOD

SEAFOOD														
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Pour plate								Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading			
5088	Skinless whiting fillet	100000	10			100000	7	+			7			a
		1000	>100	630000	5.80	1000	>100		590000	5.77	>100	590000	5.77	
		10000	63			10000	59	+			59			
5089	Pollack fillet	10000	47	450000	5.65	10000	57	+	560000	5.75	61	600000	5.78	a
		100000	2			100000	5	+			5			
5090	Chopped smoked salmon with dill and lemon	10000	>100	800000	5.90	10000	>100		1700000	6.23	>100	1700000	6.23	b
		10000				100000	17	+			17			
		100000	8											

## POUR PLATE METHOD

EGG PRODUCTS															
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Pour plate									Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading				
3778	Custard cream	10	6	60	1.78	10	0		<10	<1.00	0	<10	<1.00	b	
		100	0		Ne	100	0				0				
5796	Flan	10	64	640	2.81	10	50	+	500	2.70	58	570	2.76	b	
		100	6			100	5	+			5				
5797	Tagliatelles with fresh eggs	100	20	1900	3.28	10	83	+	810	2.91	86	850	2.93	c	
		1000	1			100	6	+			7				
6654	Pasteurised whole liquid egg portion	10	58	580	2.76	10	54	+	520	2.72	55	540	2.73	a	
		100	6			100	3	+			4				
6655	Puff pastry	10	20	210	2.32	10	10	+	110	2.04	10	110	2.04	a	
		100	3			100	2	+			2				
6656	Shortcrust pastry	100	113	11000	4.04	100	131	+	9000	3.95	132	11000	4.04	a	
		1000	9			1000	9	+			11				
6657	Profiteroles	100	60	6100	3.79	100	57	+	5600	3.75	57	5800	3.76	b	
		1000	7			1000	5	+			7				
6658	Flan	1000	42	43000	4.63	1000	41	+	44000	4.64	41	46000	4.66	b	
		10000	5			10000	7	+			10				
7442	Flan	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b	
		100	0			100	0				0				
7443	Apple tart	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b	
		100	0			100	0				0				
7444	Apricot tart	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b	
		100	0			100	0				0				
7445	Coloured fresh pasta	100	8	800	2.90	10	19	+	170	2.23	19	170	2.23	c	
		1000	1			100	0	+			0				
7446	Fresh pasta	100	50	5500	3.74	100	48	+	5100	3.71	48	5100	3.71	c	
		1000	10			1000	8	+			8				
7447	Puff pastry with butter	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a	
		100	0			100	0				0				
7448	Puff pastry with butter	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a	
		100	0			100	0				0				
7449	Fresh wheat pasta	10	>100	2300	3.36	10	>100	+	2400	3.38	>100	2400	3.38	c	
		100	23			100	24	+			24				
7450	Fresh buckwheat pasta	10	>100	2600	3.41	10	ill		2700	3.43	ill	2700	3.43	c	
		100	26			100	27	+			27				
7451	Fresh tagliatelles	100	22	2300	3.36	100	21	+	1900	3.28	21	1900	3.28	c	
		1000	3			1000	0				0				
7452	Fresh tagliatelles	100	93	9500	3.98	100	82	+	8300	3.92	82	8300	3.92	c	
		1000	11			1000	9	+			9				
7501	Flan	100	>100	17000	4.23	100	109	+	11000	4.04	109	11000	4.04	b	
		1000	17		N'	1000	8	+			8				

## POUR PLATE METHOD

EGG PRODUCTS													
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Pour plate							Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading			72 h reading			
7502	Apricot tart	100	26	2500	3.40	100	28	+	2800	3.45	30	3000	3.48
		1000	2			1000	3	+			3		
7503	Puff pastry	100	157	9000	3.95	100	141	+	6000	3.78	148	6000	3.78
		1000	9			1000	6	+			6		
7504	Shortcrust pastry	100	>100	16000	4.20	100	>100	+	10000	4.00	>100	10000	4.00
		1000	16			1000	10	+			10		

## POUR PLATE METHOD

COMPOSITE FOOD															
Spl. no.	Product	ISO 6888-2 reference method♦				Alternative method: EASY STAPH 37 °C-Pour plate									Type
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading				
5794	Chicken curry	100	17	1600	3.20	10	82	+	810	2.91	97	980	2.99	c	
		1000	1			100	7	+			11				
5795	Roast chicken sandwich	10	55	580	2.76	10	46	+	460	2.66	55	600	2.78	a	
		100	9			100	5	+			11				
5798	Quiche lorraine with smoked lardoons	100	36	3600	3.56	100	25	+	2500	3.40	32	3200	3.51	b	
		1000	4			1000	3	+			3				
5799	Bouchées à la reine	100	12	1200	3.08	100	10	+	910	2.96	16	1500	3.18	b	
		1000	1			1000	0	+			1				
6659	Cheese and tomato pizza	10	29	280	2.45	10	21	+	200	2.30	21	200	2.30	b	
		100	2			100	1	+			1				
6660	Ham and cheese pizza	10	42	440	2.64	10	53	+	510	2.71	53	510	2.71	b	
		100	6			100	3	+			3				
6661	Three-cabbage salad, ham, comté cheese	100	47	4700	3.67	100	43	+	4400	3.64	43	4500	3.65	a	
		1000	5			1000	5	+			6				
6662	Chicken salad sandwich	1000	36	35000	4.54	1000	28	+	27000	4.43	28	27000	4.43	a	
		10000	2			10000	2	+			2				
6663	Paëlla	1000	84	81000	4.91	1000	74	+	76000	4.88	74	76000	4.88	c	
		10000	5			10000	10	+			10				
7681	Mixed vegetables	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a	
		100	0			100	0				0				
7682	Grated carrots	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	a	
		100	0			100	0				0				
7683	Couscous	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	c	
		100	0			100	0				0				
7684	Ham and cheese croissants	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	b	
		100	0			100	0				0				
7685	Hacao with Xiu Mai chicken	10	0	<10	<1.00	10	0		<10	<1.00	0	<10	<1.00	c	
		100	0			100	0				0				
7722	Chicken salad sandwich	100	46	4500	3.65	100	49	+	4800	3.68	47	4500	3.65	a	
		1000	4			1000	4	+			3				
7723	Caesar salad	100	44	4300	3.63	100	39	+	3900	3.59	40	4000	3.60	a	
		1000	3			1000	4	+			4				
7724	Toastie	100	87	8800	3.94	100	75	+	7500	3.88	74	7500	3.88	b	
		1000	10			1000	8	+			8				
8088	Couscous	100	>100	>100000	>5.00	100	>100	+	>100000	>5.00	>100	>100000	>5.00	c	
		1000	>100			1000	>100	+			>100				
8089	Steamed shrimp portions	100	68	7000	3.85	100	85	+	8500	3.93	87	8700	3.94	c	
		1000	9			1000	9	+			9				
8090	Seafood tagliatelles	100	66	6500	3.81	100	73	+	6900	3.84	76	7200	3.86	c	
		1000	5			1000	3	+			3				
8091	Basquaise chicken</td														

## SPIRAL METHOD

MEAT AND POULTRY PRODUCTS														
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral								
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading			
3772	Minced poultry meat	10	58	650	2.81	10	20	+	2000	3.30	20	2000	3.30	Type a
		100	13											
3774	Duck manchons	1000	75	77000	4.89	100	56	+	56000	4.75	ill	ill	ill	a
		10000	10											
3776	Chicken wings	1000	17	15000	4.18	100	13	+	13000	4.11	4	4000	3.60 Ne	a
		10000	0											
3777	Wings BBQ	10	1	10	1.00*	10	0		<100	<2.00	0	<100	<2.00	c
		100	0											
3779	Wings BBQ	10	1	10	1.00*	10	2	+	200	2.30*	2	200	2.30*	c
		100	0											
3780	Wings BBQ	10	2	20	1.30*	10	0		<100	<2.00	0	<100	<2.00	c
		100	0											
3781	Wings BBQ	10	2	20	1.30*	10	2	+	200	2.30*	2	200	2.00*	c
		100	0											
3782	Wings BBQ	10	4	40	1.60 Ne	10	0		<100	<2.00	0	<100	<2.00	c
		100	0											
3816	Raw sausage	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00	b
		100	0											
3817	Chicken thigh	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00	a
		100	0											
3877	Turkey paupiette	10	8	80	1.90 Ne	10	0		<100	<2.00	0	<100	<2.00	a
		100	0											
3878	Turkey paupiette	10	2	20	1.30*	10	0		<100	<2.00	0	<100	<2.00	a
		100	0											
3879	Turkey paupiette	10	4	40	1.60 Ne	10	1	+	100	2.00*	1	100	2.00*	a
		100	0											
3880	Sausages seasoned with herbs	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00	b
		100	0											
4222	Beef carpaccio with pistou sauce	10	11	100	2.00	10	0		<100	<2.00	0	<100	<2.00	a
		100	0											
4223	Beef carpaccio with basil	1000	6	6000	3.78 Ne	10	75	+	7500	3.88	75	7500	3.88	a
		10000	0											
4224	Tex Mex pork chops	10	84	800	2.90	10	10	+	1000	3.00	10	1000	3.00	a
		100	4											
4225	Provençale style grilled pork	100	79	7900	3.90	10	73	+	7300	3.86	79	7300	3.86	a
		1000	8											
4303	Blanquette	10	1	10	1.00*	10	0		<100	<2.00	0	<100	<2.00	a
		100	0											
4304	Red meat	10	8	80	1.90 Ne	10	1	+	100	2.00*	1	100	2.00*	a
		100	2											

## SPIRAL METHOD

MEAT AND POULTRY PRODUCTS														
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral								
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading			
4305	Raw ham	10	29	320	2.51	10	7	+	700	2.85	7	700	2.85	
		100	6						Ne	0		Ne		
4337	Neck skin	10	35	370	2.57	10	1	+	100	2.00*	2	200	2.30*	
		100	6											
4338	Neck skin	10	26	280	2.45	10	1	+	100	2.00*	1	100	2.00*	
		100	5											
4339	Neck skin	10	9	90	1.95 Ne	10	0		<100	<2.00	0	<100	<2.00	
		100	1											
4538	Duck breast with tomato	100	96	9200	3.96	10	92	+	9200	3.96	91	9100	3.96	
		1000	5											
4539	Duck breast with tomato	100	>100	26000	4.41	10	55	+	31000	4.49	50	28000	4.45	
		1000	26											
4540	Sliced duck breast	1000	50	51000	4.71	100	59	+	59000	4.77	57	57000	4.76	
		10000	6											
4651	Raw ham	10	12	120	2.08	10	3	+	300	2.48*	3	300	2.48*	
		100	1											
4767	Beef bourguignon	100	28	2900	3.46	10	19	+	1900	3.28	19	1900	3.28	
		1000	4											
4768	Chicken curry	100	40	4000	3.60	10	28	+	2800	3.45	0	<100	<2.00	
		1000	0											
4769	Caramel pork	1000	36	35000	4.54	10	45	+	26000	4.41	47	27000	4.43	
		10000	3											
4770	Country terrine	100	35	3400	3.53	10	24	+	2400	3.38	27	2700	3.43	
		1000	2											
4771	Cooked ham	100	19	1900	3.28	10	26	+	2600	3.41	0	<100	<2.00	
		1000	2											
4772	Perche sausage	100	ill	ill	ill	10	ill		ill	ill	ill	ill	ill	
		1000	ill											
4773	Rosette	100	8	800	2.90 Ne	10	2	+	200	2.30*	0	<100	<2.00	
		1000	0											
4774	Smoked duck breast	100	36	3900	3.59	10	39	+	3900	3.59	39	3900	3.59	
		1000	7											
5091	Sausage meat	100	82	8000	3.90	10	59	+	5900	3.77	61	6100	3.79	
		1000	6											
5092	Cured ham	1000	39	37000	4.57	10	60	+	33000	4.52	60	33000	4.52	
		10000	2											
5093	Cured ham	1000	>100	80000	4.90	100	60	+	120000	5.08	60	120000	5.08	
		10000	8											
5094	Rosette	10000	48	1000000	6.00	100	44	+	430000	5.63	44	430000	5.63	
		100000	65											

## SPIRAL METHOD

## DAIRY PRODUCTS

Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
							CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log CFU/g
3769	Saint Nectaire made with raw milk	10	44	440	2.64	10	8	+	800	2.90 Ne	19	1900	3.28
		100	4										
3770	Unripened cheese made with raw cow's milk	100	18	1700	3.23	10	17	+	1700	3.23	17	1700	3.23
		1000	1										
3771	Unripened cheese made with raw cow's milk	10	34	350	2.54	10	0		<100	<2.00	0	<100	<2.00
		100	4										
3773	Reblochon made with raw milk	100	ill	<1000	<3.00	10	0		<100	<2.00	0	<100	<2.00
		1000	0										
3775	Saint Nectaire made with raw milk	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
3815	Reblochon made with raw milk	10	3	30	1.48*	10	2d	-	200	2.30*	0	<100	<2.00
		100	1										
3872	Black forest	10	2	20	1.30*	10	0		<100	<2.00	1	100	2.00*
		100	0										
3873	Pasteurised milk	100	3	300	2.48*	10	1	+	100	2.00*	4	400	2.60
		1000	0										Ne
3874	Choux with Chantilly cream	100	16	1500	3.18	10	12	+	1200	3.08	12	24000	4.38
		1000	1										
3875	Pasteurised Brie	100	36	3500	3.54	10	40	+	4000	3.60 Ne	40	40000	4.60
		1000	2										
3876	Saint Nectaire made with raw milk	10	61	600	2.78	10	4	+	400	2.60 Ne	7	700	2.85 Ne
		100	5										
4040	Raw milk	10	1	10	1.00*	10	1	+	100	2.00*	1	100	2.00*
		100	1										
4042	Tomme made with raw milk	10	5	50	1.70 Ne	10	3	+	300	2.48*	3	300	2.48*
		100	2										
4131	Bethmale made with raw milk	1000	92	100000	5.00	1000	9	+	90000	4.95 Ne	9	90000	4.95 Ne
		10000	19										
4132	Mountain Tomme made with raw milk	1000	73	72000	4.86	1000	5	+	50000	4.70 Ne	6	60000	4.78 Ne
		10000	6										
4133	Vanilla ice-cream	100	>300	53000	4.72	10	45	+	45000	4.65	52	50000	4.70
		1000	53										
4134	Chocolate ice-cream	100	135	13000	4.11	10	115	+	12000	4.08	121	12000	4.08
		1000	11										
4226	Tiramisu	10	13	120	2.08	10	2	+	200	2.30*	3	300	2.30*
		100	0										
4227	Panna cotta	100	5	500	2.70 Ne	10	9	+	900	2.95 Ne	9	900	2.95 Ne
		1000	1										
4228	Rice pudding	1000	8	8000	3.90	10	21	+	2100	3.32	21	2100	3.32

## SPIRAL METHOD

DAIRY PRODUCTS													
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
		10000	0		Ne								
4336	Goat's cheese	10	2	20	1.30*	10	0		<100	<2.00	0	<100	<2.00
		100	0										
4541	Buttermilk	10	10	91	1.96	10	1	+	100	2.00*	1	100	2.00*
		100	0										
4542	Pasteurised milk	100	23	2400	3.38	10	34	+	3400	3.53	34	3400	3.53
		1000	3										
4543	Pasteurised milk	10	99	900	2.95	10	2	+	200	2.30*	2	200	2.30*
		100	0										
4544	Pasteurised milk	100	55	5400	3.73	10	61	+	6100	3.79	61	6100	3.79
		1000	4										
4775	Pasteurised whole milk	1000	10	9100	3.96	10	89	+	8900	3.95	93	9300	3.97
		10000	0										
4776	Pasteurised buttermilk	1000	37	35000	4.54	10	48	+	27000	4.43	50	28000	4.45
		10000	1										
4777	Panna cotta	100	21	2000	3.30	10	8	+	800	2.90	8	800	2.90
		1000	1							Ne			Ne
4992	Raw milk	10	22	240	2.38	1	33	+	330	2.52	34	340	2.53
		100	4										

## SPIRAL METHOD

## SEAFOOD

Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
							CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log CFU/g
3814	Marinated raw salmon	10	44	440	2.64	10	7	+	700	2.85	5	500	2.70
		100	4						Ne			Ne	
3868	Scallop terrine	100	12	1200	3.08	10	10	+	1000	3.00	10	1000	3.00
		1000	1										
3869	Salmon duo salad	10	8	80	1.90 Ne	10	0		<100	<2.00	0	<100	<2.00
		100	0										
3870	Salmon terrine	100	95	9000	3.95	10	63	+	13000	4.11	63	13000	4.11
		1000	4										
3871	Crayfish salad	100	4	400	2.60 Ne	10	3	+	300	2.48*	3	300	2.48*
		1000	1										
4041	Raw salmon fillet	10	11	120	2.08	10	1	+	100	2.00*	1	100	2.00*
		100	2										
4129	Pollack steak with lemon-rice-vegetables	1000	152	150000	5.18	10	72	+	140000	5.15	77	150000	5.18
		10000	14										
4130	Salmon steak with mashed broccoli	1000	34	39000	4.59	10	42	+	24000	4.38	48	27000	4.43
		10000	9										
4229	Shrimp egg rolls	10	55	550	2.74	10	4	+	400	2.60	4	400	2.60
		100	5						Ne				
4230	Spicy prawns	100	68	6500	3.81	10	73	+	7300	3.86	73	7300	3.86
		1000	3										
4231	Plain cooked shrimp	1000	58	56000	4.75	100	56	+	56000	4.75	56	56000	4.75
		10000	4										
4302	Spring roll	10	13	120	2.08	10	0		<100	<2.00	0	<100	<2.00
		100	0										
4545	Ling fillets	1000	73	73000	4.86	10	48	+	93000	4.97	48	93000	4.97
		10000	7										
4546	Smoked herring with condiments	100	>100	16000	4.20	10	52	+	17000	4.23	51	17000	4.23
		1000	16										
4547	Smoked salmon	100	57	5500	3.74	10	65	+	6500	3.81	65	6500	3.81
		1000	4										
4548	Smoked trout	10	51	510	2.71	10	4	+	400	2.60	4	400	2.60
		100	5										
4652	Swordfish steak	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
5085	Scampi	100	>100	36000	4.56	10	67	+	13000	4.11	67	13000	4.11
		1000	36										
5086	Raw prawn tails	1000	89	87000	4.94	10	42	+	41000	4.61	42	41000	4.61
		10000	7										
5087	Raw octopus	10000	>100	1000000	6.00	100	66	+	1300000	6.11	66	1300000	6.11
		100000	10										

## SPIRAL METHOD

## SEAFOOD

Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
							CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log CFU/g
5088	Skinless whiting fillet	1000	>100	630000	5.80	100	70	+	690000	5.84	70	690000	5.84
		10000	63										
5089	Pollack fillet	10000	47	450000	5.65	100	57	+	570000	5.76	57	570000	5.76
		100000	2										
5090	Chopped smoked salmon with dill and lemon	10000	>100	800000	5.90	100	85	+	1700000	6.23	85	1700000	6.23
		100000	8										

Type  
a  
a  
b

## SPIRAL METHOD

EGG PRODUCTS													
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
3778	Custard cream	10	6	60	1.78 Ne	10	0		<100	<2.00	0	<100	<2.00
		100	0										
5796	Flan	10	64	640	2.81	10	7	+	700	2.85	9d	900	2.95
		100	6										
5797	Tagliatelles with fresh eggs	100	20	1900	3.28	10	21	+	2100	3.32	27d	2700	3.43
		1000	1										
6654	Pasteurised whole liquid egg portion	10	58	580	2.76	10	10	+	1000	3.00	11	1100	3.04
		100	6										
6655	Puff pastry	10	20	210	2.32	10	1	+	100	2.00*	3	300	2.48*
		100	3										
6656	Shortcrust pastry	100	113	11000	4.04	10	37	+	13000	4.11	47	16000	4.20
		1000	9										
6657	Profiteroles	100	60	6100	3.79	10	45	+	4500	3.65	49	4900	3.69
		1000	7										
6658	Flan	1000	42	43000	4.63	10	39	+	78000	4.89	47	95000	4.98
		10000	5										
7442	Flan	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7443	Apple tart	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7444	Apricot tart	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7445	Coloured fresh pasta	100	8	800	2.90	10	4	+	400	2.60 Ne	4	400	2.60
		1000	1										
7446	Fresh pasta	100	50	5500	3.74	10	22	+	2200	3.34	24	2400	3.38
		1000	10										
7447	Puff pastry with butter	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7448	Puff pastry with butter	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7449	Fresh wheat pasta	10	>100	2300	3.36	10	25	+	2500	3.40	25	2500	3.40
		100	23										
7450	Fresh buckwheat pasta	10	>100	2600	3.41	10	42	+	4200	3.62	44	4200	3.62
		100	26										
7451	Fresh tagliatelles	100	22	2300	3.36	10	17	+	1700	3.23	17	1700	3.23
		1000	3										
7452	Fresh tagliatelles	100	93	9500	3.98	10	42	+	4200	3.62	54	5400	3.73
		1000	11										
7501	Flan	100	>100	17000	4.23	10	64	+	6400	3.81	49	4900	3.69
		1000	17										

## SPIRAL METHOD

EGG PRODUCTS													
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
7502	Apricot tart	100	26	2500	3.40	10	53	+	5300	3.72	56	5600	3.75
		1000	2										
7503	Puff pastry	100	157	9000	3.95	10	115	+	23000	4.36	56 (4)	31000	4.49
		1000	9										
7504	Shortcrust pastry	100	>100	16000	4.20	10	70	+	14000	4.15	65	23000	4.36
		1000	16										
8083	Pasteurised whole liquid egg portion	100	>100	18000	4.26 N'	10	47	+	15000	4.18	50	16000	4.20
		1000	18										
8084	Pasteurised liquid egg portion	100	>100	14000	4.15 N'	10	38	+	21000	4.32	36	20000	4.30
		1000	14										

Type  
b  
a  
a  
a  
a

## SPIRAL METHOD

## COMPOSITE FOOD

Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
							CFU/plate	Coagulase	CFU/g	log (CFU/g)	CFU/plate	CFU/g	log CFU/g
5794	Chicken curry	100	17	1600	3.20	10	8	+	800	2.90	15d	1500	3.18
		1000	1										
5795	Roast chicken sandwich	10	55	580	2.76	10	6	+	600	2.78	18d	1800	3.26
		100	9										
5798	Quiche lorraine with smoked lardoons	100	36	3600	3.56	10	22	+	2200	3.34	33	3300	3.52
		1000	4										
5799	Bouchées à la reine	100	12	1200	3.08	10	18	+	1800	3.26	20	2000	3.30
		1000	1										
6659	Cheese and tomato pizza	10	29	280	2.45	10	2	+	200	2.30*	2	200	2.30*
		100	2										
6660	Ham and cheese pizza	10	42	440	2.64	10	5	+	500	2.70	5	500	2.70
		100	6							Ne			Ne
6661	Three-cabbage salad, ham, comté cheese	100	47	4700	3.67	10	53	+	5300	3.72	54	5400	3.73
		1000	5										
6662	Chicken salad sandwich	1000	36	35000	4.54	10	60	+	33000	4.52	68	38000	4.58
		10000	2										
6663	Paella	1000	84	81000	4.91	10	57	+	110000	5.04	65	130000	5.11
		10000	5										
7681	Mixed vegetables	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7682	Grated carrots	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7683	Couscous	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7684	Ham and cheese croissants	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7685	Hacao with Xiu Mai chicken	10	0	<10	<1.00	10	0		<100	<2.00	0	<100	<2.00
		100	0										
7722	Chicken salad sandwich	100	46	4500	3.65	10	24	+	2400	3.38	24	2400	3.38
		1000	4										
7723	Caesar salad	100	44	4300	3.63	10	44	+	4400	3.64	44	4400	3.64
		1000	3										
7724	Toastie	100	87	8800	3.94	10	109	+	1100	3.04	109	1100	3.04
		1000	10										
8085	Bouchées à la reine	1000	>100	110000	5.04 N'	100	63	+	130000	5.11	65	130000	5.11
		10000	11										
8086	Leek tart	1000	>100	320000	5.51 N'	100	57	+	570000	5.76	60	590000	5.77
		10000	32										
8087	Ham and cheese croissant	1000	85	87000	4.94	100	48	+	96000	4.98	60	120000	5.08

**SPIRAL METHOD**

COMPOSITE FOOD													
Spl. no.	Product	ISO 6888-2 reference method*				Alternative method: EASY STAPH 37 °C-Spiral							
		Dilution	CFU/plate	CFU/g	log (CFU/g)	Dilution	22 h reading				72 h reading		
		10000	11										
8088	Couscous	100	>100	>100000	>5.00	10	35	+	120000	5.08	67	130000	5.11
		1000	>100										
8089	Steamed shrimp portions	100	68	7000	3.85	10	50	+	10000	4.00	49	9600	3.98
		1000	9										
8090	Seafood tagliatelles	100	66	6500	3.81	10	39	+	3900	3.59	39	3900	3.59
		1000	5										
8091	Basquaise chicken	1000	>100	370000	5.57 N'	10	102	+	190000	5.28	104	190000	5.28
		10000	37										

Type  
c  
c  
c  
c

## Appendix 7 - Accuracy study: summary

Spl. no.	ISO 6888-2 reference method♦	EASY STAPH alternative method						Type	
		22h			48h		72 h		
		Spreading	Pour plate	Spiral	Spreading	Pour plate	Spiral		
3772	2.81	2.91	3.04	3.30	2.91	3.26	3.30	a	
3774	4.89	4.75	4.88	4.75	4.75	4.60	ill	a	
3776	4.18	4.15	3.90	4.11	4.15	3.90	3.60	a	
3777	1.00*	1.30*	1.00*	<2.00	1.30*	1.00*	<2.00	c	
3779	1.00*	1.30*	1.70	2.30*	1.30*	1.70	2.30*	c	
3780	1.30*	1.70	1.48*	<2.00	1.70	1.60	<2.00	c	
3781	1.30*	1.48*	1.30*	2.30*	1.00*	1.30*	2.00*	c	
3782	1.60	1.30*	<1.00	<2.00	1.30*	1.00*	<2.00	c	
3816	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00	<2.00	b	
3817	<1.00	1.30*	1.60	<2.00	1.00*	1.60	<2.00	a	
3877	1.90	1.78	2.04	<2.00	1.78	2.04	<2.00	a	
3878	1.30*	<1.00	1.00*	<2.00	1.60*	1.00*	<2.00	a	
3879	1.60	1.60	1.78	2.00*	1.60	1.78	2.00*	a	
3880	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00	<2.00	b	
4222	2.00	1.48*	2.11	<2.00	1.48*	2.11	<2.00	a	
4223	3.78	3.48*	3.48*	3.88	<3.60	3.48*	3.88	a	
4224	2.90	2.77	2.81	3.00	2.89	2.83	3.00	a	
4225	3.90	3.88	3.81	3.86	3.88	3.82	3.86	a	
4303	1.00*	1.00*	1.00*	<2.00	1.00*	1.00*	<2.00	a	
4304	1.90	1.70	1.78	2.00*	1.70	1.78	2.00*	a	
4305	2.51	2.61	2.30	2.85	2.63	2.32	2.85	b	
4337	2.57	2.43	2.46	2.00*	2.52	2.41	2.30*	a	
4338	2.45	2.41	2.60	2.00*	2.41	2.41	2.00*	a	
4339	1.95	1.00*	1.85	<2.00	1.48*	1.85	<2.00	a	
4538	3.96	4.08	3.91	3.96	4.08	3.90	3.96	c	
4539	4.41	4.49	4.32	4.49	4.49	4.32	4.45	c	
4540	4.71	4.81	4.62	4.77	4.83	4.62	4.76	b	
4651	2.08	1.95	1.95	2.48*	2.11	1.90	2.48*	b	
4767	3.46	3.34	3.30	3.28	3.36	3.41	3.28	c	
4768	3.60	3.45	3.18	3.45	<2.00	3.43	<2.00	c	
4769	4.54	4.53	4.40	4.41	4.56	4.40	4.43	c	
4770	3.53	3.34	3.40	3.38	3.41	3.51	3.43	c	
4771	3.28	3.40	3.41	3.41	2.81	3.54	<2.00	c	
4772	ill	ill	ill	ill	ill	ill	ill	b	
4773	2.90	2.60	2.60	2.30*	<3.00	2.60	<2.00	b	
4774	3.59	3.64	3.52	3.59	3.65	3.53	3.59	b	
5091	3.90	3.87	3.72	3.77	3.87	3.72	3.79	b	
5092	4.57	4.76	4.63	4.52	4.76	4.63	4.52	b	
5093	4.90	5.32	5.08	5.08	5.32	5.08	5.08	b	
5094	6.00	5.60	5.65	5.63	5.60	5.66	5.63	b	

♦

Spl. no.	ISO 6888-2 reference method♦	EASY STAPH alternative method						Type	
		22h			48h		72 h		
		Spreading	Pour plate	Spiral	Spreading	Pour plate	Spiral		
3769	2.64	2.11	2.49	2.90	2.56	2.70	3.28	a	
3770	3.23	3.20	3.15	3.23	3.36	3.15	3.23	a	
3771	2.54	2.61	2.52	<2.00	2.72	2.52	<2.00	a	
3773	<3.00	<3.00	<3.00	<2.00	<3.00	<3.00	<2.00	a	
3775	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00	<2.00	a	
3815	1.48*	1.85	1.78	2.30*	1.85	1.78	<2.00	a	
3872	1.30*	1.00*	1.00*	<2.00	1.00*	1.30*	2.00*	c	
3873	2.48*	2.78	<2.00	2.00*	2.78	<2.00	2.60	b	
3874	3.18	3.00	3.11	3.08	3.04	3.11	4.38	c	
3875	3.54	3.83	3.60	3.60	3.84	3.62	4.60	b	
3876	2.78	2.62	2.69	2.60	2.63	3.48*	2.85	a	
4040	1.00*	1.30*	<1.00	2.00*	1.00*	<1.00	2.00*	a	
4042	1.70	1.90	1.70	2.48*	1.90	1.60d	2.48*	a	
4131	5.00	4.99	4.97	4.95	5.00	4.92	4.95	a	
4132	4.86	4.70	4.75	4.70	4.71	4.72	4.78	a	
4133	4.72	4.38	4.73	4.65	4.38	4.59	4.70	c	
4134	4.11	4.04	4.04	4.08	4.08	3.90	4.08	c	
4226	2.08	2.11	1.78	2.30*	2.15	1.78	2.30*	c	
4227	2.70	3.00	2.95	2.95	3.00	3.00	2.95	c	
4228	3.90	3.30*	3.30*	3.32	3.30*	3.30*	3.32	c	
4336	1.30*	1.95	1.48*	<2.00	1.96	1.00	<2.00	a	
4541	1.96	1.60	1.90	2.00*	1.70	1.95	2.00*	b	
4542	3.38	3.73	3.56	3.53	3.73	3.56	3.53	b	
4543	2.95	3.30	2.94	2.30*	3.30	2.94	2.30*	b	
4544	3.73	3.41	3.58	3.79	3.41	3.58	3.79	b	
4775	3.96	3.85	3.99	3.95	3.93	3.95	3.97	b	
4776	4.54	4.30	4.53	4.43	4.30	4.57	4.45	b	
4777	3.30	3.92	2.90	2.90	3.95	2.90	2.90	c	
4992	2.38	2.87	2.38	2.52	2.88	2.38	2.53	a	
3814	2.64	2.70	2.70	2.85	2.59	2.78	2.70	b	
3868	3.08	3.20	2.48*	3.00	3.23	2.60	3.00	c	
3869	1.90	1.78	1.70	<2.00	1.78	1.78	<2.00	c	
3870	3.95	4.08	4.04	4.11	4.08	4.08	4.11	c	
3871	2.60	3.00	3.23	2.48*	3.00	3.23	2.48*	c	
4041	2.08	1.60	1.90	2.00*	1.90	1.90d	2.00*	a	
4129	5.18	4.98	5.00	5.15	5.15	4.97	5.18	c	
4130	4.59	4.76	4.57	4.38	4.77	4.54	4.43	c	
4229	2.74	2.70	2.78	2.60	2.70	2.79	2.60	c	
4230	3.81	3.79	3.81	3.86	3.79	3.81	3.86	c	
4231	4.75	4.70	4.90	4.75	4.70	4.90	4.75	c	
4302	2.08	1.00*	1.60	<2.00	1.00*	1.60	<2.00	c	
4545	4.86	5.00	4.93	4.97	5.08	4.93	4.97	a	
4546	4.20	4.32	4.04	4.23	4.32	4.04	4.23	b	
4547	3.74	3.88	3.79	3.81	3.91	3.79	3.81	b	

Spl. no.	ISO 6888-2 reference method♦	EASY STAPH alternative method						Type	
		22h			48h		72 h		
		Spreading	Pour plate	Spiral	Spreading	Pour plate	Spiral		
4548	2.71	2.85	2.70	2.60	2.88	2.71	2.60	b	
4652	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00	<2.00	a	
5085	4.56	4.57	4.52	4.11	4.57	4.52	4.11	a	
5086	4.94	4.94	4.89	4.61	4.94	4.90	4.61	a	
5087	6.00	6.40	5.85	6.11	6.40	5.85	6.11	a	
5088	5.80	5.95	5.77	5.84	5.95	5.77	5.84	a	
5089	5.65	5.76	5.75	5.76	5.76	5.78	5.76	a	
5090	5.90	6.08	6.23	6.23	6.08	6.23	6.23	b	
3778	1.78	2.04	<1.00	<2.00	2.04	<1.00	<2.00	b	
5796	2.81	2.89	2.70	2.85	2.98	2.76	2.95	b	
5797	3.28	3.15	2.91	3.32	3.28	2.93	3.43	c	
6654	2.76	2.91	2.72	3.00	2.93	2.73	3.04	a	
6655	2.32	2.28	2.04	2.00*	2.30	2.04	2.48*	a	
6656	4.04	4.00	3.95	4.11	5.04	4.04	4.20	a	
6657	3.79	3.88	3.75	3.65	3.89	3.76	3.69	b	
6658	4.63	4.80	4.64	4.89	4.80	4.66	4.98	b	
7442	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00	<2.00	b	
7443	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00	<2.00	b	
7444	<1.00	<1.00	<1.00	<2.00	<1.00	<1.00	<2.00	b	
5794	3.20	3.00	2.91	2.90	3.11	2.99	3.18	c	
5795	2.76	2.67	2.66	2.78	3.00	2.78	3.26	a	
5798	3.56	3.87	3.40	3.34	3.90	3.51	3.52	b	
5799	3.08	3.04	2.96	3.26	3.11	3.18	3.30	b	
6659	2.45	2.36	2.30	2.30*	2.36	2.30	2.30*	b	
6660	2.64	2.62	2.71	2.70	2.63	2.71	2.70	b	
6661	3.67	3.72	3.64	3.72	3.72	3.65	3.73	a	
6662	4.54	4.49	4.43	4.52	4.49	4.43	4.58	a	
6663	4.91	5.08	4.88	5.04	5.08	4.88	5.11	c	

## Appendix 8 - Accuracy study: statistical calculations - Spread method

Category	Type	Spl. No.	Spread method - Incubation: 22h											
			Log CFU/g		Mean	Difference	Cannot be interpreted		Cannot be interpreted <4		Corrected mean	Difference corrected	Mean <4	Difference <4
			Alternative method	Alternative method			Corrected	Corrected						
1	a	3772	2.81	2.91	2.86	0.10				#N/A			#N/A	
	a	3774	4.89	4.75	4.82	-0.14				#N/A			#N/A	
	a	3776	4.18	4.15	4.16	-0.03				#N/A			#N/A	
	a	3817	0.00		#N/A		1.30			0.65	1.30		#N/A	
	a	3877	1.90	1.78	1.84	-0.12				#N/A			#N/A	
	a	3878	1.30		#N/A		0.00			0.65	-1.30		#N/A	
	a	3879	1.60	1.60	1.60	0.00				#N/A			#N/A	
	a	4222	2.00		#N/A				1.48	#N/A		1.74	0.52	
	a	4223	3.78		#N/A				3.48	#N/A		3.63	-0.30	
	a	4224	2.90	2.77	2.84	-0.13				#N/A			#N/A	
	a	4225	3.90	3.88	3.89	-0.02				#N/A			#N/A	
	a	4303	1.00		#N/A				1.00	#N/A		1.00	0.00	
	a	4304	1.90	1.70	1.80	-0.20				#N/A			#N/A	
	a	4337	2.57	2.43	2.50	-0.14				#N/A			#N/A	
	a	4338	2.45	2.41	2.43	-0.03				#N/A			#N/A	
	a	4339	1.95		#N/A				1.00	#N/A		1.48	-0.95	
	b	3816	0.00		#N/A		0.00			0.00	0.00		#N/A	
	b	3880	0.00		#N/A		0.00			0.00	0.00		#N/A	
	b	4305	2.51	2.61	2.56	0.11				#N/A			#N/A	
	b	4540	4.71	4.81	4.76	0.10				#N/A			#N/A	
	b	4651	2.08	1.95	2.02	-0.12				#N/A			#N/A	
	b	4773	2.90	2.60	2.75	-0.30				#N/A			#N/A	
	b	4774	3.59	3.64	3.62	0.05				#N/A			#N/A	
	b	5091	3.90	3.87	3.89	-0.03				#N/A			#N/A	
	b	5092	4.57	4.76	4.67	0.20				#N/A			#N/A	
	b	5093	4.90	5.32	5.11	0.42				#N/A			#N/A	
	b	5094	6.00	5.60	5.80	-0.40				#N/A			#N/A	
	c	3777	1.00		#N/A				1.30	#N/A		1.15	0.30	
	c	3779	1.00		#N/A				1.30	#N/A		1.15	0.30	
	c	3780	1.30		#N/A				1.70	#N/A		1.50	0.40	
	c	3781	1.30		#N/A				1.48	#N/A		1.39	0.18	
	c	3782	1.60		#N/A				1.30	#N/A		1.45	-0.30	
	c	4538	3.96	4.08	4.02	0.12				#N/A			#N/A	
	c	4539	4.41	4.49	4.45	0.08				#N/A			#N/A	
	c	4767	3.46	3.34	3.40	-0.12				#N/A			#N/A	
	c	4768	3.60	3.45	3.52	-0.15				#N/A			#N/A	
	c	4769	4.54	4.53	4.54	-0.01				#N/A			#N/A	
	c	4770	3.53	3.34	3.44	-0.19				#N/A			#N/A	
	c	4771	3.28	3.40	3.34	0.12				#N/A			#N/A	
Mean of differences - category 1			D1			-0.03								
Standard deviation of differences - category 1			SD1			0.17								
2	a	3769	2.64	2.11	2.38	-0.53				#N/A			#N/A	
	a	3770	3.23	3.20	3.22	-0.03				#N/A			#N/A	
	a	3771	2.54	2.61	2.58	0.07				#N/A			#N/A	
	a	3773	2.00		#N/A		2.00			2.00	0.00		#N/A	
	a	3775	0.00		#N/A		0.00			0.00	0.00		#N/A	
	a	3815	1.48		#N/A				1.85	#N/A		1.66	0.37	
	a	3876	2.78	2.62	2.70	-0.15				#N/A			#N/A	
	a	4040	1.00		#N/A				1.30	#N/A		1.15	0.30	
	a	4042	1.70	1.90	1.80	0.20				#N/A			#N/A	
	a	4131	5.00	4.99	5.00	-0.01				#N/A			#N/A	
	a	4132	4.86	4.70	4.78	-0.16				#N/A			#N/A	
	a	4336	1.30		#N/A				1.95	#N/A		1.63	0.65	
	a	4992	2.38	2.87	2.62	0.49				#N/A			#N/A	
	b	3873	2.48		#N/A				2.78	#N/A		2.63	0.30	
	b	3875	3.54	3.83	3.69	0.28				#N/A			#N/A	
	b	4541	1.96	1.60	1.78	-0.36				#N/A			#N/A	
	b	4542	3.38	3.73	3.56	0.35				#N/A			#N/A	
	b	4543	2.95	3.30	3.13	0.35				#N/A			#N/A	
	b	4544	3.73	3.41	3.57	-0.32				#N/A			#N/A	
	b	4775	3.96	3.85	3.90	-0.11				#N/A			#N/A	
	b	4776	4.54	4.30	4.42	-0.24				#N/A			#N/A	
	c	3872	1.30		#N/A				1.00	#N/A		1.15	-0.30	
	c	3874	3.18	3.00	3.09	-0.18				#N/A			#N/A	
	c	4133	4.72	4.38	4.55	-0.34				#N/A			#N/A	
	c	4134	4.11	4.04	4.08	-0.07				#N/A			#N/A	
	c	4226	2.08	2.11	2.10	0.03				#N/A			#N/A	
	c	4227	2.70	3.00	2.85	0.30				#N/A			#N/A	
	c	4228	3.90		#									

Category	Type	Spl. No.	Spread method - Incubation: 22h									
			Log CFU/g		Mean	Difference	Cannot be interpreted		Cannot be interpreted <4		Corrected mean	Difference corrected
Mean of differences - category 3		D3	Alternative method	Alternative method			Corrected	Interpreted	<4	<4		
Standard deviation of differences - category 3		SD3			0.19							
4	a	6654	2.76	2.91	2.84	0.15				#N/A		#N/A
	a	6655	2.32	2.28	2.30	-0.04				#N/A		#N/A
	a	6656	4.04	4.00	4.02	-0.04				#N/A		#N/A
	a	7447	0.00		#N/A		0			0.00	0.00	#N/A
	a	7448	0.00		#N/A		0			0.00	0.00	#N/A
	a	7503	3.95	4.04	4.00	0.09				#N/A		#N/A
	a	7504	4.20	3.76	3.98	-0.45				#N/A		#N/A
	b	3778	1.78		#N/A		0			0.89	-1.78	#N/A
	b	5796	2.81	2.89	2.85	0.08				#N/A		#N/A
	b	6657	3.79	3.88	3.83	0.10				#N/A		#N/A
	b	6658	4.63	4.80	4.72	0.17				#N/A		#N/A
	b	7442	0.00		#N/A		0			0.00	0.00	#N/A
	b	7443	0.00		#N/A		0			0.00	0.00	#N/A
	b	7444	0.00		#N/A		0			0.00	0.00	#N/A
	b	7501	4.23	4.32	4.28	0.09				#N/A		#N/A
	b	7502	3.40	3.60	3.50	0.20				#N/A		#N/A
	c	5797	3.28	3.15	3.21	-0.13				#N/A		#N/A
	c	7445	2.90	2.65	2.78	-0.25				#N/A		#N/A
	c	7446	3.74	3.57	3.65	-0.17				#N/A		#N/A
	c	7449	3.36	3.52	3.44	0.16				#N/A		#N/A
	c	7450	3.41	2.70	3.06	-0.72				#N/A		#N/A
	c	7451	3.36	3.23	3.30	-0.13				#N/A		#N/A
	c	7452	3.98	3.85	3.91	-0.13				#N/A		#N/A
Mean of differences - category 4		D4			-0.06							
Standard deviation of differences - category 4		SD4			0.24							
5	a	5795	2.76	2.67	2.72	-0.09				#N/A		#N/A
	a	6661	3.67	3.72	3.69	0.04				#N/A		#N/A
	a	6662	4.54	4.49	4.52	-0.05				#N/A		#N/A
	a	7681	0.00		#N/A		0			0.00	0.00	#N/A
	a	7682	0.00		#N/A		0			0.00	0.00	#N/A
	a	7722	3.65	3.70	3.68	0.05				#N/A		#N/A
	a	7723	3.63	3.46	3.55	-0.17				#N/A		#N/A
	b	5798	3.56	3.87	3.71	0.31				#N/A		#N/A
	b	5799	3.08	3.04	3.06	-0.04				#N/A		#N/A
	b	6659	2.45	2.36	2.40	-0.09				#N/A		#N/A
	b	6660	2.64	2.62	2.63	-0.02				#N/A		#N/A
	b	7684	0.00		#N/A		0			0.00	0.00	#N/A
	b	7724	3.94	3.77	3.86	-0.17				#N/A		#N/A
	c	5794	3.20	3.00	3.10	-0.20				#N/A		#N/A
	c	6663	4.91	5.08	4.99	0.17				#N/A		#N/A
	c	7683	0.00		#N/A		0.00			0.00	0.00	#N/A
	c	7685	0.00		#N/A		0.00			0.00	0.00	#N/A
	c	8088	6.00		#N/A		6.00			6.00	0.00	#N/A
	c	8089	3.85	3.98	3.91	0.14				#N/A		#N/A
	c	8090	3.81	3.75	3.78	-0.06				#N/A		#N/A
	c	8091	5.57	5.62	5.60	0.06				#N/A		#N/A
Mean of differences - category 5		D5			-0.01							
Standard deviation of differences - category 5		SD5			0.14							
Mean of differences - all categories		Dall			-0.01							
Standard deviation of differences - all categories		SDAll			0.22							

β=95%  
 n all  
 T(0.05;70)=  
 Mean (minimum value)  
 Mean (maximum value)

100	1.9842169	Upper limit
0.434073385	0.00	Lower limit
7.00	0.43	Linear

Category	Type	Spl. No.	Spread method - Incubation: 48h									
			Log CFU/g		Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Mean corrected	Difference corrected	Mean <4	Difference <4
			Reference method	Alternative method								
1	a	3772	2.81	2.91	2.86	0.10			#N/A		#N/A	
	a	3774	4.89	4.75	4.82	-0.14			#N/A		#N/A	
	a	3776	4.18	4.15	4.16	-0.03			#N/A		#N/A	
	a	3817	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	3877	1.90	1.78	1.84	-0.12			#N/A		#N/A	
	a	3878	1.30		#N/A			1.60	#N/A		1.45	0.30
	a	3879	1.60	1.60	1.60	0.00			#N/A		#N/A	
	a	4222	2.00		#N/A			1.48	#N/A		1.74	-0.52
	a	4223	3.78		#N/A		2.60		3.19	-1.18	#N/A	
	a	4224	2.90	2.89	2.90	-0.01			#N/A		#N/A	
	a	4225	3.90	3.88	3.89	-0.02			#N/A		#N/A	
	a	4303	1.00		#N/A			1.00	#N/A		1.00	0.00
	a	4304	1.90	1.70	1.80	-0.20			#N/A		#N/A	
	a	4337	2.57	2.52	2.54	-0.05			#N/A		#N/A	
	a	4338	2.45	2.41	2.43	-0.03			#N/A		#N/A	
	a	4339	1.95		#N/A			1.48	#N/A		1.72	-0.47
	b	3816	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	3880	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	4305	2.51	2.63	2.57	0.13			#N/A		#N/A	
	b	4540	4.71	4.83	4.77	0.12			#N/A		#N/A	
	b	4651	2.08	2.11	2.10	0.03			#N/A		#N/A	
	b	4773	2.90		#N/A		2.00		2.45	-0.90	#N/A	
	b	4774	3.59	3.65	3.62	0.06			#N/A		#N/A	
	b	5091	3.90	3.87	3.89	-0.03			#N/A		#N/A	
	b	5092	4.57	4.76	4.67	0.20			#N/A		#N/A	
	b	5093	4.90	5.32	5.11	0.42			#N/A		#N/A	
	b	5094	6.00	5.60	5.80	-0.40			#N/A		#N/A	
	c	3777	1.00		#N/A			1.30	#N/A		1.15	0.30
	c	3779	1.00		#N/A			1.30	#N/A		1.15	0.30
	c	3780	1.30		#N/A			1.70	#N/A		1.50	0.40
	c	3781	1.30		#N/A			1.00	#N/A		1.15	-0.30
	c	3782	1.60		#N/A			1.30	#N/A		1.45	-0.30
	c	4538	3.96	4.08	4.02	0.12			#N/A		#N/A	
	c	4539	4.41	4.49	4.45	0.08			#N/A		#N/A	
	c	4767	3.46	3.36	3.41	-0.10			#N/A		#N/A	
	c	4768	3.60		#N/A		1.00		2.30	-2.60	#N/A	
	c	4769	4.54	4.56	4.55	0.01			#N/A		#N/A	
	c	4770	3.53	3.41	3.47	-0.12			#N/A		#N/A	
	c	4771	3.28	2.81	3.04	-0.47			#N/A		#N/A	
Mean of differences - category 1			D1			-0.02						
Standard deviation of differences - category 1			SD1			0.18						
2	a	3769	2.64	2.56	2.60	-0.09			#N/A		#N/A	
	a	3770	3.23	3.36	3.30	0.13			#N/A		#N/A	
	a	3771	2.54	2.72	2.63	0.18			#N/A		#N/A	
	a	3773	2.00		#N/A		2.00		2.00	0.00	#N/A	
	a	3775	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	3815	1.48		#N/A			1.85	#N/A		1.66	0.37
	a	3876	2.78	2.63	2.71	-0.14			#N/A		#N/A	
	a	4040	1.00		#N/A			1.00	#N/A		1.00	0.00
	a	4042	1.70	1.90	1.80	0.20			#N/A		#N/A	
	a	4131	5.00	5.00	5.00	0.00			#N/A		#N/A	
	a	4132	4.86	4.71	4.78	-0.15			#N/A		#N/A	
	a	4336	1.30	1.96	1.63	0.66			#N/A		#N/A	
	a	4992	2.38	2.88	2.63	0.50			#N/A		#N/A	
	b	3873	2.48		#N/A			2.78	#N/A		2.63	0.30
	b	3875	3.54	3.84	3.69	0.29			#N/A		#N/A	
	b	4541	1.96	1.70	1.83	-0.26			#N/A		#N/A	
	b	4542	3.38	3.73	3.56	0.35			#N/A		#N/A	
	b	4543	2.95	3.30	3.13	0.35			#N/A		#N/A	
	b	4544	3.73	3.41	3.57	-0.32			#N/A		#N/A	
	b	4775	3.96	3.93	3.94	-0.03			#N/A		#N/A	
	b	4776	4.54	4.30	4.42	-0.24			#N/A		#N/A	
	c	3872	1.30		#N/A		1.00		#N/A		1.15	-0.30
	c	3874	3.18	3.04	3.11	-0.13			#N/A		#N/A	
	c	4133	4.72	4.38	4.55	-0.34			#N/A		#N/A	
	c	4134	4.11	4.08	4.10	-0.03			#N/A		#N/A	
	c	4226	2.08	2.15	2.11	0.07			#N/A		#N/A	
	c	4227	2.70	3.00	2.85	0.30			#N/A		#N/A	
	c	4228	3.90		#N/A			3.30	#N/A		3.60	-0.60
	c	4777	3.30	3.95	3.63	0.65			#N/A		#N/A	
Mean of differences - category 2			D2			0.09						
Standard deviation of differences - category 2			SD2			0.30						
3	a	4041	2.08	1.90	1.99	-0.18			#N/A		#N/A	
	a	4545	4.86	5.08	4.97	0.22			#N/A		#N/A	
	a	4652	0.00		#N/A		0.00					

Category	Type	Spl. No.	Spread method - Incubation: 48h									
			Log CFU/g		Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Mean corrected	Difference corrected	Mean <4	Difference <4
			Reference method	Alternative method								
4	a	6654	2.76	2.93	2.85	0.17			#N/A		#N/A	
	a	6655	2.32	2.30	2.31	-0.02			#N/A		#N/A	
	a	6656	4.04	5.04	4.54	1.00			#N/A		#N/A	
	a	7447	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7448	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7503	3.95	4.20	4.08	0.25			#N/A		#N/A	
	a	7504	4.20	4.00	4.10	-0.20			#N/A		#N/A	
	b	3778	1.78	2.04	1.91	0.26			#N/A		#N/A	
	b	5796	2.81	2.98	2.89	0.17			#N/A		#N/A	
	b	6657	3.79	3.89	3.84	0.10			#N/A		#N/A	
	b	6658	4.63	4.80	4.72	0.17			#N/A		#N/A	
	b	7442	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7443	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7444	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7501	4.23	4.34	4.29	0.11			#N/A		#N/A	
	b	7502	3.40	3.65	3.53	0.26			#N/A		#N/A	
	c	5797	3.28	3.28	3.28	0.00			#N/A		#N/A	
	c	7445	2.90	2.78	2.84	-0.12			#N/A		#N/A	
	c	7446	3.74	3.38	3.56	-0.36			#N/A		#N/A	
	c	7449	3.36	3.53	3.45	0.17			#N/A		#N/A	
	c	7450	3.41	2.78	3.10	-0.64			#N/A		#N/A	
	c	7451	3.36	3.23	3.30	-0.13			#N/A		#N/A	
	c	7452	3.98	3.85	3.91	-0.13			#N/A		#N/A	
Mean of differences - category 4			D4			0.10						
Standard deviation of differences - category 4			SD4			0.14						
5	a	5795	2.76	3.00	2.88	0.23			#N/A		#N/A	
	a	6661	3.67	3.72	3.69	0.04			#N/A		#N/A	
	a	6662	4.54	4.49	4.52	-0.05			#N/A		#N/A	
	a	7681	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7682	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7722	3.65	3.72	3.69	0.07			#N/A		#N/A	
	a	7723	3.63	3.48	3.56	-0.16			#N/A		#N/A	
	b	5798	3.56	3.90	3.73	0.34			#N/A		#N/A	
	b	5799	3.08	3.11	3.10	0.03			#N/A		#N/A	
	b	6659	2.45	2.36	2.40	-0.09			#N/A		#N/A	
	b	6660	2.64	2.63	2.64	-0.01			#N/A		#N/A	
	b	7684	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7724	3.94	3.79	3.87	-0.15			#N/A		#N/A	
	c	5794	3.20	3.11	3.16	-0.09			#N/A		#N/A	
	c	6663	4.91	5.08	4.99	0.17			#N/A		#N/A	
	c	7683	0.00		#N/A		0.00		0.00	0.00	#N/A	
	c	7685	0.00		#N/A		0.00		0.00	0.00	#N/A	
	c	8088	6.00		#N/A		6.00		6.00	0.00	#N/A	
	c	8089	3.85	3.99	3.92	0.15			#N/A		#N/A	
	c	8090	3.81	3.76	3.78	-0.06			#N/A		#N/A	
	c	8091	5.57	5.65	5.61	0.09			#N/A		#N/A	
Mean of differences - category 5			D5			0.03						
Standard deviation of differences - category 5			SD5			0.14						
Mean of differences - all categories			Dall			0.05						
Standard deviation of differences - all categories			SDAll			0.23						

n all: 100  
 $\beta=95\%$ : T(0.025;73)= 1.9842169  
 Mean (minimum value): 0.468230882  
 Mean (maximum value): 7.00  
 Upper limit: 0.52  
 Lower limit: -0.42  
 Linear: 0.05  
 0.05

## Appendix 9 - Accuracy study: statistical calculations - Pour plate method

Category	Type	Spl. No.	Pour plate method - Incubation: 22h									
			Log CFU/g		Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Mean corrected	Difference corrected	Mean <4	Difference <4
1	a	3772	2.81	3.04	2.93	0.23			#N/A		#N/A	
	a	3774	4.89	4.88	4.88	-0.01			#N/A		#N/A	
	a	3776	4.18	3.90	4.04	-0.27			#N/A		#N/A	
	a	3817	0.00		#N/A		1.60		0.80	1.60	#N/A	
	a	3877	1.90	2.04	1.97	0.14			#N/A		#N/A	
	a	3878	1.30		#N/A			1.00	#N/A		1.15	-0.30
	a	3879	1.60	1.78	1.69	0.18			#N/A		#N/A	
	a	4222	2.00	2.11	2.06	0.11			#N/A		#N/A	
	a	4223	3.78		#N/A			3.48	#N/A		3.63	-0.30
	a	4224	2.90	2.81	2.85	-0.10			#N/A		#N/A	
	a	4225	3.90	3.81	3.86	-0.08			#N/A		#N/A	
	a	4303	1.00		#N/A			1.00	#N/A		1.00	0.00
	a	4304	1.90	1.78	1.84	-0.12			#N/A		#N/A	
	a	4337	2.57	2.46	2.52	-0.11			#N/A		#N/A	
	a	4338	2.45	2.60	2.52	0.15			#N/A		#N/A	
	a	4339	1.95	1.85	1.90	-0.11			#N/A		#N/A	
	b	3816	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	3880	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	4305	2.51	2.30	2.40	-0.20			#N/A		#N/A	
	b	4540	4.71	4.62	4.67	-0.08			#N/A		#N/A	
	b	4651	2.08	1.95	2.02	-0.12			#N/A		#N/A	
	b	4773	2.90	2.60	2.75	-0.30			#N/A		#N/A	
	b	4774	3.59	3.52	3.55	-0.07			#N/A		#N/A	
	b	5091	3.90	3.72	3.81	-0.19			#N/A		#N/A	
	b	5092	4.57	4.63	4.60	0.07			#N/A		#N/A	
	b	5093	4.90	5.08	4.99	0.18			#N/A		#N/A	
	b	5094	6.00	5.65	5.83	-0.35			#N/A		#N/A	
	c	3777	1.00		#N/A			1.00	#N/A		1.00	0.00
	c	3779	1.00		#N/A			1.70	#N/A		1.35	0.70
	c	3780	1.30		#N/A			1.48	#N/A		1.39	0.18
	c	3781	1.30		#N/A			1.30	#N/A		1.30	0.00
	c	3782	1.60		#N/A		0.00		0.80	-1.60	#N/A	
	c	4538	3.96	3.91	3.94	-0.05			#N/A		#N/A	
	c	4539	4.41	4.32	4.37	-0.09			#N/A		#N/A	
	c	4767	3.46	3.30	3.38	-0.16			#N/A		#N/A	
	c	4768	3.60	3.18	3.39	-0.43			#N/A		#N/A	
	c	4769	4.54	4.40	4.47	-0.15			#N/A		#N/A	
	c	4770	3.53	3.40	3.46	-0.13			#N/A		#N/A	
	c	4771	3.28	3.41	3.35	0.14			#N/A		#N/A	
Mean of differences - category 1			D1			-0.07						
Standard deviation of differences - category 1			SD1			0.17						
2	a	3769	2.64	2.49	2.57	-0.15			#N/A		#N/A	
	a	3770	3.23	3.15	3.19	-0.08			#N/A		#N/A	
	a	3771	2.54	2.52	2.53	-0.03			#N/A		#N/A	
	a	3773	2.00		#N/A		2.00		2.00	0.00	#N/A	
	a	3775	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	3815	1.48		#N/A			1.78	#N/A		1.63	0.30
	a	3876	2.78	2.69	2.73	-0.09			#N/A		#N/A	
	a	4040	1.00		#N/A			1.78	#N/A		1.39	0.78
	a	4042	1.70	1.70	1.70	0.00			#N/A		#N/A	
	a	4131	5.00	4.97	4.98	-0.03			#N/A		#N/A	
	a	4132	4.86	4.75	4.80	-0.11			#N/A		#N/A	
	a	4336	1.30		#N/A			1.48	#N/A		1.39	0.18
	a	4992	2.38	2.38	2.38	0.00			#N/A		#N/A	
	b	3873	2.48		#N/A		1.00		1.74	-1.48	#N/A	
	b	3875	3.54	3.60	3.57	0.06			#N/A		#N/A	
	b	4541	1.96	1.90	1.93	-0.06			#N/A		#N/A	
	b	4542	3.38	3.56	3.47	0.18			#N/A		#N/A	
	b	4543	2.95	2.94	2.95	-0.01			#N/A		#N/A	
	b	4544	3.73	3.58	3.66	-0.15			#N/A		#N/A	
	b	4775	3.96	3.99	3.97	0.03			#N/A		#N/A	
	b	4776	4.54	4.53	4.54	-0.01			#N/A		#N/A	
	c	3872	1.30		#N/A		0.00		0.65	-1.30	#N/A	
	c	3874	3.18	3.11	3.15	-0.06			#N/A		#N/A	
	c	4133	4.72	4.73	4.73	0.01			#N/A		#N/A	
	c	4134	4.11	4.04	4.08	-0.07			#N/A		#N/A	
	c	4226	2.08	1.78	1.93	-0.30			#N/A		#N/A	
	c	4227	2.70	2.95	2.83	0.26			#N/A		#N/A	
	c	4228	3.90		#N/A			3.30	#N/A		3.60	-0.60
	c	4777	3.30	2.90	3.10	-0.40			#N/A		#N/A	
Mean of differences - category 2			D2			-0.05						
Standard deviation of differences - category 2			SD2			0.14						
3	a	4041	2.08	1.90	1.99	-0.18			#N/A		#N/A	
	a	4545	4.86	4.93	4.90	0.07			#N/A		#N/A	
	a	4652	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	5085	4.56	4.52</								

Category	Type	Spl. No.	Pour plate method - Incubation: 22h									
			Log CFU/g		Mean	Difference	Cannot be interpreted		Cannot be interpreted <4		Mean corrected	Difference corrected
			Reference method	Alternative method			Corrected	<4	Mean corrected	Difference corrected		
4	a	6654	2.76	2.72	2.74	-0.05			#N/A		#N/A	
	a	6655	2.32	2.04	2.18	-0.28			#N/A		#N/A	
	a	6656	4.04	3.95	4.00	-0.09			#N/A		#N/A	
	a	7447	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7448	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7503	3.95	3.78	3.87	-0.18			#N/A		#N/A	
	a	7504	4.20	4.00	4.10	-0.20			#N/A		#N/A	
	b	3778	1.78		#N/A		0.00		0.89	-1.78	#N/A	
	b	5796	2.81	2.70	2.75	-0.11			#N/A		#N/A	
	b	6657	3.79	3.75	3.77	-0.04			#N/A		#N/A	
	b	6658	4.63	4.64	4.64	0.01			#N/A		#N/A	
	b	7442	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7443	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7444	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7501	4.23	4.04	4.14	-0.19			#N/A		#N/A	
	b	7502	3.40	3.45	3.42	0.05			#N/A		#N/A	
	c	5797	3.28	2.91	3.09	-0.37			#N/A		#N/A	
	c	7445	2.90	2.23	2.57	-0.67			#N/A		#N/A	
	c	7446	3.74	3.71	3.73	-0.03			#N/A		#N/A	
	c	7449	3.36	3.38	3.37	0.02			#N/A		#N/A	
	c	7450	3.41	3.43	3.42	0.02			#N/A		#N/A	
	c	7451	3.36	3.28	3.32	-0.08			#N/A		#N/A	
	c	7452	3.98	3.92	3.95	-0.06			#N/A		#N/A	
Mean of differences - category 4			D4			-0.13						
Standard deviation of differences - category 4			SD4			0.18						
5	a	5795	2.76	2.66	2.71	-0.10			#N/A		#N/A	
	a	6661	3.67	3.64	3.66	-0.03			#N/A		#N/A	
	a	6662	4.54	4.43	4.49	-0.11			#N/A		#N/A	
	a	7681	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7682	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	7722	3.65	3.68	3.67	0.03			#N/A		#N/A	
	a	7723	3.63	3.59	3.61	-0.04			#N/A		#N/A	
	b	5798	3.56	3.40	3.48	-0.16			#N/A		#N/A	
	b	5799	3.08	2.96	3.02	-0.12			#N/A		#N/A	
	b	6659	2.45	2.30	2.37	-0.15			#N/A		#N/A	
	b	6660	2.64	2.71	2.68	0.06			#N/A		#N/A	
	b	7684	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	7724	3.94	3.88	3.91	-0.07			#N/A		#N/A	
	c	5794	3.20	2.91	3.06	-0.30			#N/A		#N/A	
	c	6663	4.91	4.88	4.89	-0.03			#N/A		#N/A	
	c	7683	0.00		#N/A		0.00		0.00	0.00	#N/A	
	c	7685	0.00		#N/A		0.00		0.00	0.00	#N/A	
	c	8088	6.00		#N/A		6.00		6.00	0.00	#N/A	
	c	8089	3.85	3.93	3.89	0.08			#N/A		#N/A	
	c	8090	3.81	3.84	3.83	0.03			#N/A		#N/A	
	c	8091	5.57	5.30	5.43	-0.27			#N/A		#N/A	
Mean of differences - category 5			D5			-0.08						
Standard deviation of differences - category 5			SD5			0.11						
Mean of differences - all categories			Dall			-0.06						
Standard deviation of differences - all categories			SDAll			0.17						

$\beta=95\%$   
 $n \text{ all}$   
 $T(0.05; 70) =$   
 Mean (minimum value)  
 Mean (maximum value)

102  
 1.98373095  
 0.34092096

0.00

7.00

0.28

0.28

Upper limit

-0.40

Lower limit

-0.40

Linear

-0.06

-0.06

Category	Type	Spl. No.	Pour plate method - Incubation: 72h									
			Log CFU/g		Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Corrected mean	Corrected difference	Mean <4	Difference <4
			Reference method	Alternative method								
1	a	3772	2.81	3.26	3.03	0.44			#N/A		#N/A	
	a	3774	4.89	4.60	4.74	-0.28			#N/A		#N/A	
	a	3776	4.18	3.90	4.04	-0.27			#N/A		#N/A	
	a	3817	0.00		#N/A		1.60		0.80	1.60	#N/A	
	a	3877	1.90	2.04	1.97	0.14			#N/A		#N/A	
	a	3878	1.30		#N/A			1.00	#N/A		1.15	-0.30
	a	3879	1.60	1.78	1.69	0.18			#N/A		#N/A	
	a	4222	2.00	2.11	2.06	0.11			#N/A		#N/A	
	a	4223	3.78		#N/A			3.48	#N/A		3.63	-0.30
	a	4224	2.90	2.83	2.86	-0.08			#N/A		#N/A	
	a	4225	3.90	3.82	3.86	-0.08			#N/A		#N/A	
	a	4303	1.00		#N/A			1.00	#N/A		1.00	0.00
	a	4304	1.90	1.78	1.84	-0.12			#N/A		#N/A	
	a	4337	2.57	2.41	2.49	-0.15			#N/A		#N/A	
	a	4338	2.45	2.41	2.43	-0.03			#N/A		#N/A	
	a	4339	1.95	1.85	1.90	-0.11			#N/A		#N/A	
	b	3816	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	3880	0.00		#N/A		0.00		0.00	0.00	#N/A	
	b	4305	2.51	2.32	2.41	-0.18			#N/A		#N/A	
	b	4540	4.71	4.62	4.67	-0.08			#N/A		#N/A	
	b	4651	2.08	1.90	1.99	-0.18			#N/A		#N/A	
	b	4773	2.90	2.60	2.75	-0.30			#N/A		#N/A	
	b	4774	3.59	3.53	3.56	-0.06			#N/A		#N/A	
	b	5091	3.90	3.72	3.81	-0.19			#N/A		#N/A	
	b	5092	4.57	4.63	4.60	0.07			#N/A		#N/A	
	b	5093	4.90	5.08	4.99	0.18			#N/A		#N/A	
	b	5094	6.00	5.66	5.83	-0.34			#N/A		#N/A	
	c	3777	1.00		#N/A			1.00	#N/A		1.00	0.00
	c	3779	1.00		#N/A			1.70	#N/A		1.35	0.70
	c	3780	1.30		#N/A			1.60	#N/A		1.45	0.30
	c	3781	1.30		#N/A			1.30	#N/A		1.30	0.00
	c	3782	1.60		#N/A			1.00	#N/A		1.30	-0.60
	c	4538	3.96	3.90	3.93	-0.07			#N/A		#N/A	
	c	4539	4.41	4.32	4.37	-0.09			#N/A		#N/A	
	c	4767	3.46	3.41	3.44	-0.05			#N/A		#N/A	
	c	4768	3.60	3.43	3.52	-0.17			#N/A		#N/A	
	c	4769	4.54	4.40	4.47	-0.15			#N/A		#N/A	
	c	4770	3.53	3.51	3.52	-0.03			#N/A		#N/A	
	c	4771	3.28	3.54	3.41	0.27			#N/A		#N/A	
Mean of differences - category 1			D1			-0.06						
Standard deviation of differences - category 1			SD1			0.18						
2	a	3769	2.64	2.70	2.67	0.06			#N/A		#N/A	
	a	3770	3.23	3.15	3.19	-0.08			#N/A		#N/A	
	a	3771	2.54	2.52	2.53	-0.03			#N/A		#N/A	
	a	3773	2.00		#N/A		2.00		2.00	0.00	#N/A	
	a	3775	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	3815	1.48		#N/A			1.78	#N/A		1.63	0.30
	a	3876	2.78		#N/A			3.48	#N/A		3.13	0.70
	a	4040	1.00		#N/A		0.00		0.50	-1.00	#N/A	
	a	4042	1.70	1.60	1.65	-0.10			#N/A		#N/A	
	a	4131	5.00	4.92	4.96	-0.08			#N/A		#N/A	
	a	4132	4.86	4.72	4.79	-0.13			#N/A		#N/A	
	a	4336	1.30		#N/A			1.00	#N/A		1.15	-0.30
	a	4992	2.38	2.38	2.38	0.00			#N/A		#N/A	
	b	3873	2.48		#N/A		1.00		1.74	-1.48	#N/A	
	b	3875	3.54	3.62	3.58	0.08			#N/A		#N/A	
	b	4541	1.96	1.95	1.96	0.00			#N/A		#N/A	
	b	4542	3.38	3.56	3.47	0.18			#N/A		#N/A	
	b	4543	2.95	2.94	2.95	-0.01			#N/A		#N/A	
	b	4544	3.73	3.58	3.66	-0.15			#N/A		#N/A	
	b	4775	3.96	3.95	3.96	0.00			#N/A		#N/A	
	b	4776	4.54	4.57	4.56	0.02			#N/A		#N/A	
	c	3872	1.30		#N/A			1.30	#N/A		1.30	0.00
	c	3874	3.18	3.11	3.15	-0.06			#N/A		#N/A	
	c	4133	4.72	4.59	4.66	-0.13			#N/A		#N/A	
	c	4134	4.11	3.90	4.01	-0.21			#N/A		#N/A	
	c	4226	2.08	1.78	1.93	-0.30			#N/A		#N/A	
	c	4227	2.70	3.00	2.85	0.30			#N/A		#N/A	
	c	4228	3.90		#N/A			3.30	#N/A		3.60	-0.60
	c	4777	3.30	2.90	3.10	-0.40			#N/A		#N/A	
Mean of differences - category 2			D2			-0.05						
Standard deviation of differences - category 2			SD2			0.15						
3	a	4041	2.08	1.90	1.99	-0.18			#N/A		#N/A	
	a	4545	4.86	4.93	4.90	0.07			#N/A		#N/A	
	a	4652	0.00		#N/A		0.00		0.00	0.00	#N/A	
	a	5085	4.56	4.52	4.54	-0.04			#N/A		#N/A	
	a	5086	4.94	4.90	4.92	-0.04			#N/A		#N/A	
	a	5087	6.00	5.85	5.92	-0.15			#N/A		#N/A	
	a	5088	5.80	5.77	5.79	-0.03			#N/A		#N/A	
	a	5089	5.65	5.78	5.72	0.13			#N/A		#N/A	
	b	3814	2.64	2.78	2.71	0.13			#N/A		#N/A	
	b	4546	4.20	4.04	4.12	-0.16			#N/A		#N/A	
	b	4547	3.74	3.79	3.76	0.04			#N/A		#N/A	
	b	4548	2.71	2.71	2.71	0.00			#N/A		#N/A	
	b	5090	5.90	6.23	6.07	0.33			#N/A		#N/A	
	c	3868	3.08	2.60	2.84	-0.48			#N/A		#N/A	
	c	3869	1.90	1.78	1.84	-0.12						

Category	Type	Spl. No.	Pour plate method - Incubation: 72h												
			Log CFU/g		Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Corrected mean	Corrected difference	Mean <4	Difference <4			
Mean of differences - category 3			D3			-0.01									
Standard deviation of differences - category 3			SD3			0.24									
4	a	6654	2.76	2.73	2.75	-0.03			#N/A		#N/A				
	a	6655	2.32	2.04	2.18	-0.28			#N/A		#N/A				
	a	6656	4.04	4.04	4.04	0.00			#N/A		#N/A				
	a	7447	0.00		#N/A		0		0.00	0.00	#N/A				
	a	7448	0.00		#N/A		0		0.00	0.00	#N/A				
	a	7503	3.95	3.78	3.87	-0.18			#N/A		#N/A				
	a	7504	4.20	4.00	4.10	-0.20			#N/A		#N/A				
	b	3778	1.78		#N/A		0		0.89	-1.78	#N/A				
	b	5796	2.81	2.76	2.78	-0.05			#N/A		#N/A				
	b	6657	3.79	3.76	3.77	-0.02			#N/A		#N/A				
	b	6658	4.63	4.66	4.65	0.03			#N/A		#N/A				
	b	7442	0.00		#N/A		0		0.00	0.00	#N/A				
	b	7443	0.00		#N/A		0		0.00	0.00	#N/A				
	b	7444	0.00		#N/A		0		0.00	0.00	#N/A				
	b	7501	4.23	4.04	4.14	-0.19			#N/A		#N/A				
	b	7502	3.40	3.48	3.44	0.08			#N/A		#N/A				
	c	5797	3.28	2.93	3.10	-0.35			#N/A		#N/A				
	c	7445	2.90	2.23	2.57	-0.67			#N/A		#N/A				
	c	7446	3.74	3.71	3.73	-0.03			#N/A		#N/A				
	c	7449	3.36	3.38	3.37	0.02			#N/A		#N/A				
	c	7450	3.41	3.43	3.42	0.02			#N/A		#N/A				
	c	7451	3.36	3.28	3.32	-0.08			#N/A		#N/A				
	c	7452	3.98	3.92	3.95	-0.06			#N/A		#N/A				
Mean of differences - category 4			D4			-0.12									
Standard deviation of differences - category 4			SD4			0.19									
5	a	5795	2.76	2.78	2.77	0.01			#N/A		#N/A				
	a	6661	3.67	3.65	3.66	-0.02			#N/A		#N/A				
	a	6662	4.54	4.43	4.49	-0.11			#N/A		#N/A				
	a	7681	0.00		#N/A		0		0.00	0.00	#N/A				
	a	7682	0.00		#N/A		0		0.00	0.00	#N/A				
	a	7722	3.65	3.65	3.65	0.00			#N/A		#N/A				
	a	7723	3.63	3.60	3.62	-0.03			#N/A		#N/A				
	b	5798	3.56	3.51	3.53	-0.05			#N/A		#N/A				
	b	5799	3.08	3.18	3.13	0.10			#N/A		#N/A				
	b	6659	2.45	2.30	2.37	-0.15			#N/A		#N/A				
	b	6660	2.64	2.71	2.68	0.06			#N/A		#N/A				
	b	7684	0.00		#N/A		0		0.00	0.00	#N/A				
	b	7724	3.94	3.88	3.91	-0.07			#N/A		#N/A				
	c	5794	3.20	2.99	3.10	-0.21			#N/A		#N/A				
	c	6663	4.91	4.88	4.89	-0.03			#N/A		#N/A				
	c	7683	0.00		#N/A		0		0.00	0.00	#N/A				
	c	7685	0.00		#N/A		0		0.00	0.00	#N/A				
	c	8088	6.00		#N/A		6		6.00	0.00	#N/A				
	c	8089	3.85	3.94	3.89	0.09			#N/A		#N/A				
	c	8090	3.81	3.86	3.84	0.04			#N/A		#N/A				
	c	8091	5.57	5.38	5.47	-0.19			#N/A		#N/A				
Mean of differences - category 5			D5			-0.04									
Standard deviation of differences - category 5			SD5			0.10									
Mean of differences - all categories			Dall			-0.05									
Standard deviation of differences - all categories			SDall			0.18									

β=95%      n all T(0.025;73)=  
 Mean (minimum value)      Mean (maximum value)  
 102  
 1.98373095  
 0.36017891  
 0.00      7.00  
 Upper limit      Lower limit  
 Linear

## Appendix 10 - Accuracy study: statistical calculations - Spiral method

Category	Type	Spl. No.	Spiral method - Incubation: 22h										
			Log CFU/g	Reference method	Alternative method	Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Mean corrected	Difference corrected	Mean <4	Difference <4
1	a	3772	2.81	3.30	3.06	0.49				#N/A		#N/A	
	a	3774	4.89	4.75	4.82	-0.14				#N/A		#N/A	
	a	3776	4.18	4.11	4.15	-0.06				#N/A		#N/A	
	a	3817	0.00		#N/A		1.00			0.50	1.00	#N/A	
	a	3877	1.90		#N/A		1.00			1.45	-0.90	#N/A	
	a	3878	1.30		#N/A		1.00			1.15	-0.30	#N/A	
	a	3879	1.60		#N/A				2.00	#N/A		1.80	0.40
	a	4222	2.00		#N/A		1.00			1.50	-1.00	#N/A	
	a	4223	3.78	3.88	3.83	0.10				#N/A		#N/A	
	a	4224	2.90	3.00	2.95	0.10				#N/A		#N/A	
	a	4225	3.90	3.86	3.88	-0.03				#N/A		#N/A	
	a	4303	1.00		#N/A		1.00			1.00	0.00	#N/A	
	a	4304	1.90		#N/A				2.00	#N/A		1.95	0.10
	a	4337	2.57		#N/A				2.00	#N/A		2.28	-0.57
	a	4338	2.45		#N/A				2.00	#N/A		2.22	-0.45
	a	4339	1.95		#N/A		1.00			1.48	-0.95	#N/A	
	b	3816	0.00		#N/A		1.00			0.50	1.00	#N/A	
	b	3880	0.00		#N/A		1.00			0.50	1.00	#N/A	
	b	4305	2.51	2.85	2.68	0.34				#N/A		#N/A	
	b	4540	4.71	4.77	4.74	0.06				#N/A		#N/A	
	b	4651	2.08		#N/A				2.48	#N/A		2.28	0.40
	b	4773	2.90		#N/A				2.30	#N/A		2.60	-0.60
	b	4774	3.59	3.59	3.59	0.00				#N/A		#N/A	
	b	5091	3.90	3.77	3.84	-0.13				#N/A		#N/A	
	b	5092	4.57	4.52	4.54	-0.05				#N/A		#N/A	
	b	5093	4.90	5.08	4.99	0.18				#N/A		#N/A	
	b	5094	6.00	5.63	5.82	-0.37				#N/A		#N/A	
	c	3777	1.00		#N/A		1.00			1.00	0.00	#N/A	
	c	3779	1.00		#N/A				2.30	#N/A		1.65	1.30
	c	3780	1.30		#N/A		1.00			1.15	-0.30	#N/A	
	c	3781	1.30		#N/A				2.30	#N/A		1.80	1.00
	c	3782	1.60		#N/A		1.00			1.30	-0.60	#N/A	
	c	4538	3.96	3.96	3.96	0.00				#N/A		#N/A	
	c	4539	4.41	4.49	4.45	0.08				#N/A		#N/A	
	c	4767	3.46	3.28	3.37	-0.18				#N/A		#N/A	
	c	4768	3.60	3.45	3.52	-0.15				#N/A		#N/A	
	c	4769	4.54	4.41	4.48	-0.13				#N/A		#N/A	
	c	4770	3.53	3.38	3.46	-0.15				#N/A		#N/A	
	c	4771	3.28	3.41	3.35	0.14				#N/A		#N/A	
Mean of differences - category 1			D1			0.00							
Standard deviation of differences - category 1			SD1			0.19							
2	a	3769	2.64	2.90	2.77	0.26				#N/A		#N/A	
	a	3770	3.23	3.23	3.23	0.00				#N/A		#N/A	
	a	3771	2.54		#N/A		1.00			1.77	-1.54	#N/A	
	a	3773	2.00		#N/A		1.00			1.50	-1.00	#N/A	
	a	3775	0.00		#N/A		1.00			0.50	1.00	#N/A	
	a	3815	1.48		#N/A				2.30	#N/A		1.89	0.82
	a	3876	2.78	2.60	2.69	-0.18				#N/A		#N/A	
	a	4040	1.00		#N/A				2.00	#N/A		1.50	1.00
	a	4042	1.70		#N/A				2.48	#N/A		2.09	0.78
	a	4131	5.00	4.95	4.98	-0.05				#N/A		#N/A	
	a	4132	4.86	4.70	4.78	-0.16				#N/A		#N/A	
	a	4336	1.30		#N/A		1.00			1.15	-0.30	#N/A	
	a	4992	2.38	2.52	2.45	0.14				#N/A		#N/A	
	b	3873	2.48		#N/A				2.00	#N/A		2.24	-0.48
	b	3875	3.54	3.60	3.57	0.06				#N/A		#N/A	
	b	4541	1.96		#N/A				2.00	#N/A		1.98	0.04
	b	4542	3.38	3.53	3.46	0.15				#N/A		#N/A	
	b	4543	2.95		#N/A				2.30	#N/A		2.63	-0.65
	b	4544	3.73	3.79	3.76	0.05				#N/A		#N/A	
	b	4775	3.96	3.95	3.95	-0.01				#N/A		#N/A	
	b	4776	4.54	4.43	4.49	-0.11				#N/A		#N/A	
	c	3872	1.30		#N/A		1.00			1.15	-0.30	#N/A	
	c	3874	3.18	3.08	3.13	-0.10				#N/A		#N/A	
	c	4133	4.72	4.65	4.69	-0.07				#N/A		#N/A	
	c	4134	4.11	4.08	4.10	-0.03				#N/A		#N/A	
	c	4226	2.08		#N/A				2.30	#N/A		2.19	0.22
	c	4227	2.70	2.95	2.83	0.26				#N/A		#N/A	
	c	4228	3.90	3.32	3.61	-0.58				#N/A		#N/A	
	c	4777	3.30	2.90	3.10	-0.40				#N/A		#N/A	
Mean of differences - category 2			D2			-0.05							
Standard deviation of differences - category 2			SD2										

Category	Type	Spl. No.	Spiral method - Incubation: 22h									
			Log CFU/g		Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Mean corrected	Difference corrected	Mean <4	Difference <4
			Reference method	Alternative method								
4	a	6654	2.76	3.00	2.88	0.24			#N/A		#N/A	
	a	6655	2.32		#N/A			2	#N/A		2.16	-0.32
	a	6656	4.04	4.11	4.08	0.07			#N/A		#N/A	
	a	7447	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7448	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7503	3.95	4.36	4.16	0.41			#N/A		#N/A	
	a	7504	4.20	4.15	4.18	-0.06			#N/A		#N/A	
	a	8083	4.26	4.18	4.22	-0.08			#N/A		#N/A	
	a	8084	4.15	4.32	4.23	0.18			#N/A		#N/A	
	b	3778	1.78		#N/A		1.00		1.39	-0.78	#N/A	
	b	5796	2.81	2.85	2.83	0.04			#N/A		#N/A	
	b	6657	3.79	3.65	3.72	-0.13			#N/A		#N/A	
	b	6658	4.63	4.89	4.76	0.26			#N/A		#N/A	
	b	7442	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7443	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7444	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7501	4.23	3.81	4.02	-0.42			#N/A		#N/A	
	b	7502	3.40	3.72	3.56	0.33			#N/A		#N/A	
	c	5797	3.28	3.32	3.30	0.04			#N/A		#N/A	
	c	7445	2.90	2.60	2.75	-0.30			#N/A		#N/A	
	c	7446	3.74	3.34	3.54	-0.40			#N/A		#N/A	
	c	7449	3.36	3.40	3.38	0.04			#N/A		#N/A	
	c	7450	3.41	3.62	3.52	0.21			#N/A		#N/A	
	c	7451	3.36	3.23	3.30	-0.13			#N/A		#N/A	
	c	7452	3.98	3.62	3.80	-0.35			#N/A		#N/A	
Mean of differences - category 4			D4			0.00						
Standard deviation of differences - category 4			SD4			0.25						
5	a	5795	2.76	2.78	2.77	0.01			#N/A		#N/A	
	a	6661	3.67	3.72	3.70	0.05			#N/A		#N/A	
	a	6662	4.54	4.52	4.53	-0.03			#N/A		#N/A	
	a	7681	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7682	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7722	3.65	3.38	3.52	-0.27			#N/A		#N/A	
	a	7723	3.63	3.64	3.64	0.01			#N/A		#N/A	
	b	5798	3.56	3.34	3.45	-0.21			#N/A		#N/A	
	b	5799	3.08	3.26	3.17	0.18			#N/A		#N/A	
	b	6659	2.45		#N/A			2.3	#N/A	2.37	-0.15	
	b	6660	2.64	2.70	2.67	0.06			#N/A		#N/A	
	b	7684	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7724	3.94	3.04	3.49	-0.90			#N/A		#N/A	
	b	8085	5.04	5.11	5.08	0.07			#N/A		#N/A	
	b	8086	5.51	5.76	5.63	0.25			#N/A		#N/A	
	b	8087	4.94	4.98	4.96	0.04			#N/A		#N/A	
	c	5794	3.20	2.90	3.05	-0.30			#N/A		#N/A	
	c	6663	4.91	5.04	4.97	0.13			#N/A		#N/A	
	c	7683	0.00		#N/A		1.00		0.50	1.00	#N/A	
	c	7685	0.00		#N/A		1.00		0.50	1.00	#N/A	
	c	8088	6.00		#N/A		5.08		5.54	-0.92	#N/A	
	c	8089	3.85	4.00	3.92	0.15			#N/A		#N/A	
	c	8090	3.81	3.59	3.70	-0.22			#N/A		#N/A	
	c	8091	5.57	5.28	5.42	-0.29			#N/A		#N/A	
Mean of differences - category 5			D5			-0.07						
Standard deviation of differences - category 5			SD5			0.28						
Mean - all categories			Dall			-0.02						
Standard deviation of differences - all categories			SDall			0.22						

$\beta=95\%$   
n all T(0.025,55)= 90  
1.98697866  
0.44468929  
upper limit 0.00  
lower limit 7.00  
linear -0.47  
-0.47 -0.02  
-0.47 -0.02  
0.00 0.00  
10 10

Category	Type	Spl. No.	Spiral method - Incubation: 72h									
			Log CFU/g		Mean	Difference	Cannot be interpreted Corrected	Cannot be interpreted <4	Mean corrected	Difference corrected	Mean <4	Difference <4
			Reference method	Alternative method								
1	a	3772	2.81	3.30	3.06	0.49			#N/A		#N/A	
	a	3774	4.89		#N/A				#N/A		#N/A	
	a	3776	4.18	3.60	3.89	-0.57			#N/A		#N/A	
	a	3817	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	3877	1.90		#N/A		1.00		1.45	-0.90	#N/A	
	a	3878	1.30		#N/A		1.00		1.15	-0.30	#N/A	
	a	3879	1.60		#N/A			2.00	#N/A	1.80	0.40	
	a	4222	2.00		#N/A		1.00		1.50	-1.00	#N/A	
	a	4223	3.78	3.88	3.83	0.10			#N/A		#N/A	
	a	4224	2.90	3.00	2.95	0.10			#N/A		#N/A	
	a	4225	3.90	3.86	3.88	-0.03			#N/A		#N/A	
	a	4303	1.00		#N/A		1.00		1.00	0.00	#N/A	
	a	4304	1.90		#N/A			2.00	#N/A	1.95	0.10	
	a	4337	2.57		#N/A			2.00	#N/A	2.28	-0.57	
	a	4338	2.45		#N/A			2.00	#N/A	2.22	-0.45	
	a	4339	1.95		#N/A		1.00		1.48	-0.95	#N/A	
	b	3816	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	3880	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	4305	2.51	2.85	2.68	0.34			#N/A		#N/A	
	b	4540	4.71	4.76	4.73	0.05			#N/A		#N/A	
	b	4651	2.08		#N/A			2.48	#N/A	2.28	0.40	
	b	4773	2.90		#N/A		1.00		1.95	-1.90	#N/A	
	b	4774	3.59	3.59	3.59	0.00			#N/A		#N/A	
	b	5091	3.90	3.79	3.84	-0.12			#N/A		#N/A	
	b	5092	4.57	4.52	4.54	-0.05			#N/A		#N/A	
	c	5093	4.90	5.08	4.99	0.18			#N/A		#N/A	
	b	5094	6.00	5.63	5.82	-0.37			#N/A		#N/A	
	c	3777	1.00		#N/A		1.00		1.00	0.00	#N/A	
	c	3779	1.00		#N/A			2.30	#N/A	1.65	1.30	
	c	3780	1.30		#N/A		1.00		1.15	-0.30	#N/A	
	c	3781	1.30		#N/A			2.00	#N/A	1.65	0.70	
	c	3782	1.60		#N/A		1.00		1.30	-0.60	#N/A	
	c	4538	3.96	3.96	3.96	0.00			#N/A		#N/A	
	c	4539	4.41	4.45	4.43	0.03			#N/A		#N/A	
	c	4767	3.46	3.28	3.37	-0.18			#N/A		#N/A	
	c	4768	3.60		#N/A		1.00		2.30	-2.60	#N/A	
	c	4769	4.54	4.43	4.49	-0.11			#N/A		#N/A	
	c	4770	3.53	3.43	3.48	-0.10			#N/A		#N/A	
	c	4771	3.28		#N/A		1.00		2.14	-2.28	#N/A	
Mean of differences - category 1			D1			-0.02						
Standard deviation of differences - category 1			SD1			0.24						
2	a	3769	2.64	3.28	2.96	0.64			#N/A		#N/A	
	a	3770	3.23	3.23	3.23	0.00			#N/A		#N/A	
	a	3771	2.54		#N/A		1.00		1.77	-1.54	#N/A	
	a	3773	2.00		#N/A		1.00		1.50	-1.00	#N/A	
	a	3775	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	3815	1.48		#N/A		1.00		1.24	-0.48	#N/A	
	a	3876	2.78	2.85	2.81	0.07			#N/A		#N/A	
	a	4040	1.00		#N/A			2.00	#N/A	1.50	1.00	
	a	4042	1.70		#N/A			2.48	#N/A	2.09	0.78	
	a	4131	5.00	4.95	4.98	-0.05			#N/A		#N/A	
	a	4132	4.86	4.78	4.82	-0.08			#N/A		#N/A	
	a	4336	1.30		#N/A		1.00		1.15	-0.30	#N/A	
	b	4992	2.38	2.53	2.46	0.15			#N/A		#N/A	
	b	3873	2.48		#N/A			2.60	#N/A	2.54	0.12	
	b	3875	3.54	4.60	4.07	1.06			#N/A		#N/A	
	b	4541	1.96		#N/A			2.00	#N/A	1.98	0.04	
	b	4542	3.38	3.53	3.46	0.15			#N/A		#N/A	
	b	4543	2.95		#N/A			2.30	#N/A	2.63	-0.65	
	b	4544	3.73	3.79	3.76	0.05			#N/A		#N/A	
	b	4775	3.96	3.97	3.96	0.01			#N/A		#N/A	
	b	4776	4.54	4.45	4.50	-0.10			#N/A		#N/A	
	c	3872	1.30		#N/A			2.00	#N/A	1.65	0.70	
	c	3874	3.18	4.38	3.78	1.20			#N/A		#N/A	
	c	4133	4.72	4.70	4.71	-0.03			#N/A		#N/A	
	c	4134	4.11	4.08	4.10	-0.03			#N/A		#N/A	
	c	4226	2.08		#N/A			2.30	#N/A	2.19	0.22	
	c	4227	2.70	2.95	2.83	0.26			#N/A		#N/A	
	c	4228	3.90	3.32	3.61	-0.58			#N/A		#N/A	
	c	4777	3.30	2.90	3.10	-0.40			#N/A		#N/A	
Mean of differences - category 2			D2			0.14						
Standard deviation of differences - category 2			SD2			0.45						
3	a	4041	2.08		#N/A			2.00	#N/A	2.04	-0.08	
	a	4545	4.86	4.97	4.92	0.11			#N/A		#N/A	
	a	4652	0.00		#N/A		1.00					

Category	Type	Spl. No.	Spiral method - Incubation: 72h									
			Log CFU/g		Mean	Difference	Cannot be interpreted		Cannot be interpreted <4		Mean corrected	Difference corrected
			Reference method	Alternative method			Corrected	<4	Mean corrected	Difference corrected		
4	a	6654	2.76	3.04	2.90	0.28			#N/A		#N/A	
	a	6655	2.32		#N/A			2.48	#N/A		2.40	0.16
	a	6656	4.04	4.20	4.12	0.16			#N/A		#N/A	
	a	7447	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7448	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7503	3.95	4.49	4.22	0.54			#N/A		#N/A	
	a	7504	4.20	4.36	4.28	0.16			#N/A		#N/A	
	a	8083	4.26	4.20	4.23	-0.05			#N/A		#N/A	
	a	8084	4.15	4.30	4.22	0.15			#N/A		#N/A	
	b	3778	1.78		#N/A		1.00		1.39	-0.78	#N/A	
	b	5796	2.81	2.95	2.88	0.15			#N/A		#N/A	
	b	6657	3.79	3.69	3.74	-0.10			#N/A		#N/A	
	b	6658	4.63	4.98	4.81	0.34			#N/A		#N/A	
	b	7442	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7443	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7444	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7501	4.23	3.69	3.96	-0.54			#N/A		#N/A	
	b	7502	3.40	3.75	3.57	0.35			#N/A		#N/A	
	c	5797	3.28	3.43	3.36	0.15			#N/A		#N/A	
	c	7445	2.90	2.60	2.75	-0.30			#N/A		#N/A	
	c	7446	3.74	3.38	3.56	-0.36			#N/A		#N/A	
	c	7449	3.36	3.40	3.38	0.04			#N/A		#N/A	
	c	7450	3.41	3.62	3.52	0.21			#N/A		#N/A	
	c	7451	3.36	3.23	3.30	-0.13			#N/A		#N/A	
	c	7452	3.98	3.73	3.86	-0.25			#N/A		#N/A	
Mean of differences - category 4			D4			0.04						
Standard deviation of differences - category 4			SD4			0.28						
5	a	5795	2.76	3.26	3.01	0.49			#N/A		#N/A	
	a	6661	3.67	3.73	3.70	0.06			#N/A		#N/A	
	a	6662	4.54	4.58	4.56	0.04			#N/A		#N/A	
	a	7681	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7682	0.00		#N/A		1.00		0.50	1.00	#N/A	
	a	7722	3.65	3.38	3.52	-0.27			#N/A		#N/A	
	a	7723	3.63	3.64	3.64	0.01			#N/A		#N/A	
	b	5798	3.56	3.52	3.54	-0.04			#N/A		#N/A	
	b	5799	3.08	3.30	3.19	0.22			#N/A		#N/A	
	b	6659	2.45		#N/A			2.30	#N/A	2.37	-0.15	
	b	6660	2.64	2.70	2.67	0.06			#N/A		#N/A	
	b	7684	0.00		#N/A		1.00		0.50	1.00	#N/A	
	b	7724	3.94	3.04	3.49	-0.90			#N/A		#N/A	
	b	8085	5.04	5.11	5.08	0.07			#N/A		#N/A	
	b	8086	5.51	5.77	5.64	0.27			#N/A		#N/A	
	b	8087	4.94	5.08	5.01	0.14			#N/A		#N/A	
	c	5794	3.20	3.18	3.19	-0.03			#N/A		#N/A	
	c	6663	4.91	5.11	5.01	0.21			#N/A		#N/A	
	c	7683	0.00		#N/A		1.00		0.50	1.00	#N/A	
	c	7685	0.00		#N/A		1.00		0.50	1.00	#N/A	
	c	8088	6.00		#N/A			5.11		5.56	-0.89	#N/A
	c	8089	3.85	3.98	3.91	0.14			#N/A		#N/A	
	c	8090	3.81	3.59	3.70	-0.22			#N/A		#N/A	
	c	8091	5.57		5.28	5.42	-0.29		#N/A		#N/A	
Mean of differences - category 5			D5			0.00						
Standard deviation of differences - category 5			SD5			0.30						
Mean - all categories			Dall			0.03						
Standard deviation of differences - all categories			SDAll			0.30						



## Appendix 11 - Specificity>Selectivity: raw results

INCLUSIVITY						
	Strains		Reference	Origin	PCA method (CFU/plate)	Reference method ISO 6888-2* (CFU/plate)
1	<i>Staphylococcus</i>	<i>aureus</i>	ATCC51740	/	29	34
2	<i>Staphylococcus</i>	<i>aureus</i>	501	Raw milk	17	26
3	<i>Staphylococcus</i>	<i>aureus</i>	605	Raw milk	26	36
4	<i>Staphylococcus</i>	<i>aureus</i>	CIP76.25	/	24	27
5	<i>Staphylococcus</i>	<i>aureus</i>	242	Pasteurised Munster	32	29
6	<i>Staphylococcus</i>	<i>aureus</i>	Ad152	Rabbit	47	67
7	<i>Staphylococcus</i>	<i>aureus</i>	Ad153	Rabbit	37	33
8	<i>Staphylococcus</i>	<i>aureus</i>	Ad154	Hake fillet	25	29
9	<i>Staphylococcus</i>	<i>aureus</i>	Ad155	Turkey MSM	25	49
10	<i>Staphylococcus</i>	<i>aureus</i>	Ad157	Chicken skin	37	56
11	<i>Staphylococcus</i>	<i>aureus</i>	Ad158	Chicken thigh	29	25
12	<i>Staphylococcus</i>	<i>aureus</i>	Ad159	Cutlet	32	53
13	<i>Staphylococcus</i>	<i>aureus</i>	Ad160	Minced steak	21	40
14	<i>Staphylococcus</i>	<i>aureus</i>	Ad161	Merguez	76	99
15	<i>Staphylococcus</i>	<i>aureus</i>	Ad162	Merguez	14	16
16	<i>Staphylococcus</i>	<i>aureus</i>	Ad163	Crayfish roe	104	89
17	<i>Staphylococcus</i>	<i>aureus</i>	Ad164	Boar meat	21	27
18	<i>Staphylococcus</i>	<i>aureus</i>	Ad165	Raw smoked pork belly	78	11
19	<i>Staphylococcus</i>	<i>aureus</i>	Ad166	Chicken thigh	14	17
20	<i>Staphylococcus</i>	<i>aureus</i>	Ad167	Raw smoked pork belly	83	94
21	<i>Staphylococcus</i>	<i>aureus</i>	Ad168	Minced poultry meat	18	20
22	<i>Staphylococcus</i>	<i>aureus</i>	A00M071	Frozen cooked tuna	89	90
23	<i>Staphylococcus</i>	<i>aureus</i>	Ad422	Rabbit	12	11
24	<i>Staphylococcus</i>	<i>aureus</i>	Ad467	Dairy product	22	21
25	<i>Staphylococcus</i>	<i>aureus</i>	Ad468	Dairy product	22	11
26	<i>Staphylococcus</i>	<i>aureus</i>	Ad1063	Cheese	127	117
27	<i>Staphylococcus</i>	<i>aureus</i>	Ad1064	Cheese	33	35
28	<i>Staphylococcus</i>	<i>aureus</i>	Ad1709	Cheese	33	30
						31

♦

INCLUSIVITY							
	Strains		Reference	Origin	PCA method (CFU/plate)	Reference method ISO 6888-2♦ (CFU/plate)	EASY STAPH method (CFU/plate)
29	<i>Staphylococcus aureus</i>		Ad1710	Raw ewe's milk cheese	162	133	145
30	<i>Staphylococcus aureus</i>		Ad1711	Cheese	95	95	88
31	<i>Staphylococcus aureus</i>		Ad1712	Munster	130	99	112
32	<i>Staphylococcus aureus</i>		735	Cheese	19	27	26
33	<i>Staphylococcus aureus</i>		Ad899	Battered fish	59	46	59
34	<i>Staphylococcus aureus</i>		Ad900	Grouper fillet	108	113	96
35	<i>Staphylococcus aureus</i>		Ad901	Back of cod	78	71	96
36	<i>Staphylococcus aureus</i>		Ad902	Nems	35	40	26
37	<i>Staphylococcus aureus</i>		Ad903	Meat scraps	81	74	74
38	<i>Staphylococcus aureus</i>		Ad904	Munster made with raw milk	17	23	16
39	<i>Staphylococcus aureus</i>		Ad905	Munster made with raw milk	25	132	96
40	<i>Staphylococcus aureus</i>		Ad906	Merguez	20	24	14
41	<i>Staphylococcus aureus</i>		Ad907	Mini-merguez	16	15	14(2)
42	<i>Staphylococcus aureus</i>		Ad908	Pressed cheese	18	28 <sup>(3)</sup>	18 <sup>(3)</sup>
43	<i>Staphylococcus aureus</i>		Ad909	Pressed cheese	44	45 <sup>(3)</sup>	60 <sup>(4)</sup>
44	<i>Staphylococcus aureus</i>		Ad910	Hen morsels with skin	24	22	20
45	<i>Staphylococcus aureus</i>		Ad1519	Swimming pool water	47	54	48
46	<i>Staphylococcus aureus</i>		Ad1571	River water	28	53	35
47	<i>Staphylococcus aureus</i>		Ad1601	Swimming pool water	42	44	38
48	<i>Staphylococcus intermedius</i>		CIP 81.67	/	29	39	28
49	<i>Staphylococcus hyicus</i>		CIP81.58	Pork	41	32	23
50	<i>Staphylococcus intermedius</i>		CIP81.60	Pigeon	32	18	22
51	<i>Staphylococcus aureus</i>		Ad1656	Swimming pool water	79	96	82

(1): surface colonies lost their halo when incubation was prolonged

(2): halo not visible at 22 h; visible at 48 h

(3): halo not visible after incubation for 48 h

(4): halo not visible, even after incubation for 72 h

For strains 41, 42 and 43, the tube coagulase test was positive

EXCLUSIVITY						
	Strains	Reference	Origin	PCA pour plate (CFU/plate)	Reference method ISO 6888-2♦ (CFU/plate)	EASY STAPH method (CFU/plate)
1	<i>Brevibacterium linens</i>	CIP 101125T	/	14(-3)	0(-2)	0(-2)
2	<i>Brochothrix thermosphacta</i>	EN 15/29	Trout	39(-7)	0(-6)	0(-6)
3	<i>Carnobacterium piscicola</i>	Ad 368	Raw milk	18(-7)	0(-5)	0(-5)
4	<i>Kluyveromyces lactis</i>	Ad 988	Salad	65(-5)	0(-5)	0(-5)
5	<i>Kocuria rosea</i>	CIP 7115		92(-3)	0(-2)	0(-2)
6	<i>Macrococcus cohnii cohnii</i>	Ad 156	Poultry	104(-5)	0(-5)	0(-5)
7	<i>Micrococcus luteus</i>	Ad 432	Rhum	33(-5)	0(-4)	0(-4)
8	<i>Staphylococcus carnosus</i>	1		27(-6)	0(-6)	0(-6)
9	<i>Staphylococcus carnosus</i>	M86	Ferment	58(-6)	0(-6)	0(-6)
10	<i>Micrococcus caseolyticus</i>	CIP 100755		17(-6)	0(-4)	0(-4)
11	<i>Staphylococcus epidermidis</i>	Ad 150	Minced steak	37(-7)	0(-5)	0(-5)
12	<i>Staphylococcus equorum</i>	DSM20674		61(-6)	0(-4)	0(-4)
13	<i>Staphylococcus equorum</i>	CIP 103502	Horse skin	43(-6)	0(-4)	0(-4)
14	<i>Staphylococcus hominis</i>	Ad 692		52(-5)	0(-5)	0(-5)
15	<i>Staphylococcus saprophyticus</i>	Ad 866	Milk	17(-7)	0(-6)	0(-6)
16	<i>Staphylococcus xylosus</i>	Ad 151	Minced steak	125(-6)	0(-3)	0(-3)
17	<i>Streptococcus salivarius subs. thermophilus</i>	91L580	Cheese	71(-7)	0(-5)	0(-5)
18	<i>Bacillus cereus</i>	Ad 608	Baguette dough	17(-6)	0(-6)	0(-6)
19	<i>Staphylococcus caprae</i>	DSM20608T		132(-6)	0(-5)	0(-5)
20	<i>Bacillus cereus</i>	Ad 825		23(-6)	0(-6)	0(-6)
21	<i>Proteus mirabilis</i>	Ad 639	Mayonnaise	66(-7)	0(-7)	0(-7)
22	<i>Proteus vulgaris</i>	Ad 984	Pork meatballs	100(-7)	0(-7)	0(-7)
23	<i>Listeria monocytogenes</i>	Ad 1781	Milk	91(-7)	0(-7)	0(-7)
24	<i>Listeria monocytogenes</i>	Ad 1757	Sliced egg	54(-7)	0(-7)	0(-7)
25	<i>Micrococcus caseolyticus</i>	Ad 1100	Cheese	93(-5)	0(-4)	0(-4)
26	<i>Staphylococcus epidermidis</i>	Ad 931	Fruit preparation	102(-4)	0(-3)	0(-3)
27	<i>Staphylococcus hominis</i>	Ad 693		57(-5)	0(-5)	0(-5)
28	<i>Staphylococcus warneri</i>	WR51		149(-5)	0(-5)	0(-5)
29	<i>Staphylococcus xylosus</i>	Ad 1142	Dried sausage	126(-6)	0(-5)	0(-5)
30	<i>Bacillus subtilis</i>	Ad 1625	Cocoa powder	43(-6)	0(-6)	0(-6)

### Appendix 12 - Inoculum homogeneity

Low level							
Sample	Analysis 1	Analysis 2	Log Analysis 1	Log Analysis 2	D	S	D <sup>2</sup>
1	1100	1000	3.041	3.000	-0.041	6.041	0.002
2	940	1000	2.973	3.000	0.027	5.973	0.001
3	1000	990	3.000	2.996	-0.004	5.996	0.000
4	850	900	2.929	2.954	0.025	5.884	0.001
5	1100	1000	3.041	3.000	-0.041	6.041	0.002
6	950	860	2.978	2.934	-0.043	5.912	0.002
7	930	1000	2.968	3.000	0.032	5.968	0.001
8	1000	1000	3.000	3.000	0.000	6.000	0.000
9	850	910	2.929	2.959	0.030	5.888	0.001
10	1000	960	3.000	2.982	-0.018	5.982	0.000
SUM	9720	9620	29.861	29.826	-0.035	59.687	0.009

S<sub>w</sub> 0.00044S<sub>b</sub> 0.0016S<sup>2</sup><sub>an</sub> 0.00044S<sup>2</sup><sub>sam</sub> 0.000594

F1 1.88

F2 1.01

Target standard deviation to apply 0.25

Test value 0.01102 > S<sup>2</sup><sub>sam</sub>

Intermediate rate							
Sample	Analysis 1	Analysis 2	Log Analysis 1	Log Analysis 2	D	S	D <sup>2</sup>
11	9700	9700	3.987	3.987	0.000	7.974	0.000
12	11000	11000	4.041	4.041	0.000	8.083	0.000
13	9600	8700	3.982	3.940	-0.043	7.922	0.002
14	11000	10000	4.041	4.000	-0.041	8.041	0.002
15	8600	9200	3.934	3.964	0.029	7.898	0.001
16	11000	11000	4.041	4.041	0.000	8.083	0.000
17	9400	9100	3.973	3.959	-0.014	7.932	0.000
18	12000	11000	4.079	4.041	-0.038	8.121	0.001
19	9200	8800	3.964	3.944	-0.019	7.908	0.000
20	10000	9900	4.000	3.996	-0.004	7.996	0.000
SUM	101500	98400	40.044	39.913	-0.130	79.957	0.006

S<sub>w</sub> 0.00032S<sub>b</sub> 0.0033S<sup>2</sup><sub>an</sub> 0.00032S<sup>2</sup><sub>sam</sub> 0.001505

F1 1.88

F2 1.01

Target standard deviation to apply 0.25

Test value 0.01090 > S<sup>2</sup><sub>sam</sub>

High rate							
Sample	Analysis 1	Analysis 2	Log Analysis 1	Log Analysis 2	D	S	D <sup>2</sup>
21	130000	100000	5.114	5.000	-0.114	10.114	0.013
22	97000	110000	4.987	5.041	0.055	10.028	0.003
23	110000	130000	5.041	5.114	0.073	10.155	0.005
24	100000	110000	5.000	5.041	0.041	10.041	0.002
25	110000	110000	5.041	5.041	0.000	10.083	0.000
26	95000	100000	4.978	5.000	0.022	9.978	0.000
27	110000	120000	5.041	5.079	0.038	10.121	0.001
28	110000	110000	5.041	5.041	0.000	10.083	0.000
29	97000	100000	4.987	5.000	0.013	9.987	0.000
30	110000	100000	5.041	5.000	-0.041	10.041	0.002
SUM	1069000	1090000	50.272	50.359	0.087	100.631	0.027

S<sub>w</sub> 0.00134S<sub>b</sub> 0.0017S<sup>2</sup>an 0.00134S<sup>2</sup>sam 0.000177

F1 1.88

F2 1.01

Target standard deviation to apply 0.25

Test value 0.01193 > S<sup>2</sup>sam