

ISO 16140-2:2016 validation of **iQ-Check™ STEC VirX Kit**

for the real-time PCR detection of virulence and attachment genes from
Shiga toxin-producing *Escherichia coli* in a broad range of food

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This report consists of 163 pages, including 9 appendices.

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The modifications are highlighted.

The technical protocol and the result interpretation were carried out according to the EN ISO 16140-2:2016 and the MicroVal technical rules. This document is prepared in accordance with ISO 16140-2:2016 and MicroVal technical committee interpretation of ISO 16140-2 v.2.6.

Analyses of flours and raw doughs, multicomponent foods and meal components are not covered by COFRAC Accreditation.

Validation protocol	- ISO 16140-1 (2016): Microbiology of the food chain - Method validation — <i>Part 1: Vocabulary</i> - ISO 16140-2 (2016): Microbiology of the food chain - Method validation — <i>Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method</i> - MicroVal
Reference method ♦	ISO/TS 13136 (November 2012): Microbiology of food and animal feed - Real-Time Polymerase Chain Reaction (PCR) based method for the detection of food-borne pathogens. Horizontal method for the detection of Shiga-toxin producing (STEC) and the determination of O26, O103, O111, O145 and O157 serogroups
Method/Kit name	iQ-Check STEC VirX Kit
Scope of validation	A broad range of foods including: ☒ Raw dairy products (up to 25 g test portion) ☒ Raw meat products (excluding poultry) (up to 375 g test portion) ☒ Flours and raw doughs (up to 375 g test portion) ☒ Multicomponent foods and meal components (up to 25 g test portion) ☒ Raw produces and fruits (up to 25 g test portion)
Certification organization	Lloyd's Register

♦ Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

1 LIST OF ABBREVIATIONS

-	No typical colonies but presence of background microflora
(x)	Number of colonies in the plate
1/2	50% level of target analyte
AL	Acceptability Limit
BPW	Buffered Peptone Water
CFU	Colony Forming Units
d	Doubtful result
$\bar{D}$	Average difference
FDRS	iQ-Check Free DNA Removal Solution
FP	False Positive
FPR	False Positive Ratio
g	Gram
h	Hour
m	Minority level of target analyte
M	Majority level of target analyte
MCS	Method Comparison Study
min	minute
ml	milliliter
MR	(MicroVal) Method Reviewer
MVTC	MicroVal Technical Committee
NA	Negative agreement
ND	Negative deviation
p	Pure culture level of target analyte
PA	Positive agreement
PD	Positive deviation
pos (+)	positive/growth/target detected
PPNA	Positive presumptive negative agreement
PPND	Presumptive Positive Negative Deviation (belongs to the False Positive results)
RLOD	Relative Level of Detection
RT	Relative Trueness
SE	Relative Sensitivity
SP	Relative Specificity
st	Plate without any colony
T	Late amplification curve
*	PCR result using ISO/TS 13136 on typical colony
**	Dilution in distilled water using 10µL of the DNA extract

Bold typing: artificially inoculated samples

2 INTRODUCTION

This document reports a MicroVal validation study, based on ISO 16140-2:2016, of alternative method(s) for the real-time detection of virulence genes in Shiga-toxin-producing *Escherichia coli* in broad range of food, carried out by ADRIA as the MicroVal Expert Laboratory.

This report is a summary reports including the initial method comparison study, the interlaboratory study and the extension study results. A summary of the steps is provided hereafter:

Date	Validation stage	Categories	Thermocycler	Target
June 2022	Initial validation	Raw dairy (up to 25g) Raw meat (excluding poultry) (up to 375 g)	CFX96 Deep Well	stx
December 2022	Extension	Flours and raw doughs (up to 375 g)	CFX96 Deep Well	
June 2023	Extension for broad range of food claim	Multicomponent foods and meal components, Raw produces and fruits (up to 25 g)	CFX Opus and CFX96 Deep Well for all categories	
June 2024	Extension for a new interpretation for <i>stx</i> , <i>eae</i> detection	Raw dairy (up to 25g) Raw meat (excluding poultry) (up to 375 g) Flours and raw doughs (up to 375 g) Multicomponent foods and meal components, Raw produces and fruits (up to 25 g)	CFX Opus and CFX96 Deep Well for all categories	stx and eae

This method uses the iQ-Check STEC VirX Kit (catalog # 3578139).

The iQ-Check STEC VirX Kit gives the results for both *stx* and *eae* genes. Two interpretations of the results are available: presence of *stx* only and presence of *stx* and *eae*.

This report concerns only the interpretation of the data including both *stx* (virulence genes) and *eae* (attachment genes).

The categories included are:

- Raw dairy products (up to 25 g test portion),
- Raw meat products (excluding poultry) (up to 375 g test portion),
- Flours and raw doughs (up to 375 g test portion)
- Multicomponent foods and meal components (up to 25 g test portion),
- Raw produces and fruits (up to 25 g test portion).

The category “dried cereals, fruits, nuts seeds and vegetables” described in the annex A of the ISO 16140-2 (2016) was reduced to “flours and raw doughs” because of the typical issue linked to these products.

Several enrichment protocols are available depending on the category evaluated:

- For raw dairy products: BPW supplemented with selective STEC supplement (catalogue # 3564005) for 16 h - 24 h at $41.5^{\circ}\text{C} \pm 1^{\circ}\text{C}$ (up to 25 g test portion), 1/10 dilution.
- For raw meat products (excluding poultry): pre-warmed BPW for 10 -18 h at $41.5^{\circ}\text{C} \pm 1^{\circ}\text{C}$ (up to 375 g test portion), 1/4 dilution.
- For flours and raw doughs: BPW + STEC supplement for 18 - 26 h at $41.5^{\circ}\text{C} \pm 1^{\circ}\text{C}$ (up to 375 g test portion), 1/4 dilution.
- For multicomponent foods and meal components and raw produces and fruits: BPW for 18-26 h at $41.5^{\circ}\text{C} \pm 1^{\circ}\text{C}$ (up to 25 g test portion), 1/10 dilution.

The DNA extraction is performed using the Easy II extraction protocol.

The FDRS protocol (iQ-Check Free DNA Removal Solution) can be applied to remove free DNA from food prior to PCR analysis. It is performed by a selected enzyme and its specific buffer under optimized conditions. The iQ-Check lysis buffer associated with thermal lysis inactivates the enzyme, allowing extraction from intact and living cells. This protocol is optional and can be applied before proceeding to the Easy II extraction.

The detection by Real time PCR is carried out using a Bio-Rad real-time PCR instrument, such as the CFX96 Touch Deep well Real-Time PCR Detection and the CFX Opus Deep well Systems associated with the VirX Fast ISO Thermal protocol (CFX Manager IDE software version 3.1.):

The confirmation step is performed by:

- **Confirmation A:** direct streaking onto selective agar plates (TBX and CHROMagar STEC); the typical colonies are confirmed by the iQ-Check STEC VirX (Kit reference # 3578139) and biochemical gallery to confirm the identification to *E. coli* species
- **Confirmation B** (alternative protocol, in case of discrepancy between PCR and direct confirmation):
 - Dilute to 1/100 the enriched sample (0.1 ml + 9 ml BPW STEC supplement)
 - Incubation for 16 - 24 h at 41.5°C ± 1°C
 - Streak 10 µl onto selective agar plates (TBX, CHROMagar STEC, RAPID'E. coli 2 (REC2) and RAPID'E. coli O157 (RECO157)).
 - Screen up to 50 colonies as recommended in the ISO/TS 13136 using the kit iQ-Check STEC VirX (Kit reference # 3578139). Pooling 10 typical colonies is possible.
 - From pooled colonies giving a positive result, test individual colonies. Confirm the identification to *E. coli* species by biochemical gallery.

The reference method uses ISO/TS 13136 (November 2012): Microbiology of food and animal feed - Real-Time Polymerase Chain Reaction (PCR) based method for the detection of food-borne pathogens. Horizontal method for the detection of Shiga-toxin producing (STEC) and the determination of O26, O103, O111, O145 and O157 serogroups.

Criteria evaluated during the study are:

- Method comparison study (MCS)
 - Sensitivity
 - Relative level of detection
 - Inclusivity and exclusivity
- Inter-laboratory study (ILS).

3 METHOD PROTOCOLS

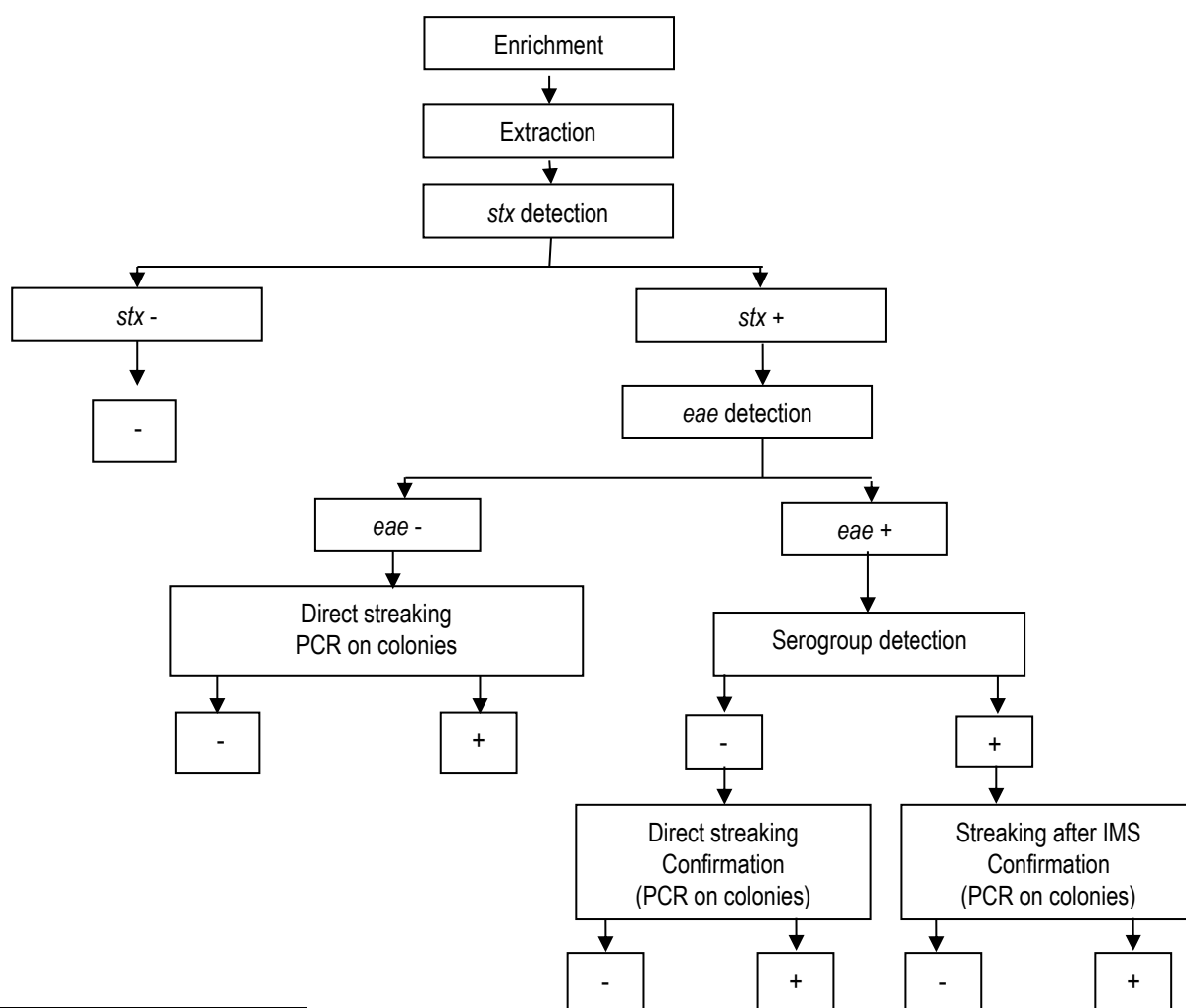
The Method Comparison Study was carried out using 25 gram or 375 gram portions of sample material.

3.1 Reference method[♦]

The reference method is the ISO/TS 13136 (November 2012): Microbiology of food and animal feed - Real-Time Polymerase Chain Reaction (PCR) based method for the detection of food-borne pathogens. Horizontal method for the detection of Shiga-toxin producing (STEC) and the determination of O26, O103, O111; O145 and O157 serogroups (See **Appendix 1**).

Even if the scope of the alternative method is stx detection only, the decision tree for the reference method is the following (See Figure 1):

Figure 1 - Decision tree for the reference method



[♦] Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Table 1 describes the different possibilities of conclusions according to the ISO/TS 13136 method. As the target of the alternative method concerns only the positive *stx* 1 or/and *stx* 2, the results were interpreted and presented as described in the last column in Table 1.

Table 1 - Conclusion

PCR <i>stx</i>	PCR <i>eae</i>	PCR Serogroup	Confirmation on colony	Conclusion	Result provided in the report
-	/	/	/	STEC not detected	-
+	-	/	/	Presumptive detection of STEC	-
+	+	-	-	Presumptive detection of STEC associated with attaching-effacing activity	-
			+	Detection of STEC associated with attaching-effacing activity	+
		+	-	Presumptive detection of STEC from serogroup XXX	-
			+	STEC from serogroup XXX detected	+

The RLOD for raw beef meat (25 g vs 375 g) has been determined at ADRIA by testing frozen ground beef inoculated with *Escherichia coli* O157

The calculated value is 0.871 and meet the acceptability limit for an unpaired study design (AL= 2.5); it is thus possible to analyze the same sample size for the reference and the alternative methods (375 g for raw meat products category).

For the categories flours and raw doughs, multicomponent foods and meal components, raw produces and fruits the reference method was tested using 25 g test portions.

The ability of ADRIA to perform the analyses for flours and raw doughs, multicomponent foods and meal components using the ISO/TS 13136 was evaluated by applying the protocol 3 described in the ISO 16140-3 on raw pizza dough wheat flour and dehydrated vegetables soup samples. The expected results were obtained with 7 positive samples (see Table 2). This confirms the ability of ADRIA to perform the STEC detection using the ISO/TS 13136 on these food categories.

Table 2 - ISO 16140-3 Protocol 3 results

Matrix	Strain	Inoculation level (CFU/sample)	ISO/TS 13136 result		Conclusion
			Blank sample	Inoculated samples	
Raw pizza dough	<i>E. coli</i> O26 Ad3385	4,8	0/1	7/7	Valid
Wheat flour (T45)	<i>E. coli</i> O157 Ad3383	4,0	0/1	7/7	Valid
Dehydrated vegetables soup	<i>E. coli</i> O103 Ad3318	2,4	0/1	7/7	Valid

3.2 Alternative method

3.2.1 Principle

The iQ-Check STEC VirX Kit is a test based on gene amplification and detection by real-time PCR. The kit contains oligonucleotides (primers and probes) specific for *stx1/stx2* and *eae* virulence genes as well as DNA polymerase and nucleotides. The probes are linked to a fluorophore that fluoresces only when hybridized to the target sequence. FAM is the fluorophore for detection of *stx1/stx2* and Cy5 the fluorophore for detection of *eae*. An internal control is included in the reaction mix, it is detected by a third fluorophore: HEX.

Detection and data analysis are done using a Bio-Rad real-time PCR instrument, such as the CFX96 Touch Deep Well Real-Time PCR detection system.

The method is performed in several steps:

- Enrichment,
- Optional: iQ-Check Free DNA Removal Solution (FDRS),
- DNA extraction,
- Real-Time PCR,
- Data analysis and interpretation

3.2.2 Protocols

The protocols are described below (See Table 3).

- **Enrichment step**

Table 3 - Enrichment protocols

	Category	Test portion	Enrichment volume	Enrichment temperature	Enrichment time
1	Raw dairy products	Up to 25 g	BPW+STEC supplement d 1/10	41.5°C ± 1°C	16 - 24 h
2	Raw meat products	Up to 375 g	Pre-warmed (41.5°C) BPW d 1/4	41.5°C ± 1°C	10 - 18 h
3	Flours and raw doughs	Up to 375 g	BPW + STEC supplement d 1/4	41, 5°C ± 1°C	18- 26 h
4	Multicomponent foods and meal components	Up to 25 g	BPW d 1/10	41.5°C ± 1°C	18 - 26 h
5	Raw produces and fruits	Up to 25 g	BPW d 1/10	41.5°C ± 1°C	18 - 26 h

- **DNA extraction:**

The DNA extraction is performed using the Easy II extraction protocol on 100 µl enriched sample with or without applying the FDRS protocol.

The FDRS protocol (iQ-Check Free DNA Removal Solution) can be applied to remove free DNA from food prior to PCR analysis:

- It is performed by a selected enzyme and its specific buffer under optimized conditions.
- The iQ-Check lysis buffer associated with thermal lysis inactivates the enzyme, allowing extraction from intact and living cells.
- This protocol is optional and can be applied before proceeding to the extraction.

- **Detection:** the detection of the virulence genes, *stx1/stx2* and *eae* is done by the real-time PCR on 5 µl lysate using the CFX96 Touch Deep Well or the CFX Opus Deep Well systems.

The use of CFX Opus for Raw dairy products, Raw meat products and Flours and raw doughs was evaluated on frozen extract and compared to the data generated on fresh samples using CFX 96. For the two other categories, the analysis was performed in parallel with the CFX 96 and CFX Opus.

- **Interpretation:** the PCR results are interpreted using the “STEC VirX ISO Fast”, software version 3.0. taking into account *stx* and *eae* detection as explained in Tables 4 and 5 below.

Table 4 - Controls

	<i>stx1/stx2</i> Detection (FAM channel)	<i>eae</i> Detection (Cy5 channel)	Internal Control Detection (HEX channel)
Negative control	Cq = N/A*	Cq = N/A*	$26 \leq Cq \leq 36$
Positive control	$26 \leq Cq \leq 36$	$26 \leq Cq \leq 36$	NA

- * The software indicates a Cq value of N/A (not applicable) when the fluorescence of a sample does not rise significantly above the background noise and hence does not cross the threshold.

Table 5 - Interpretation of sample results

<i>stx1/stx2</i> Detection (FAM channel)	<i>eae</i> Detection (Cy5 channel)	Internal Control Detection (HEX channel)	Interpretation PCR test
$Cq \geq 10$	$Cq \geq 10$	NA	Positive <i>stx1/stx2</i> , positive <i>eae</i> : Final result for the study: Positive
$Cq \geq 10$	Cq = N/A	NA	Positive <i>stx1/stx2</i> , negative <i>eae</i> Final result for the study: Negative
Cq = N/A	$Cq \geq 10$	NA	Negative <i>stx1/stx2</i> , positive <i>eae</i> Final result for the study: Negative
Cq = N/A	Cq = N/A	$Cq \geq 26$	Negative <i>stx1</i> , <i>stx2</i> , <i>eae</i> Final result for the study: Negative
Cq = N/A	Cq = N/A	Cq = N/A	Negative <i>stx1</i> , <i>stx2</i> , <i>eae</i> , internal control Final result for the study: Inhibition**

- ** When all *stx1/stx2* and *eae* virulence genes and internal control detection give a Cq value = N/A, the sample must be tested again but diluted (1/10)

- **Isolation and Confirmation:**
 - o **Confirmation A:** direct streaking
 - Streak of 10 µl onto selective agar plates (TBX and CHROMagar STEC)
 - Incubate the plates 18 - 24 h at $37^{\circ}\text{C} \pm 1^{\circ}\text{C}$
 - Using a single colony, perform detection of virulence genes on colonies using the same kit as for the screening step: resuspend an isolated colony in 0.1 ml of BPW or Tryptone Salt and proceed to the lysis and to the detection. Confirm the identification to *E. coli* using biochemical gallery.

- Pooling of up to 10 colonies is possible to screen for the detection of virulence genes. 5 µl of suspension can be directly added to the amplification mix without DNA extraction. It depends on lab organization and safety rules.
 - From pooled colonies giving a positive result, test individual colonies and confirm the identification to *E. coli* using biochemical gallery.
- **Confirmation B:** in case of discrepancy between the iQ-Check STEC VirX test and the direct confirmation, depending on the Cq values obtained at the screening step, and depending on the interfering flora level, the following additional procedures are recommended:
- Dilute to 1/100 the enriched broth (0.1 ml + 9 ml BPW + STEC sup)
 - Incubation for 16 - 24 h at 41.5°C ± 1°C.
 - Streak 10 µl onto selective agar plates (TBX, CHROMagar STEC, RAPID'E. coli 2 (REC2) and RAPID'E. coli O157 (RECO157)). Incubate the plates 18 - 24 h at 37°C ± 1°C.
 - Screen up to 50 colonies as recommended in the ISO/TS 13136 using the kit iQ-Check STEC VirX. Pooling 10 typical colonies is possible.
 - From pooled colonies giving a positive result, test individual colonies. Confirm the identification to *E. coli* species by biochemical gallery.

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

The detailed protocols are given in **Appendix 2**.

3.2.3 Restriction

Poultry meat is excluded from the scope.

3.3 Study design

The study is **an unpaired study design** as the reference and the alternative methods have different enrichment procedures (broths, incubation times, incubation temperatures and tests portions). (See Table 6).

Table 6 - Protocols for the ISO/TS 13136 and iQ-Check STEC VirX

Products	ISO/TS 13136			iQ-Check STEC VirX		
	Test portion	Enrichment broth	Incubation time and temperature	Test portion	Enrichment broth	Incubation time and temperature
Raw dairy products	25 g	mTSB + acriflavin (12 mg/L) d 1/10	18 - 24 h at 37°C ±1°C	25 g	BPW + selective STEC supplement d 1/10	16-24 h at 41,5°C ±1°C
Raw meat products	375 g	Pre-warmed mTSB + novobiocin (16 mg/L) d 1/10	18 - 24 h at 37°C ±1°C	375 g	Pre-warmed BPW d 1/4	10-18 h at 41,5°C ±1°C
Frozen seasoned raw meat	375 g	Pre-warmed BPW d 1/10	18 - 24 h at 37°C ±1°C	375 g	Pre-warmed BPW d 1/4	10-18 h at 41,5°C ±1°C
Flour and raw doughs	25 g	BPW d 1/10	18 - 24 h at 37°C ±1°C	375 g	BPW + STEC supplement d 1/4	18-26 h at 41,5°C ±1°C
Multicomponent foods and meal components	25 g	BPW d 1/10	18 - 24 h at 37°C±1°C	25 g	BPW d 1/10	18-26 h 41.5°C ±1°C
Raw produces and fruits	25 g	BPW d 1/10	18 - 24 h at 37°C ±1°C	25 g	BPW d 1/10	18-26 h 41.5°C ±1°C

4 METHOD COMPARISON STUDY

4.1 Sensitivity study

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

4.1.1 Categories and sample types

A total of five categories were included in this validation study. A minimum of 60 items for each category were tested by both the reference method and the alternative method in the sensitivity study, with a minimum of 30 positive samples per category. Each category was made up of three types, with at least 20 items representative for that Type.

The categories, the types and the number of samples analyzed are presented in Table 7.

Table 7 - Categories, types and number of samples analyzed

Category		Test portion	Protocol	Type		Total
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41,5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	25
				b	Raw cow's milk cheeses	24
				c	Raw milk cheeses originating from other than cow's milk	31
				TOTAL		80
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW at 41,5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb...)	25
				b	Frozen (beef, veal, pork, lamb...)	23
				c	Seasoned (beef, veal, pork, lamb...)	23
				TOTAL		71
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41,5°C 1/4 18h	a	Wheat (different types)	30
				b	Rye, corn, rice and pea flour	28
				c	Raw doughs	26
				TOTAL		84
4	Multicomponent foods or meal components	25 g	+225ml BPW at 41,5°C 1/10 18h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	20
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	22
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	27
				TOTAL		69
5	Raw produces and fruits	25 g	+225ml BPW at 41,5°C 1/10 18h	a	Sprouts and leafy greens	26
				b	Fresh and frozen produces	27
				c	Fresh and frozen fruits	25
				TOTAL		78
All samples						382

382 samples were analyzed. The distribution of positive and negative samples per tested category and type is given in Table 8 using the CFX96 Deep well and Table 9 using the CFX Opus Deep Well PCR instruments.



Table 8 – Distribution per tested category and type - CFX96 Deep Well

Category		Alternative method protocol	Test portion size*	Type		Without FDRS			With FDRS		
						Positive	Negative	Total	Positive	Negative	Total
1	Raw dairy products	BPW+STEC supplement d 1/10 41.5°C ± 1°C 16-24 h	25 g	a	Raw milk (cow, ewe, goat)	10	15	25	10	15	25
				b	Raw cow's milk cheeses	11	13	24	11	13	24
				c	Raw milk cheeses originating from other than cow's milk	12	19	31	13	18	31
				TOTAL		33	47	80	34	46	80
2	Raw meat products (excluding poultry meat)	Pre-warmed (41.5°C) BPW d 1/4 41.5°C ± 1°C 10-18 h	375 g	a	Chilled (beef, veal, pork, lamb)	11	14	25	11	14	25
				b	Frozen (beef, veal, pork, lamb)	12	11	23	12	11	23
				c	Seasoned (beef, veal, pork, lamb)	9	14	23	10	13	23
				TOTAL		32	39	71	33	38	71
3	Flours and raw doughs	BPW+STEC supplement d 1/4 41.5°C ± 1°C 18-26 h	375 g	a	Wheat (different types)	11	19	30	12	18	30
				b	Rye, corn, rice and pea flour	11	17	28	11	17	28
				c	Raw doughs	11	15	26	11	15	26
				TOTAL		33	51	84	34	50	84
4	Multicomponent foods and meal components	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	10	20	10	10	20
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	10	22	12	10	22
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	17	27	10	17	27
				TOTAL		32	37	69	32	37	69
5	Raw produces and fruits	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Sprouts and leafy greens	12	14	26	12	14	26
				b	Fresh and frozen raw produces (cut and ready to eat)	10	17	27	10	17	27
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	14	25	11	14	25
				TOTAL		33	45	78	33	45	78
All categories						163	219	382	166	216	382

FDRS: iQ-Check Free DNA Removal Solution



Table 9 – Distribution per tested category and type - CFX Opus Deep Well

Category		Alternative method protocol	Test portion size*	Type		Without FDRS			With FDRS		
						Positive	Negative	Total	Positive	Negative	Total
1	Raw dairy products	BPW+STEC supplement d 1/10 41.5°C ± 1°C 16-24 h	25 g	a	Raw milk (cow, ewe, goat)	10	15	25	10	15	25
				b	Raw cow's milk cheeses	11	13	24	11	13	24
				c	Raw milk cheeses originating from other than cow's milk	12	19	31	13	18	31
				TOTAL		33	47	80	34	46	80
2	Raw meat products (excluding poultry meat)	Pre-warmed (41.5°C) BPW d 1/4 41.5°C ± 1°C 10-18 h	375 g	a	Chilled (beef, veal, pork, lamb)	10	15	25	11	14	25
				b	Frozen (beef, veal, pork, lamb)	12	11	23	12	11	23
				c	Seasoned (beef, veal, pork, lamb)	10	13	23	10	13	23
				TOTAL		32	39	71	33	38	71
3	Flours and raw doughs	BPW+STEC supplement d 1/4 41.5°C ± 1°C 18-26 h	375 g	a	Wheat (different types)	12	18	30	12	18	30
				b	Rye, corn, rice and pea flour	11	17	28	11	17	28
				c	Raw doughs	11	15	26	11	15	26
				TOTAL		34	50	84	34	50	84
4	Multicomponent foods and meal components	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	10	20	10	10	20
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	10	22	12	10	22
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	17	27	10	17	27
				TOTAL		32	37	69	32	37	69
5	Raw produces and fruits	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Sprouts and leafy greens	12	14	26	12	14	26
				b	Fresh and frozen raw produces (cut and ready to eat)	10	17	27	10	17	27
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	14	25	11	14	25
				TOTAL		33	45	78	33	45	78
All categories						164	218	382	168	216	382

FDRS: iQ-Check Free DNA Removal Solution



The distribution of positive samples per strain inoculated is given per category and test portion and for all tested samples in Tables 10 and 11. The raw dairy products were mainly contaminated with O26 and O145 *E. coli* strains, while raw meat products were contaminated mainly O157 *E. coli* strains, flours, raw doughs with O157 and O145, multicomponent foods and meal components with O157, O26 and O103 and raw produces and fruits with O26.



Table 10 – Distribution of positive samples per strain inoculated (stx and serogroups), per category, type and protocol for CFX96

Category		Alternative method protocol	Test portion	Type		Without FDRS							With FDRS								
						Stx/eae outside Top5	Stx/eae associated with serogroup						TOTAL	Stx/eae	Stx/eae associated with serogroup						TOTAL
							O26	O103	O111	O145	O157	mix			O26	O103	O111	O145	O157	mix	
1	Raw dairy products	BPW+STEC supplement d 1/10 41.5°C ± 1°C 16-24 h	25 g	a	Raw milk (cow, ewe, goat)	0	3	0	1	5	1	0	10	0	3	0	1	5	1	0	10
				b	Raw cow's milk cheeses	1	3	1	1	4	1	0	11	1	3	1	1	4	1	0	11
				c	Raw milk cheeses originating from other than cow's milk	1	1	3	1	4	2	0	12	1	2	3	1	4	2	0	13
				TOTAL		2	7	4	3	13	4	0	33	2	8	4	3	13	4	0	34
2	Raw meat products (excluding poultry)	Pre-warmed (41.5°C) BPW d 1/4 41.5°C ± 1°C 10-18 h	375 g	a	Chilled (beef, veal, pork, lamb)	1	0	3	2	3	2	0	11	1	0	3	2	3	2	0	11
				b	Frozen (beef, veal, pork, lamb)	1	3	0	0	2	6	0	12	1	3	0	0	2	6	0	12
				c	Seasoned (beef, veal, pork, lamb)	0	3	1	0	3	2	0	9	0	3	1	0	3	3	0	10
				TOTAL		2	6	4	2	8	10	0	32	2	6	4	2	8	11	0	33
3	Flours and raw doughs	BPW + STEC supplement d 1/4 41.5°C ± 1°C 18-26 h	375 g	a	Wheat (different types)	0	2	1	1	4	3	0	11	0	2	1	1	4	4	0	12
				b	Rye, corn, rice and pea flour	0	2	1	1	3	4	0	11	0	2	1	1	3	4	0	11
				c	Raw doughs	0	3	2	1	3	2	0	11	0	3	2	1	3	2	0	11
				TOTAL		0	7	4	3	10	9	0	33	0	7	4	3	10	10	0	34
4	Multicomponent foods or meal components	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	0	3	4	0	0	3	0	10	0	3	4	0	0	3	0	10
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	0	4	4	0	0	4	0	12	0	4	4	0	0	4	0	12
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	0	1	0	1	2	5	1	10	0	1	0	1	2	5	1	10
				TOTAL		0	8	8	1	2	12	1	32	0	8	8	1	2	12	1	32
5	Raw produces and fruits	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Sprouts and leafy greens	0	5	1	1	1	2	2	12	0	5	1	1	1	2	2	12
				b	Fresh and frozen raw produces (cut and ready to eat)	0	3	1	2	1	3	0	10	0	3	1	2	1	3	0	10
				c	Fresh and frozen raw fruits (cut and ready to eat)	0	6	1	0	1	3	0	11	0	6	1	0	1	3	0	11
				TOTAL		0	14	3	3	3	8	2	33	0	14	3	3	3	8	2	33
All categories						4	42	23	12	36	43	3	163	4	43	23	12	36	45	3	166

FDRS: iQ-Check Free DNA Removal Solution



Table 11 – Distribution of positive samples per strain inoculated (stx and serogroups), per category, type and protocol for CFX Opus

Category		Alternative method protocol	Test portion	Type		Without FDRS								With FDRS							
						Stx/eae outside Top5	Stx/eae associated with serogroup						TOTAL	Stx/eae	Stx/eae associated with serogroup						TOTAL
							O26	O103	O111	O145	O157	mix			O26	O103	O111	O145	O157	mix	
1	Raw dairy products	BPW+STEC supplement d 1/10 41.5°C ± 1°C 16-24 h	25 g	a	Raw milk (cow, ewe, goat)	0	3	0	1	5	1	0	10	0	3	0	1	5	1	0	10
				b	Raw cow's milk cheeses	1	3	1	1	4	1	0	11	1	3	1	1	4	1	0	11
				c	Raw milk cheeses originating from other than cow's milk	1	1	3	1	4	2	0	12	1	2	3	1	4	2	0	13
				TOTAL		2	7	4	3	13	4	0	33	2	8	4	3	13	4	0	34
2	Raw meat products (excluding poultry)	Pre-warmed (41.5°C) BPW d 1/4 41.5°C ± 1°C 10-18 h	375 g	a	Chilled (beef, veal, pork, lamb)	1	0	3	2	3	1	0	10	1	0	3	2	3	2	0	11
				b	Frozen (beef, veal, pork, lamb)	1	3	0	0	2	6	0	12	1	3	0	0	2	6	0	12
				c	Seasoned (beef, veal, pork, lamb)	0	3	1	0	3	3	0	10	0	3	1	0	3	3	0	10
				TOTAL		2	6	4	2	8	10	0	32	2	6	4	2	8	11	0	33
3	Flours and raw doughs	BPW + STEC supplement d 1/4 41.5°C ± 1°C 18-26 h	375 g	a	Wheat (different types)	0	2	1	1	4	4	0	12	0	2	1	1	4	4	0	12
				b	Rye, corn, rice and pea flour	0	2	1	1	3	4	0	11	0	2	1	1	3	4	0	11
				c	Raw doughs	0	3	2	1	3	2	0	11	0	3	2	1	3	2	0	11
				TOTAL		0	7	4	3	10	10	0	34	0	7	4	3	10	10	0	34
4	Multicomponent foods or meal components	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	0	3	4	0	0	3	0	10	0	3	4	0	0	3	0	10
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	0	4	4	0	0	4	0	12	0	4	4	0	0	4	0	12
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	0	1	0	1	2	5	1	10	0	1	0	1	2	5	1	10
				TOTAL		0	8	8	1	2	12	1	32	0	8	8	1	2	12	1	32
5	Raw produces and fruits	BPW d 1/10 41.5°C ± 1°C 18-26 h	25 g	a	Sprouts and leafy greens	0	5	1	1	1	2	2	12	0	5	1	1	1	2	2	12
				b	Fresh and frozen raw produces (cut and ready to eat)	0	3	1	2	1	3	0	10	0	3	1	2	1	3	0	10
				c	Fresh and frozen raw fruits (cut and ready to eat)	0	6	1	0	1	3	0	11	0	6	1	0	1	3	0	11
				TOTAL		0	14	3	3	3	8	2	33	0	14	3	3	3	8	2	33
All categories						4	42	23	12	36	44	3	164	4	43	23	12	36	45	5	166

FDRS: iQ-Check Free DNA Removal Solution

4.1.2 Test sample preparation

Naturally contaminated samples were preferentially analyzed. Artificial contaminations were also done by seeding protocols using strains from appropriate origin for inoculation before storage of the samples for 48 h to 72 h at 3°C ± 2°C or for 2 weeks at - 20°C, or 2 weeks at room temperature using lyophilized strains for flours. Cross contamination was applied for 2 raw meat samples (75 g naturally contaminated sample + 325 non-contaminated sample).

The target inoculation was ≤ 3 CFU/test portion.

The same strain was not used to inoculate more than 6 positive samples (See Table 12).

Table 12 - Repartition of positive and negative samples per inoculated strain

Strain inoculated	Number of samples		
	Negative	Positive	Total
<i>E. coli</i> Ad3247	2		2
<i>E. coli</i> O103 Ad1772	2	4	6
<i>E. coli</i> O103 Ad2309	1		1
<i>E. coli</i> O103 Ad3153		4	4
<i>E. coli</i> O103 Ad3255		5	5
<i>E. coli</i> O103 Ad3257		2	2
<i>E. coli</i> O103 Ad3284		2	2
<i>E. coli</i> O103 Ad3318		4	4
<i>E. coli</i> O103 Ad982		2	2
<i>E. coli</i> O111 Ad3021	1	1	2
<i>E. coli</i> O111 Ad3037	3		3
<i>E. coli</i> O111 Ad981	2	2	4
<i>E. coli</i> O111:H28 Ad511		2	2
<i>E. coli</i> O111:H8 622-4		4	4
<i>E. coli</i> O111:H8 Ad3021	1	2	3
<i>E. coli</i> O111:H8 Ad511		3	3
<i>E. coli</i> O111:H8 CDC 2010C-314		1	1
<i>E. coli</i> O145 Ad3029	1	2	3
<i>E. coli</i> O145 Ad3054	2	6	8
<i>E. coli</i> O145 Ad3168	1	2	3
<i>E. coli</i> O145 Ad3173		4	4
<i>E. coli</i> O145 Ad3175		7	7
<i>E. coli</i> O145 Ad3176		2	2
<i>E. coli</i> O145 Ad983		3	3
<i>E. coli</i> O145:H28 092-4		3	3
<i>E. coli</i> O145:H28 1502-105		2	2

Strain inoculated	Number of samples		
	Negative	Positive	Total
<i>E. coli</i> O145:H28 2305-1		3	3
<i>E. coli</i> O157 Ad3183		3	3
<i>E. coli</i> O157 Ad3383	2	6	8
<i>E. coli</i> O157:H7 803		2	2
<i>E. coli</i> O157:H7 Ad3118		6	6
<i>E. coli</i> O157:H7 Ad3396	1	1	2
<i>E. coli</i> O157:H7 Ad3398	3	3	6
<i>E. coli</i> O157:H7 Ad485		3	3
<i>E. coli</i> O157:H7 Ad557	1	2	3
<i>E. coli</i> O157:H7 Ad558	1	1	2
<i>E. coli</i> O157:H7 Ad571		3	3
<i>E. coli</i> O157:H7 Ad572		2	2
<i>E. coli</i> O157:H7 Ad574	1	2	3
<i>E. coli</i> O157:H7 Ad683		2	2
<i>E. coli</i> O157:H7 Ad975		7	7
<i>E. coli</i> O157:H7 d3260		3	3
<i>E. coli</i> O26 14-53		1	1
<i>E. coli</i> O26 Ad1777		2	2
<i>E. coli</i> O26 Ad1777 + <i>E. coli</i> O157:H7 Ad3118		2	2
<i>E. coli</i> O26 Ad2623	1	2	3
<i>E. coli</i> O26 Ad2670	1	2	3
<i>E. coli</i> O26 Ad2831	1	3	4
<i>E. coli</i> O26 Ad3109		2	2
<i>E. coli</i> O26 Ad3203	1		1
<i>E. coli</i> O26 Ad3253		2	2
<i>E. coli</i> O26 Ad3254	1	6	7
<i>E. coli</i> O26 Ad3256		3	3
<i>E. coli</i> O26 Ad3385	3	6	9
<i>E. coli</i> O26 Ad3430	3	6	9
<i>E. coli</i> O26 Ad980		4	4
<i>E. coli</i> O26:H11 Ad1507	1	3	4
Total	37	162	199

The artificial inoculations are presented in **Appendix 3**.

199 samples were artificially contaminated by seeding protocol, using **56** different strains or strain combination. **162** gave a positive result by at least one of the methods. Most of the seeding inoculations were lower or equal to 3 CFU/sample.

The number of samples inoculated, the number of samples contaminated with only naturally present strains and the repartition of the positive samples per inoculation protocol are given in Table 13.



Table 13 - Repartition of the positive samples per inoculation protocol and inoculation level
for CFX96 Deep Well and CFX Opus Deep Well

Category			CFX96								CFX Opus							
			Without FDRS				With FDRS				Without FDRS				With FDRS			
			Naturally contaminated	Seeding protocol		Total	Naturally contaminated	Seeding protocol		Total	Naturally contaminated	Seeding protocol		Total	Naturally contaminated	Seeding protocol		Total
				≤ 3 CFU	3 < x ≤ 10 CFU			≤ 3 CFU	3 < x ≤ 10 CFU			≤ 3 CFU	3 < x ≤ 10 CFU			≤ 3 CFU	3 < x ≤ 10 CFU	
1	Raw dairy products	Number	2	29	2	33	2	30	2	34	2	29	2	33	2	30	2	34
		%	6,1%	87,9%	6,1%	100,0%	5,9%	88,2%	5,9%	100,0%	6,1%	87,9%	6,1%	100,0%	5,9%	88,2%	5,9%	100,0%
2	Raw meat products (excluding poultry)	Number	2	26	4	32	2	27	4	33	2	26	4	32	2	27	4	33
		%	6,3%	81,3%	12,5%	100,0%	6,1%	81,8%	12,1%	100,0%	6,3%	81,3%	12,5%	100,0%	6,1%	81,8%	12,1%	100,0%
3	Flours and raw doughs	Number	0	32	1	33	0	33	1	34	0	33	1	34	0	33	1	34
		%	0,0%	97,0%	3,0%	100,0%	0,0%	97,1%	2,9%	100,0%	0,0%	97,1%	2,9%	100,0%	0,0%	97,1%	2,9%	100,0%
4	Multicomponent foods or meal components	Number	0	24	8	32	0	24	8	32	0	24	8	32	0	24	8	32
		%	0,0%	75,0%	25,0%	100,0%	0,0%	75,0%	25,0%	100,0%	0,0%	75,0%	25,0%	100,0%	0,0%	75,0%	25,0%	100,0%
5	Fresh and processed produce and fruits	Number	0	25	8	33	0	25	8	33	0	25	8	33	0	25	8	33
		%	0,0%	75,8%	24,2%	100,0%	0,0%	75,8%	24,2%	100,0%	0,0%	75,8%	24,2%	100,0%	0,0%	75,8%	24,2%	100,0%
All categories		Number	4	136	23	163	2	139	23	166	4	137	23	164	4	139	23	166
		%	2,5%	83,4%	14,1%	100,0%	2,4%	83,7%	13,9%	100,0%	2,4%	83,5%	14,0%	100,0%	2,4%	83,7%	13,9%	100,0%

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1.2 % of the samples were naturally contaminated.

Only four naturally contaminated samples were analyzed during the study, two in the raw dairy category and two in the raw meat category they are listed in Table 14.

For one additional sample (n°1105) inoculated with *E. coli* O111 Ad3021, two different strains were isolated with the ISO/TS 13136 (the inoculated *E. coli* O111 strain and a *E. coli* O26 naturally present in the sample).

Table 14 - Naturally contaminated samples

Category		Sample N°	Product (French name)	Product	Agreement Ref/Alt	Strain isolated and tested by the PCR of the reference method (naturally contaminated sample)
1	Raw dairy products	7474	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	PD	<i>stx+/eae+/O26+</i>
1	Raw dairy products	7834	Fromage au lait cru de chèvre (Rigotte)	Raw goat milk cheese	PD	<i>stx+/eae+</i>
2	Raw meat products (except poultry)	7775	Viande d'agneau à mijoter surgelée	Frozen lamb meat	PD	<i>stx+/eae+</i>
2	Raw meat products (except poultry)	8105	Gigot d'agneau	Fresh lamb meat	PA	<i>stx+/eae+/Top 5 -</i>
4	Multicomponent foods and meal components	1105	Soupe déshydratée tomates vermicelles	Dehydrated soup (tomato and vermicelli)	PA	<i>stx1+/stx2-/eae+/O26+</i>

4.1.3 Protocols applied during the validation study

➤ Test portions

For both the ISO/TS 13136 and the alternative methods the same test portions were used for categories listed below:

- **Raw dairy products, multicomponent foods and meal components, raw produces and fruits:** 25 g,
- **Raw meat products:** 375 g.

For **flours and raw doughs**, different tests portions were used:

- ISO/TS 13136: 25 g,
- Alternative method: 375 g.

> **Incubation time**

The minimum incubation time was applied:

- 16 h at 41.5°C for **raw dairy products**,
- 10 h at 41.5°C for **raw meats products**,
- 18 h at 41.5°C for **flours and raw doughs, multicomponent foods and meal components, raw produces and fruits**.

> **Extraction protocols**

Both extraction protocols were tested during the validation study:

- EASY II on 100 µL enriched samples.
- EASY II on 100 µL pre-treated enriched samples using FRDS protocol.

> **Confirmation protocols**

- **Confirmation A:** direct streaking
 - Streak of 10 µL onto selective agar plates (TBX and CHROMagar STEC).
 - Incubate the plates 18 - 24 h at 37°C ± 1°C.
 - Using a single colony, perform detection of virulence genes on colonies using the same kit as for the screening step: resuspend an isolated colony in 0.1 ml of BPW or Tryptone Salt and proceed to the lysis and to the detection. Confirm the identification to *E. coli* species by biochemical gallery (API 20E galleries were used for the validation study).
 - Pooling of up to 10 colonies is possible to screen for the detection of virulence genes. 5 µl of suspension can be directly added to the amplification mix without DNA extraction. It depends on lab organization and safety rules.
 - From pooled colonies giving a positive result, test individual colonies and confirm the identification to *E. coli* species by biochemical gallery (API 20E galleries were used for the validation study).

- **Confirmation B:** in case of discrepancy between the iQ-Check STEC VirX test and the direct confirmation, depending on the Cq values obtained at the screening step, and depending on the interfering flora level, the following additional procedures are recommended:
 - Dilute to 1/100 the enriched broth (0.1 ml + 9 ml BPW + STEC sup)
 - Incubate for 16 - 24 h at 41.5°C ± 1°C.
 - Streak 10 µl onto selective agar plates (TBX, CHROMagar STEC, RAPID'E. coli 2 and RAPID'E. coli O157). Incubate the plates 18 - 24 h at 37°C ± 1°C.
 - Screen up to 50 colonies as recommended in the ISO/TS 13136 using the kit iQ-Check STEC VirX. Pooling 10 typical colonies is possible.
 - From pooled colonies giving a positive result, test individual colonies and confirm the identification to *E. coli* species by biochemical gallery (API 20E galleries were used for the validation study).

During the validation study:

- In case of discrepancy between the iQ-Check test result and the different confirmation procedures described in the IFU for the artificially contaminated samples, an IMS step was performed before streaking onto selective agar plates when strains from Top 5 were inoculated.
- The colonies isolated from naturally contaminated samples confirmed as positive using the protocol of the alternative method were tested by the PCR tests of the ISO/TS 13136.

> **Enrichment broth storage**

The enrichment broths of the alternative method from positive and discordant samples were stored for 72h at 5°C ± 3°C and tested again (PCR and confirmatory tests).

4.1.4 *Sensitivity study results*

All raw data per category are given in **Appendix 4**. Sample numbers in **bold** indicate artificial inoculation of the sample (see **Appendix 3** for details on artificial inoculation).

Table 15 shows the summary of results of the reference method and the alternative methods for **all Categories** using the **CFX96 Deep Well** PCR instrument.

Table 16 shows the Interpretation of sample results between the reference and alternative method (based on the confirmed alternative method) using the **CFX Opus Deep Well** PCR instrument.

Table 17 shows the Interpretation of sample results between the reference and alternative method (based on the confirmed alternative method) using the **CFX96 Deep Well** PCR instrument.

Table 18 shows the Interpretation of sample results between the reference and alternative method (based on the confirmed alternative method) using the **CFX Opus Deep Well** PCR instrument.

Table 15 – Summary of sensitivity study results – All categories
CFX96 Deep Well

	Without FDRS		With FDRS	
	Reference method positive (R+)	Reference method negative (R-)	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (R+/A+) PA = 87	Positive deviation (R-/A+) PD = 48	Positive agreement (R+/A+) PA = 87	Positive deviation (R-/A+) PD = 51
Alternative method negative (A-)	Negative deviation (R+/A-) ND** = 24 (PPND=4)	Negative agreement (R-/A-) NA* = 192 (PPNA=27)	Negative deviation (R+/A-) ND** = 23 (PPND=5)	Negative agreement (R-/A-) NA* = 188 (PPNA=28)

FDRS: iQ-Check Free DNA Removal Solution

* PPNA not included

** PPND not included

Table 16 – Summary of sensitivity study results – All categories
CFX Opus Deep Well

	Without FDRS		With FDRS	
	Reference method positive (R+)	Reference method negative (R-)	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement (R+/A+) PA = 87	Positive deviation (R-/A+) PD = 49	Positive agreement (R+/A+) PA = 86	Positive deviation (R-/A+) PD = 51
Alternative method negative (A-)	Negative deviation (R+/A-) ND** = 24 (PPND=4)	Negative agreement (R-/A-) NA* = 189 (PPNA=29)	Negative deviation (R+/A-) ND** = 24 (PPND=5)	Negative agreement (R-/A-) NA* = 189 (PPNA=27)

FDRS: iQ-Check Free DNA Removal Solution

* PPNA not included

** PPND not included



**Table 17 – Interpretation of sample results between the reference and alternative method
(based on the confirmed alternative method) – CFX96 Deep Well**

Without FDRS												
Category		Test portion	Protocol	Type		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Raw dairy products	25 g	BPW+STEC supplement d 1:10 16 h at 41.5°C	a	Raw milk (cow, ewe, goat)	7	14	2	1	0	1	25
				b	Raw cow's milk cheeses	6	8	3	2	0	5	24
				c	Raw milk cheeses originating from other than cow's milk	6	17	3	3	0	2	31
				TOTAL		19	39	8	6	0	8	80
2	Raw meat products (except poultry)	Up to 375 g	Pre-warmed BPW (41.5°C) d 1:4 10 h at 41.5°C	a	Chilled (beef, veal, pork, lamb...)	1	12	10	0	0	2	25
				b	Frozen (beef, veal, pork, lamb...)	8	9	3	1	0	2	23
				c	Seasoned (beef, veal, pork, lamb...)	6	14	1	1	1	0	23
				TOTAL		15	35	14	2	1	4	71
3	Flours and raw doughs	Up to 375 g	BPW+STEC supplement d 1:4 16 h at 41.5°C	a	Wheat (different types)	3	10	3	3	2	9	30
				b	Rye, corn, rice and pea flour	8	13	2	0	1	4	28
				c	Raw doughs	5	14	3	3	0	1	26
				TOTAL		16	37	8	6	3	14	84
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	10	0	0	0	0	20
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	11	10	1	0	0	0	22
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	3	17	4	3	0	0	27
				TOTAL		24	37	5	3	0	0	69
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	6	14	5	1	0	0	26
				b	Fresh and frozen raw produces (cut and ready to eat)	3	16	4	3	0	1	27
				c	Fresh and frozen raw fruits (cut and ready to eat)	4	14	4	3	0	0	25
				TOTAL		13	44	13	7	0	1	78
All categories						87	192	48	24	4	27	382



With FDRS												
Category		Test portion	Protocol	Type		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Raw dairy products	25 g	+225 ml BPW+STEC supp 16 h at 41.5°C 1/10	a	Raw milk (cow, ewe, goat)	7	14	2	1	0	1	25
				b	Raw cow's milk cheeses	6	9	3	2	0	4	24
				c	Raw milk cheeses originating from other than cow's milk	6	17	4	3	0	1	31
				TOTAL		19	40	9	6	0	6	80
2	Raw meat products (except poultry)	Up to 375 g	+1125 ml Pre-warmed BPW 10 h at 41.5°C 1/4	a	Chilled (beef, veal, pork, lamb...)	1	10	10	0	0	4	25
				b	Frozen (beef, veal, pork, lamb...)	8	10	3	1	0	1	23
				c	Seasoned (beef, veal, pork, lamb...)	6	12	2	1	1	1	23
				TOTAL		15	32	15	2	1	6	71
3	Flours and raw doughs	Up to 375 g	+225 ml BPW+STEC supp 18 h at 41.5°C 1/10 18h	a	Wheat (different types)	3	8	4	3	2	10	30
				b	Rye, corn, rice and pea flour	8	13	2	0	1	4	28
				c	Raw doughs	5	14	3	2	1	1	26
				TOTAL		16	35	9	5	4	15	84
4	Multicomponent foods or meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	10	0	0	0	0	20
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	11	10	1	0	0	0	22
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	3	17	4	3	0	0	27
				TOTAL		24	37	5	3	0	0	69
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	6	14	5	1	0	0	26
				b	Fresh and frozen raw produces (cut and ready to eat)	3	16	4	3	0	1	27
				c	Fresh and frozen raw fruits (cut and ready to eat)	4	14	4	3	0	0	25
				TOTAL		13	44	13	7	0	1	78
All categories						87	188	51	23	5	28	382

FDRS: iQ-Check Free DNA Removal Solution

* PPNA not included

** PPND not included



**Table 18 – Interpretation of sample results between the reference and alternative method
(based on the confirmed alternative method) – CFX Opus Deep Well**

Without FDRS												
Category		Test portion	Protocol	Type		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Raw dairy products	25 g	BPW+STEC supplement d 1:10 16 h at 41.5°C	a	Raw milk (cow, ewe, goat)	7	14	2	1	0	1	25
				b	Raw cow's milk cheeses	6	9	3	2	0	4	24
				c	Raw milk cheeses originating from other than cow's milk	6	18	3	3	0	1	31
				TOTAL								
2	Raw meat products (except poultry)	Up to 375 g	Pre-warmed BPW (41.5°C) d 1:4 10 h at 41.5°C	a	Chilled (beef, veal, pork, lamb...)	1	12	9	0	0	3	25
				b	Frozen (beef, veal, pork, lamb...)	8	9	3	1	0	2	23
				c	Seasoned (beef, veal, pork, lamb...)	6	11	2	1	1	2	23
				TOTAL		15	32	14	2	1	7	71
3	Flours and raw doughs	Up to 375 g	BPW+STEC supplement d 1:4 16 h at 41.5°C	a	Wheat (different types)	3	10	4	3	2	8	30
				b	Rye, corn, rice and pea flour	8	14	2	0	1	3	28
				c	Raw doughs	5	14	3	3	0	1	26
				TOTAL		16	38	9	6	3	12	84
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	10	0	0	0	0	20
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	11	9	1	0	0	1	22
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	3	17	4	3	0	0	27
				TOTAL		24	36	5	3	0	1	69
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	6	13	5	1	0	1	26
				b	Fresh and frozen raw produces (cut and ready to eat)	3	16	4	3	0	1	27
				c	Fresh and frozen raw fruits (cut and ready to eat)	4	14	4	3	0	0	25
				TOTAL		13	43	13	7	0	2	78
All categories						87	189	49	24	4	29	382

FDRS: iQ-Check Free DNA Removal Solution

* PPNA not included

** PPND not included



With FDRS												
Category		Test portion	Protocol	Type		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Raw dairy products	25 g	+225 ml BPW+STEC supp 16 h at 41.5°C 1/10	a	Raw milk (cow, ewe, goat)	7	14	2	1	0	1	25
				b	Raw cow's milk cheeses	6	9	3	2	0	4	24
				c	Raw milk cheeses originating from other than cow's milk	6	17	4	3	0	1	31
				TOTAL		19	40	9	6	0	6	80
2	Raw meat products (except poultry)	Up to 375 g	+1125 ml Pre- warmed BPW 10 h at 41.5°C 1/4	a	Chilled (beef, veal, pork, lamb...)	1	10	10	0	0	4	25
				b	Frozen (beef, veal, pork, lamb...)	8	10	3	1	0	1	23
				c	Seasoned (beef, veal, pork, lamb...)	6	12	2	1	1	1	23
				TOTAL		15	32	15	2	1	6	71
3	Flours and raw doughs	Up to 375 g	+225 ml BPW+STEC supp 18 h at 41.5°C 1/10 18h	a	Wheat (different types)	2	10	4	4	2	8	30
				b	Rye, corn, rice and pea flour	8	12	2	0	1	5	28
				c	Raw doughs	5	14	3	2	1	1	26
				TOTAL		15	36	9	6	4	14	84
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	10	0	0	0	0	20
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	11	10	1	0	0	0	22
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	3	17	4	3	0	0	27
				TOTAL		24	37	5	3	0	0	69
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	6	14	5	1	0	0	26
				b	Fresh and frozen raw produces (cut and ready to eat)	3	16	4	3	0	1	27
				c	Fresh and frozen raw fruits (cut and ready to eat)	4	14	4	3	0	0	25
				TOTAL		13	44	13	7	0	1	78
All categories						86	189	51	24	5	27	382

FDRS: iQ-Check Free DNA Removal Solution

* PPNA not included

** PPND not included

4.1.5 Sensitivity study calculations

The sensitivity study parameters as specified in Table 19 were calculated for all categories and types, and the overview is given in Tables 20 and 21.

Table 19 – Formula to calculate the sensitivity parameters

		CFX96 Deep Well		CFX Opus Deep Well	
		Without FDRS	With FDRS	Without FDRS	With FDRS
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\%$	82,8%	83,1%	82,9%	82,5%
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)} \times 100\%$	70,6%	69,3%	70,1%	69,3%
Relative trueness	$RT = \frac{(PA + NA)}{N} \times 100\%$	80,1%	79,3%	79,8%	79,1%
False positive ratio for the alternative method	$FPR = \frac{(FP)}{NA} \times 100\%$	14,2%	15,3%	14,7%	14,8%

FDRS: iQ-Check Free DNA Removal Solution

With $ND = ND + PPND$
 $NA = NA + PPNA$



Table 20 – Overview calculated sensitivity parameters per category and type – CFX96 Deep Well

Without FDRS									
Category		Test portion	Protocol	Type		SE _{alt} %	SE _{ref} %	RT %	FPR %
1	Raw dairy products	25 g	+225 ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	90,0	80,0	88,0	6,7
				b	Raw cow's milk cheeses	81,8	72,7	79,2	38,5
				c	Raw milk cheeses originating from other than cow's milk	75,0	75,0	80,6	10,5
				TOTAL		81,8	75,8	82,5	17,0
2	Raw meat products (except poultry)	Up to 375 g	+1125 ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb...)	100,0	9,1	60,0	14,3
				b	Frozen (beef, veal, pork, lamb...)	91,7	75,0	82,6	18,2
				c	Seasoned (beef, veal, pork, lamb...)	77,8	88,9	87,0	7,1
				TOTAL		90,6	56,3	76,1	12,8
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	54,5	72,7	73,3	57,9
				b	Rye, corn, rice and pea flour	90,9	81,8	89,3	29,4
				c	Raw doughs	72,7	72,7	76,9	6,7
				TOTAL		72,7	75,8	79,8	33,3
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	100,0	100,0	100,0	0,0
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	100,0	91,7	95,5	0,0
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	70,0	60,0	74,1	0,0
				TOTAL		90,6	84,4	88,4	0,0
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	91,7	58,3	76,9	0,0
				b	Fresh and frozen raw produces (cut and ready to eat)	70,0	60,0	74,1	5,9
				c	Fresh and frozen raw fruits (cut and ready to eat)	72,7	63,6	72,0	0,0
				TOTAL		78,8	60,6	74,4	2,2
All categories						82,8	70,6	80,1	14,2



With FDRS									
Category		Test portion	Protocol	Type		SE _{alt} %	SE _{ref} %	RT %	FPR %
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	90,0	80,0	88,0	6,7
				b	Raw cow's milk cheeses	81,8	72,7	79,2	30,8
				c	Raw milk cheeses originating from other than cow's milk	76,9	69,2	77,4	5,6
				TOTAL		82,4	73,5	81,3	13,0
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb...)	100,0	9,1	60,0	28,6
				b	Frozen (beef, veal, pork, lamb...)	91,7	75,0	82,6	9,1
				c	Seasoned (beef, veal, pork, lamb...)	80,0	80,0	82,6	15,4
				TOTAL		90,9	54,5	74,6	18,4
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	58,3	66,7	70,0	66,7
				b	Rye, corn, rice and pea flour	90,9	81,8	89,3	29,4
				c	Raw doughs	72,7	72,7	76,9	13,3
				TOTAL		73,5	73,5	78,6	38,0
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	100,0	100,0	100,0	0,0
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	100,0	91,7	95,5	0,0
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	70,0	60,0	74,1	0,0
				TOTAL		90,6	84,4	88,4	0,0
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	91,7	58,3	76,9	0,0
				b	Fresh and frozen raw produces (cut and ready to eat)	70,0	60,0	74,1	5,9
				c	Fresh and frozen raw fruits (cut and ready to eat)	72,7	63,6	72,0	0,0
				TOTAL		78,8	60,6	74,4	2,2
All categories						83,1	69,3	79,3	15,3

FDRS: iQ-Check Free DNA Removal Solution

* PPNA not included



Table 21 – Overview calculated sensitivity parameters per category and type – CFX Opus Deep Well

Without FDRS									
Category		Test portion	Protocol	Type		SE _{alt} %	SE _{ref} %	RT %	FPR %
1	Raw dairy products	25 g	+225 ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	90,0	80,0	88,0	6,7
				b	Raw cow's milk cheeses	81,8	72,7	79,2	30,8
				c	Raw milk cheeses originating from other than cow's milk	75,0	75,0	80,6	5,3
				TOTAL		81,8	75,8	82,5	12,8
2	Raw meat products (except poultry)	Up to 375 g	+1125 ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb...)	100,0	10,0	64,0	20,0
				b	Frozen (beef, veal, pork, lamb...)	91,7	75,0	82,6	18,2
				c	Seasoned (beef, veal, pork, lamb...)	80,0	80,0	82,6	23,1
				TOTAL		90,6	56,3	76,1	20,5
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	58,3	66,7	70,0	55,6
				b	Rye, corn, rice and pea flour	90,9	81,8	89,3	23,5
				c	Raw doughs	72,7	72,7	76,9	6,7
				TOTAL		73,5	73,5	78,6	30,0
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	100,0	100,0	100,0	0,0
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	100,0	91,7	95,5	10,0
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	70,0	60,0	74,1	0,0
				TOTAL		90,6	84,4	88,4	2,7
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	91,7	58,3	76,9	7,1
				b	Fresh and frozen raw produces (cut and ready to eat)	70,0	60,0	74,1	5,9
				c	Fresh and frozen raw fruits (cut and ready to eat)	72,7	63,6	72,0	0,0
				TOTAL		78,8	60,6	74,4	4,4
All categories						82,9	70,1	79,8	14,7



With FDRS									
Category		Test portion	Protocol	Type		SE _{alt} %	SE _{ref} %	RT %	FPR %
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	90,0	80,0	88,0	6,7
				b	Raw cow's milk cheeses	81,8	72,7	79,2	30,8
				c	Raw milk cheeses originating from other than cow's milk	76,9	69,2	77,4	5,6
				TOTAL		82,4	73,5	81,3	13,0
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb...)	100,0	9,1	60,0	28,6
				b	Frozen (beef, veal, pork, lamb...)	91,7	75,0	82,6	9,1
				c	Seasoned (beef, veal, pork, lamb...)	80,0	80,0	82,6	15,4
				TOTAL		90,9	54,5	74,6	18,4
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	50,0	66,7	66,7	55,6
				b	Rye, corn, rice and pea flour	90,9	81,8	89,3	35,3
				c	Raw doughs	72,7	72,7	76,9	13,3
				TOTAL		70,6	73,5	77,4	36,0
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	100,0	100,0	100,0	0,0
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	100,0	91,7	95,5	0,0
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	70,0	60,0	74,1	0,0
				TOTAL		90,6	84,4	88,4	0,0
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	91,7	58,3	76,9	0,0
				b	Fresh and frozen raw produces (cut and ready to eat)	70,0	60,0	74,1	5,9
				c	Fresh and frozen raw fruits (cut and ready to eat)	72,7	63,6	72,0	0,0
				TOTAL		78,8	60,6	74,4	2,2
All categories						82,5	69,3	79,1	14,8

FDRS: iQ-Check Free DNA Removal Solution

* PPNA not included

** PPND not included

4.1.6 *Discordant results*

> **Negative deviations** (See Tables 22 and 23)

Combining all the categories, twenty-eight negative deviations, with or without FDRS protocol, were observed for the **CFX96 Deep Well** and for the **CFX Opus Deep Well** without FDRS. Twenty-nine deviations were observed with the **CFX Opus Deep Well** with FDRS.

The additional negative deviation for the CFX Opus with the FDRS concerns a flour (n°6104) for which the presence of STEC was confirmed in the enrichment broth. All the other samples were found negative using the confirmation tests.

For five samples (n°5946: seasoned lamb meal, n° 1918 (with FDRS protocol) - 2488 - 979 - 980: flours) the presence of STEC was detected by PCR (three times for sample 1918) but it was impossible to confirm the presence of the strain in the enrichment broth. For wheat flours samples, high background microflora was present on the selective agar plates, this may have hindered the recovery of the strain on the plates. Several protocols were tested to detect the *E. coli* stx/eah positive but without any success.

> **Positive deviations** (See Tables 24 and 25)

Forty-eight positive samples were observed without FDRS protocol, and fifty-one with FDRS protocol combining all categories for the **CFX96 Deep Well**. For the **CFX Opus Deep Well**, forty-nine positive samples were observed without FDRS protocol, and fifty-one with FDRS protocol.

For three samples with CFX96 (7656,7987 and 6103) and two samples with CFX Opus (7656 and 7724), positive deviations were observed only when using the FDRS protocol. The contamination level for these samples were probably just at the limit of detection of the alternative method (replicates were tested for the two protocols for sample 7987). Two positive results were obtained out of the three tests performed for the sample concerned with or without applying the FDRS protocol. These results are probably related to the phenomenon of DNA distribution in the collected sample rather than a positive effect of FDRS treatment at the time of extraction.

For nine sample, with four from the flour and dough categories, the confirmations were only obtained either after adding an IMS step or after storage of the samples. It shows the difficulties to recover the strains in the presence of high background flora.



Table 22 - Negative deviations – [CFX96 Deep Well](#)

Year	Sample N°	Product (French name)	Product	Strain inoculated	Inoculation level (CFU/sample)	ISO/TS 13136	Alternative method: iQ Check STEC VirX						Category	Type	
							PCR final result		Final result all confirmatory tests	Final result iQ-Check STEC VirX		Agreement			
							Without FDRS	With FDRS		Without FDRS	With FDRS	Without FDRS			With FDRS
2021	7648	Lait cru de brebis	Raw ewe milk	<i>E. coli</i> O145 Ad3029	2	O145	-	-	-(18h)	-	-	ND	ND	1	a
2021	7830	Fromage au lait cru de vache (Salers)	Raw cow milk cheese	<i>E. coli</i> O157 Ad3183	1,8	O157	-	-	-	-	-	ND	ND	1	b
2021	7831	Fromage au lait cru de vache (Emmenthal)	Raw cow milk cheese	<i>E. coli</i> O157 Ad3183	1,8	O145	-	-	-	-	-	ND	ND	1	b
2021	7833	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	<i>E. coli</i> O111:H8 622-4	2,2	O111	-	-	-	-	-	ND	ND	1	c
2024	222	Fromage au lait cru de brebis (Brebis fermier)	Raw ewe milk cheese	<i>E. coli</i> O103 Ad3153	3	O103	-	-	-	-	-	ND	ND	1	c
2024	224	Fromage au lait cru de chèvre (Rocamadour)	Raw goat milk cheese	<i>E. coli</i> O157:H7 Ad3398	1	O157	-	-	-	-	-	ND	ND	1	c
2021	7766	Viande hachée de bœuf surgelée 15%MG	Frozen ground beef	<i>E. coli</i> O157:H7 d3260	1	O157	-	-	-	-	-	ND	ND	2	b
2021	7988	Pavé d'agneau à la tomate	Seasoned Lamb trim	<i>E. coli</i> O26 14-53	2,4	O26	-	-	-	-	-	ND	ND	2	c
2023	5946	Pavé d'agneau à la tomate	Seasoned Lamb meat	<i>E. coli</i> O26 Ad3253	0,8	O26	+	+	-	-	-	PPND	PPND	2	c
2022	1918	Pâte à pizza bio (Farine de blé)	Pizza dough bio with wheat flour	<i>E. coli</i> O26 Ad980	2,0	O26	-	+ / + / +	-(IMS O26-/AP-)	-	-	ND	PPND	3	c
2022	1925	Pâte sablée (farine de blé)	Dough with wheat flour	<i>E. coli</i> O103 Ad1772	2,6	O103	-	-	-	-	-	ND	ND	3	c
2022	2488	Farine de blé bio T55	Wheat flour T55	<i>E. coli</i> O157:H7 Ad3118	1,3	O157	+	+	-	-	-	PPND	PPND	3	a
2022	2490	Farine de blé	Wheat flour	<i>E. coli</i> O145 Ad983	1,0	O145	-	-	-	-	-	ND	ND	3	a
2022	2770	Farine de blé T65	Wheat flour T65	<i>E. coli</i> O145 Ad983	3,0	O145	-	-	-(IMS O103-/AP-)	-	-	ND	ND	3	a
2023	6102	Farine de blé T45	Wheat flour T45	<i>E. coli</i> 0157 Ad3383	0,4	O157	-	-	-	-	-	ND	ND	3	a
2024	979	Farine de blé noir	Buckwheat flour	<i>E. coli</i> O145 Ad3175	<1	O145	+	+	-	-	-	PPND	PPND	3	a
2024	980	Farine de Sarrasin	Buckwheat flour	<i>E. coli</i> O145 Ad3175	<1	O145	+	+	-	-	-	PPND	PPND	3	b
2024	1229	Pâte à pizza (farine de blé)	Pizza raw dough (wheat flour)	<i>E. coli</i> O26 Ad3430	2,6	+O26	- (stx+)	- (stx+)	-	-	-	ND	ND	3	c
2023	6106	Nouilles japonaises saveur bœuf teppanyaki	Japanese noodles	<i>E. coli</i> O145 Ad3175	1	O145	-	-	-	-	-	ND	ND	4	c
2023	6109	Potage déshydraté aux vermicelles saveur bœuf	Dehydrated soup	<i>E. coli</i> 157:H7 Ad975	0,5	O157	-	-	-	-	-	ND	ND	4	c
2023	6110	Potage déshydraté à la chinoise nouilles, champignon noir et épices	Dehydrated soup	<i>E. coli</i> O145 Ad3175	1	O145	-	-	-	-	-	ND	ND	4	c
2023	949	Salade de mangue, myrtilles, framboise	Fresh fruits salad (mango, blueberry, raspberry)	<i>E. coli</i> O157:H7 Ad571	1,2	O157	-	-	-	-	-	ND	ND	5	c
2023	5921	Salade de fruits ananas-myrtilles-framboises	Fruit salad	<i>E. coli</i> O26 Ad3254	1	O26	-	-	-	-	-	ND	ND	5	c
2023	5923	Ananas découpé	Pineapple	<i>E. coli</i> O26 Ad3430	0,8	O26	-	-	-	-	-	ND	ND	5	c
2023	5951	Mélange crudités frais (maïs, carottes, salade, radis et chou rouge)	Vegetables mix	<i>E. coli</i> O157:H7 Ad557	1,6	O157	-	-	-	-	-	ND	ND	5	b
2023	6100	Haricots beurre surgelés	Frozen beans	<i>E. coli</i> O26 Ad3109	0,6	O157	-	-	-	-	-	ND	ND	5	b
2023	6101	Petits pois surgelés	Frozen peas	<i>E. coli</i> O26 Ad3109	0,6	O26	-	-	-	-	-	ND	ND	5	b
2024	226	Graines germées alfalfa-radis-fenouil	Sprouts	<i>E. coli</i> O26 Ad3254	0,6	O26	-	-	-	-	-	ND	ND	5	

FDRS: iQ-Check Free DNA Removal Solution



Table 23 - Negative deviations – CFX Opus Deep Well

Year	Sample N°	Product (french name)	Product	Strain inoculated	Inoculation level (CFU/sample)	ISO/TS 13136	Alternative method: iQ Check STEC VirX						Category	Type	
							PCR final result		Final result all confirmatory tests	Final result iQ-Check STEC VirX		Agreement			
							Without FDRS	With FDRS		Without FDRS	With FDRS	Without FDRS			With FDRS
2021	7648	Lait cru de brebis	Raw ewe milk	<i>E. coli</i> O145 Ad3029	2	O145	-	-	-(18h)	-	-	ND	ND	1	a
2021	7830	Fromage au lait cru de vache (Salers)	Raw cow milk cheese	<i>E. coli</i> O157 Ad3183	1,8	O157	-	-	-	-	-	ND	ND	1	b
2021	7831	Fromage au lait cru de vache (Emmenthal)	Raw cow milk cheese	<i>E. coli</i> O157 Ad3183	1,8	O145	-	-	-	-	-	ND	ND	1	b
2021	7833	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	<i>E. coli</i> O111:H8 622-4	2,2	O111	-	-	-	-	-	ND	ND	1	c
2024	222	Fromage au lait cru de brebis (Brebis fermier)	Raw ewe milk cheese	<i>E. coli</i> O103 Ad3153	3	O103	-	-	-	-	-	ND	ND	1	c
2024	224	Fromage au lait cru de chèvre (Rocamadour)	Raw goat milk cheese	<i>E. coli</i> O157:H7 Ad3398	1	O157	-	-	-	-	-	ND	ND	1	c
2021	7766	Viande hachée de bœuf surgelée 15%MG	Frozen ground beef	<i>E. coli</i> O157:H7 d3260	1	O157	-	-	-	-	-	ND	ND	2	b
2021	7988	Pavé d'agneau à la tomate	Seasoned Lamb trim	<i>E. coli</i> O26 14-53	2,4	O26	-	-	-	-	-	ND	ND	2	c
2023	5946	Pavé d'agneau à la tomate	Seasoned Lamb meat	<i>E. coli</i> O26 Ad3253	0,8	O26	+	+	-	-	-	PPND	PPND	2	c
2022	1918	Pâte à pizza bio (Farine de blé)	Pizza dough bio with wheat flour	<i>E. coli</i> O26 Ad980	2,0	O26	-	+	-(IMS O26-/AP-)	-	-	ND	PPND	3	c
2022	1925	Pâte sablée (farine de blé)	Dough with wheat flour	<i>E. coli</i> O103 Ad1772	2,6	O103	-	-	-	-	-	ND	ND	3	c
2022	2488	Farine de blé bio T55	Wheat flour T55	<i>E. coli</i> O157:H7 Ad3118	1,3	O157	+	+	-	-	-	PPND	PPND	3	a
2022	2490	Farine de blé	Wheat flour	<i>E. coli</i> O145 Ad983	1,0	O145	-	-	-	-	-	ND	ND	3	a
2022	2770	Farine de blé T65	Wheat flour T65	<i>E. coli</i> O145 Ad983	3,0	O145	-	-	-(IMS O103-/AP-)	-	-	ND	ND	3	a
2023	6102	Farine de blé T45	Wheat flour T45	<i>E. coli</i> O157 Ad3383	0,4	O157	-	-	-	-	-	ND	ND	3	a
2023	6104	Farine de blé T55	Wheat flour T55	<i>E. coli</i> O26 Ad3385	1,4	O26	+	-	+	+	-	PA	ND	3	a
2024	979	Farine de blé noir	Buckwheat flour	<i>E. coli</i> O145 Ad3175	<1	O145	+	+	-	-	-	PPND	PPND	3	a
2024	980	Farine de Sarrasin	Buckwheat flour	<i>E. coli</i> O145 Ad3175	<1	O145	+	+	-	-	-	PPND	PPND	3	b
2024	1229	Pâte à pizza (farine de blé)	Pizza raw dough (wheat flour)	<i>E. coli</i> O26 Ad3430	2,6	+O26	- (stx+)	- (stx+)	-	-	-	ND	ND	3	c
2023	6106	Nouilles japonaises saveur bœuf teppanyaki	Japanese beef teppanyaki noodles	<i>E. coli</i> O145 Ad3175	1	O145	-	-	-	-	-	ND	ND	4	c
2023	6109	Potage déshydraté aux vermicelles saveur bœuf	Dehydrated soup with beef-flavored vermicelli	<i>E. coli</i> 157:H7 Ad975	0,5	O157	-	-	-	-	-	ND	ND	4	c
2023	6110	Potage déshydraté à la chinoise nouilles, champignon noir et épices	Chinese-style dehydrated soup with noodles, black mushroom and spices	<i>E. coli</i> O145 Ad3175	1	O145	-	-	-	-	-	ND	ND	4	c
2023	5951	Mélange crudités frais (maïs, carottes, salade, radis et chou rouge)	Fresh raw vegetables (corn, carrots, lettuce, radish and red cabbage)	<i>E. coli</i> O157:H7 Ad557	1,6	O157	-	-	-	-	-	ND	ND	5	b
2023	6100	Haricots beurre surgelés	Frozen beans	<i>E. coli</i> O26 Ad3109	0,6	O157	-	-	-	-	-	ND	ND	5	b
2023	6101	Petits pois surgelés	Frozen peas	<i>E. coli</i> O26 Ad3109	0,6	O26	-	-	-	-	-	ND	ND	5	b
2023	949	Salade de mangue, myrtilles, framboise	Fresh fruits salad (mango, blueberry, raspberry)	<i>E. coli</i> O157:H7 Ad571	1,2	O157	-	-	-	-	-	ND	ND	5	c
2023	5921	Salade de fruits ananas-myrtilles-framboises	Pineapple, blueberry and raspberry fruit salad	<i>E. coli</i> O26 Ad3254	1	O26	-	-	-	-	-	ND	ND	5	c
2023	5923	Ananas découpé	Pineapple	<i>E. coli</i> O26 Ad3430	0,8	O26	-	-	-	-	-	ND	ND	5	c
2024	226	Graines germées alfalfa-radis-fenouil	Sprouts	<i>E. coli</i> O26 Ad3254	0,6	O26	-	-	-	-	-	ND	ND	5	a



Table 24 - Positive deviations-[CFX96 Deep Well](#)

Year	Sample N°	Product	Product	Strain inoculated	Inoculation level (CFU/sample)	ISO/TS 13136	Alternative method: iQ Check STEC VirX							Category	Type	
							PCR final result		Final result all confirmatory tests	Final result		Agreement				
							without FDRS	With FDRS		iQ-Check STEC VirX	Without FDRS					With FDRS
2021	7474	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	/	/	-	+	+	+	(PCR ISO stx+/eae+/O26+)	+	+	PD	PD	1	b
2021	7644	Lait cru de vache	Raw cow milk	E. coli O26 Ad2831	2	-	+	+	+	+	+	+	PD	PD	1	a
2021	7824	Lait cru de chèvre	Raw goat milk	E. coli O145 Ad3054	2,2	-	+	+	+	+	+	+	PD	PD	1	a
2021	7828	Fromage au lait cru de vache (Pont l'évêque)	Raw cow milk cheese	E. coli O111:H8 622-4	2,2	-	+	+	+	+	+	+	PD	PD	1	b
2021	7837	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	E. coli O145 Ad3054	2,2	-	+	+	+	+	+	+	PD	PD	1	c
2021	7656	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	E. coli O26 Ad2670	1,6	-	-	+	+	+	-	+	NA	PD	1	c
2021	7834	Fromage au lait cru de chèvre (Rigotte)	Raw goat milk cheese	E. coli Ad3188	2,8	-(stx)	+	+	+	+(72h)	+	+	PD	PD	1	c
2023	5915	Fromage au lait cru de chèvre (Grand Caprin)	Raw goat milk cheese	E. coli O103 Ad3153	1,8	-	+	+	+	+	+	+	PD	PD	1	c
2024	219	Fromage au lait cru de vache (St Nectaire)	Raw cow milk cheese	E. coli O103 Ad3153	3	-	+	+	+	+	+	+	PD	PD	1	b
2021	7724	Faux filet de bœuf	Fresh beef meat	E. coli O157:H7 Ad485	2,6	-	+	+	+	+	+	+	PD	PD	2	a
2021	7726	Escalope de veau	Fresh veal meat	E. coli O157:H7 Ad485	2,6	-	+	+	+	+	+	+	PD	PD	2	a
2021	7727	Jarret de veau en tranche façon Osso bucco	Fresh veal meat	E. coli O103 Ad3257	2,2	-	+	+	+	+(72h)	+	+	PD	PD	2	a
2021	7893	Viande porc (jambon avec os)	Fresh pork meat	E. coli O145:H28 092-4	3,8	-	+	+	+	+	+	+	PD	PD	2	a
2021	7894	Filet de porc à rôtir	Fresh pork meat	E. coli O145:H28 092-4	3,8	-	+	+	+	+	+	+	PD	PD	2	a
2021	7895	Sauté de porc surgelé	Fresh pork meat	E. coli O111:H28 Ad511	2,6	-	+	+	+	+(72h)	+	+	PD	PD	2	a
2021	7896	Côtes d'agneau	Fresh Lamb meat	E. coli O145:H28 092-4	3,8	-	+	+	+	+	+	+	PD	PD	2	a
2021	7897	Gigot d'agneau	Fresh Lamb meat	E. coli O111:H28 Ad511	2,6	-	+	+	+	+	+	+	PD	PD	2	a
2021	7987	Pavé d'agneau à la tomate	Seasoned Lamb trim	E. coli O157:H7 803	3,8	-	-/+	+/+	+/+	+	-	+	NA	PD	2	c
2021	7775	Viande d'agneau à mijoter surgelée	Frozen Lamb meat	E. coli Ad3105	2,4	-	+	+	+	+	+	+	PD	PD	2	b
2023	5943	Blanquette de veau	Veal meat	E. coli O103 Ad3284	1	-	+	+	+	+	+	+	PD	PD	2	a
2023	5944	Porc pointe sans os à mijoter	Pork meat	E. coli O103 Ad3284	1	-	+	+	+	+	+	+	PD	PD	2	a
2023	5945	Bifteck persille	Beef meat	E. coli O26 Ad3253	0,8	-	+	+	+	+	+	+	PD	PD	2	c
2023	6096	Sauté d'agneau surgelé	Frozen Lamb meat	E. coli O157:H7 Ad683	1,4	-	+	+	+	+	+	+	PD	PD	2	b
2022	1917	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	E. coli O157:H7 Ad571	2	-	+/+	+/+	+/+	+(IMS)	+	+	PD	PD	3	c
2022	1923	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	E. coli O26 Ad980	2	-	+	+	+	+	+	+	PD	PD	3	c
2022	2493	Farine d'orge mondée	Barley flour	E. coli O26:H11 Ad1507	<1	-	+	+	+	+	+	+	PD	PD	3	b
2022	2769	Farine de blé T55	Wheat flour T55	E. coli O103 Ad982	1,3	-	+	+	+	+	+	+	PD	PD	3	a
2022	1919	Pâte à pizza (Farine de blé 63%)	Pizza dough with wheat flour	E. coli O111:H8 Ad511	1,1	-	+	+	+	+	+	+	PD	PD	3	c
2023	6098	Souris d'agneau surgelé	Frozen Lamb meat	E. coli O157:H7 Ad683	1,4	-	+	+	+	+	+	+	PD	PD	3	b
2023	6103	Farine de blé T80	Wheat flour T80	E. coli O157 Ad3383	0,4	-	-	+	+	- (+ 72 h)	+	+	NA	PD	3	a
2024	975	Farine de blé T45	Wheat flour T45	E. coli O145 Ad3175	<1	-	+	+	+	- (+ 72 h)	+	+	PD	PD	3	a
2024	977	Farine de blé T55	Wheat flour T55	E. coli O26 Ad3430	<1	-	+	+	+	- (+72h)	+	+	PD	PD	3	a
2024	983	Farine de pois chiche	Chick pea flour	E. coli O26 Ad3385	5	-	+	+	+	+	+	+	PD	PD	3	b
2023	370	Pizza surgelée (végétarienne)	RTRH frozen pizza (vegetables)	E. coli O157:H7 Ad3396	4	-	+	+	+	+	+	+	PD	PD	4	b
2023	507	Minestrone deshydraté	Dehydrated minestrone	E. coli O157:H7 Ad574	1	-	+	+	+	+	+	+	PD	PD	4	c
2023	508	Soupe chinois déshydratée	Dehydrated Chinese soup	E. coli O157:H7 Ad574	1	-	+	+	+	+	+	+	PD	PD	4	c



Year	Sample N°	Product	Product	Strain inoculated	Inoculation level (CFU/sample)	ISO/TS 13136	Alternative method: iQ Check STEC VirX								Category	Type
							PCR final result		Final result all confirmatory tests	Final result		Agreement				
							without FDRS	With FDRS		iQ-Check STEC VirX						
										Without FDRS	With FDRS	Without FDRS	With FDRS			
2023	6105	Nouilles japonaises saveur légumes et sauce soja	Japanese noodles with vegetable flavor and soy sauce	E. coli O26 Ad3385	1,4	-	+	+	+	+	+	PD	PD	4	c	
2023	6107	Nouilles instantanées saveur crevettes	Shrimp-flavored instant noodles	E. coli 157:H7 Ad975	0,5	-	+	+	+	+	+	PD	PD	4	c	
2023	308	Mangue coupée	Cut Mango	E. coli O103 Ad1772	2,6	-	+	+	+	+	+	PD	PD	5	c	
2023	309	Ananas coupé	Cut pineapple	E. coli O26 Ad1777	3,4	-	+	+	+	+	+	PD	PD	5	c	
2023	311	Graines germées de radis rose bio	Sprouted seeds (radishes)	E. coli O157:H7 Ad3118	3,2	-	+	+	IMSO157 -/+(72h)	+	+	PD	PD	5	a	
2023	947	Spaguettis de courgettes frais	Fresh cut zucchini	E. coli O111:H8 Ad511	1,4	-	+	+		+	+	PD	PD	5	b	
2023	1088	Courgettes en rondelles surgelées	Frozen zucchini	E. coli O111 Ad981	0,4	-	+	+	+	+	+	PD	PD	5	b	
2023	1089	Epinards en branche surgelés	Frozen spinach	E. coli O111:H8 CDC 2010C-314	0,4	-	+	+	+	+	+	PD	PD	5	a	
2023	1090	Fraises entières surgelées	Frozen strawberries	E. coli O26:H11 Ad1507	2	-	+	+	+	+	+	PD	PD	5	c	
2023	5917	Graines germées alfalfa-poireaux-lentilles	Sprouts	E. coli O26 Ad3430	0,8	-	+	+	+	+	+	PD	PD	5	a	
2023	5922	Ananas découpé	Pineapple	E. coli O26 Ad3254	1	-	+	+	+	+	+	PD	PD	5	c	
2023	5950	Chou-fleur coupés frais	Cauliflower	E. coli O145 Ad3168	1,2	-	+	+	+	+	+	PD	PD	5	b	
2023	5952	Carottes râpées fraîches natures	Grated carrots	E. coli O157:H7 Ad557	1,6	-	+	+	+	+	+	PD	PD	5	b	
2024	225	Salade verte	Salad	E. coli O26 Ad3430	2,0	-	+	+	+	+	+	PD	PD	5	a	
2024	227	Graines germées de poireaux	Sprouts (leeks)	E. coli O145 Ad3054	1,2	-	+	+	+	+	+	PD	PD	5	a	



Table 25 - Positive deviations - **CFX Opus Deep Well**

Year	Sample N°	Product	Product	Strain inoculated	Inoculation level (CFU/sample)	ISO/TS 13136''	Alternative method: iQ Check STEC VirX								Category	Type
							PCR final result		Final result all confirmatory tests	Final result		Agreement				
										iQ-Check STEC VirX						
							without FDRS	with FDRS		Without FDRS	With FDRS	Without FDRS	With FDRS			
2021	7474	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	/	/	-	+	+	+ (PCR ISO stx+/eae+/O26+)	+	+	PD	PD	1	b	
2021	7644	Lait cru de vache	Raw cow milk	E. coli O26 Ad2831	2	-	+	+	+	+	+	PD	PD	1	a	
2021	7824	Lait cru de chèvre	Raw goat milk	E. coli O145 Ad3054	2,2	-	+	+	+	+	+	PD	PD	1	a	
2021	7828	Fromage au lait cru de vache (Pont l'évêque)	Raw cow milk cheese	E. coli O111:H8 622-4	2,2	-	+	+	+	+	+	PD	PD	1	b	
2021	7837	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	E. coli O145 Ad3054	2,2	-	+	+	+	+	+	PD	PD	1	c	
2021	7656	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	E. coli O26 Ad2670	1,6	-	-	+	+	-	+	NA	PD	1	c	
2021	7834	Fromage au lait cru de chèvre (Rigotte)	Raw goat milk cheese	E. coli Ad3188	2,8	-(stx)	+	+	+(72h)	+	+	PD	PD	1	c	
2023	5915	Fromage au lait cru de chèvre (Grand Caprin)	Raw goat milk cheese	E. coli O103 Ad3153	1,8	-	+	+	+	+	+	PD	PD	1	c	
2024	219	Fromage au lait cru de vache (St Nectaire)	Raw cow milk cheese	E. coli O103 Ad3153	3	-	+	+	+	+	+	PD	PD	1	b	
2021	7724	Faux filet de bœuf	Fresh beef meat	E. coli O157:H7 Ad485	2,6	-	-	+	+	-	+	NA	PD	2	a	
2021	7726	Escalope de veau	Fresh veal meat	E. coli O157:H7 Ad485	2,6	-	+	+	+	+	+	PD	PD	2	a	
2021	7727	Jarret de veau en tranche façon Osso bucco	Fresh veal meat	E. coli O103 Ad3257	2,2	-	+	+	+(72h)	+	+	PD	PD	2	a	
2021	7893	Viande porc (jambon avec os)	Fresh pork meat	E. coli O145:H28 092-4	3,8	-	+	+	+	+	+	PD	PD	2	a	
2021	7894	Filet de porc à rôtir	Fresh pork meat	E. coli O145:H28 092-4	3,8	-	+	+	+	+	+	PD	PD	2	a	
2021	7895	Sauté de porc surgelé	Fresh pork meat	E. coli O111:H28 Ad511	2,6	-	+	+	+(72h)	+	+	PD	PD	2	a	
2021	7896	Côtes d'agneau	Fresh Lamb meat	E. coli O145:H28 092-4	3,8	-	+	+	+	+	+	PD	PD	2	a	
2021	7897	Gigot d'agneau	Fresh Lamb meat	E. coli O111:H28 Ad511	2,6	-	+	+	+	+	+	PD	PD	2	a	
2021	7987	Pavé d'agneau à la tomate	Seasoned Lamb trim	E. coli O157:H7 803	3,8	-	+	+	+	+	+	PD	PD	2	c	
2021	7775	Viande d'agneau à mijoter surgelée	Frozen Lamb meat	E. coli Ad3105	2,4	-	+	+	+	+	+	PD	PD	2	b	
2023	5943	Blanquette de veau	Veal meat	E. coli O103 Ad3284	1	-	+	+	+	+	+	PD	PD	2	a	
2023	5944	Porc pointe sans os à mijoter	Pork meat	E. coli O103 Ad3284	1	-	+	+	+	+	+	PD	PD	2	a	
2023	5945	Bifteck persille	Beef meat	E. coli O26 Ad3253	0,8	-	+	+	+	+	+	PD	PD	2	c	
2023	6096	Sauté d'agneau surgelé	Frozen Lamb meat	E. coli O157:H7 Ad683	1,4	-	+	+	+	+	+	PD	PD	2	b	
2022	1917	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	E. coli O157:H7 Ad571	2	-	+ / + / +	+ / + / +	+(IMS)	+	+	PD	PD	3	c	
2022	1923	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	E. coli O26 Ad980	2	-	+	+	+	+	+	PD	PD	3	c	
2022	2493	Farine d'orge mondée	Barley flour	E. coli O26:H11 Ad1507	<1	-	+	+	+	+	+	PD	PD	3	b	
2022	2769	Farine de blé T55	Wheat flour T55	E. coli O103 Ad982	1,3	-	+	+	+	+	+	PD	PD	3	a	
2022	1919	Pâte à pizza (Farine de blé 63%)	Pizza dough with wheat flour	E. coli O111:H8 Ad511	1,1	-	+	+	+	+	+	PD	PD	3	c	
2023	6103	Farine de blé T80	Wheat flour T80	E. coli O157 Ad3383	0,4	-	+	+	- (+ 72 h)	+	+	PD	PD	3	a	
2024	975	Farine de blé T45	Wheat flour T45	E. coli O145 Ad3175	<1	-	+	+	- (+ 72 h)	+	+	PD	PD	3	a	
2024	977	Farine de blé T55	Wheat flour T55	E. coli O26 Ad3430	<1	-	+	+	- (+72h)	+	+	PD	PD	3	a	
2024	983	Farine de pois chiche	Chick pea flour	E. coli O26 Ad3385	5	-	+	+	+	+	+	PD	PD	3	b	
2023	370	Pizza surgelée (végétarienne)	RTRH frozen pizza (vegetables)	E. coli O157:H7 Ad3396	4	-	+	+	+	+	+	PD	PD	4	b	
2023	507	Minestrone deshydraté	Dehydrated minestrone	E. coli O157:H7 Ad574	1	-	+	+	+	+	+	PD	PD	4	c	
2023	508	Soupe chinois déshydratée	Dehydrated Chinese soup	E. coli O157:H7 Ad574	1	-	+	+	+	+	+	PD	PD	4	c	



Year	Sample N°	Product	Product	Strain inoculated	Inoculation level (CFU/sample)	ISO/TS 13136"	Alternative method: iQ Check STEC VirX							Category	Type
							PCR final result		Final result all confirmatory tests	Final result		Agreement			
							without FDRS	with FDRS		iQ-Check STEC VirX	Without FDRS	With FDRS	Without FDRS		
2023	6105	Nouilles japonaises saveur légumes et sauce soja	Japanese noodles with vegetable flavor and soy sauce	E. coli O26 Ad3385	1,4	-	+	+	+	+	+	PD	PD	4	c
2023	6107	Nouilles instantanées saveur crevettes	Shrimp-flavored instant noodles	E. coli 157:H7 Ad975	0,5	-	+	+	+	+	+	PD	PD	4	c
2023	308	Mangue coupée	Cut Mango	E. coli O103 Ad1772	2,6	-	+	+	+	+	+	PD	PD	5	c
2023	309	Ananas coupé	Cut pineapple	E. coli O26 Ad1777	3,4	-	+	+	+	+	+	PD	PD	5	c
2023	311	Graines germées de radis rose bio	Sprouted seeds (radishes)	E. coli O157:H7 Ad3118	3,2	-	+	+	IMSO157 -/(72h)	+	+	PD	PD	5	a
2023	947	Spaguettis de courgettes frais	Fresh cut zucchini	E. coli O111:H8 Ad511	1,4	-	+	+	+	+	+	PD	PD	5	b
2023	1088	Courgettes en rondelles surgelées	Frozen zucchini	E. coli O111 Ad981	0,4	-	+	+	+	+	+	PD	PD	5	b
2023	1089	Epinards en branche surgelés	Frozen spinach	E. coli O111:H8 CDC 2010C-314	0,4	-	+	+	+	+	+	PD	PD	5	a
2023	1090	Fraises entières surgelées	Frozen strawberries	E. coli O26:H11 Ad1507	2	-	+	+	+	+	+	PD	PD	5	c
2023	5917	Graines germées alfalfa-poireaux-lentilles	Sprouts	E. coli O26 Ad3430	0,8	-	+	+	+	+	+	PD	PD	5	a
2023	5922	Ananas découpé	Pineapple	E. coli O26 Ad3254	1	-	+	+	+	+	+	PD	PD	5	c
2023	5950	Chou-fleur coupés frais	Cauliflower	E. coli O145 Ad3168	1,2	-	+	+	+	+	+	PD	PD	5	b
2023	5952	Carottes râpées fraîches natures	Grated carrots	E. coli O157:H7 Ad557	1,6	-	+	+	+	+	+	PD	PD	5	b
2024	225	Salade verte	Salad	E. coli O26 Ad3430	2,0	-	+	+	+	+	+	PD	PD	5	a
2024	227	Graines germées de poireaux	Sprouts (leeks)	E. coli O145 Ad3054	1,2	-	+	+	+	+	+	PD	PD	5	a
2023	6098	Souris d'agneau surgelé	Frozen Lamb meat	E. coli O157:H7 Ad683	1,4	-	+	+	+	+	+	PD	PD	2	b

FDRS: iQ-Check Free DNA Removal Solution

The analyses of discordant results according to the EN ISO 16140-2:2016 for an unpaired study is the following (See Table 26 for the CFX96 Deep Well and Table 27 for the CFX Opus Deep Well):

Table 26 - Interpretation of the sensitivity study results- [CFX96 Deep Well](#)

Without FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPND	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10	a	Raw milk (cow, ewe, goat)	10	1	0	2	-1	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	12	3	0	3	0	
				TOTAL		33	6	0	8	-2	
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW 10 h at 41.5°C 1/4	a	Chilled (beef, veal, pork, lamb...)	11	0	0	10	-10	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	9	1	1	1	1	
				TOTAL		32	2	1	14	-11	
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 18h at 41.5°C 1/4	a	Wheat (different types)	11	3	2	3	2	
				b	Rye, corn, rice and pea flour	11	0	1	2	-1	
				c	Raw doughs	11	3	0	3	0	
				TOTAL		33	6	3	8	1	
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	
All categories						163	24	4	48	-20	5

With FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPND	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10	a	Raw milk (cow, ewe, goat)	10	1	0	2	-1	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	13	3	0	4	-1	
				TOTAL		34	6	0	9	-3	
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW 10 h at 41.5°C 1/4	a	Chilled (beef, veal, pork, lamb)	11	0	0	10	-10	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	10	1	1	2	0	
				TOTAL		33	2	1	15	-12	
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 18h at 41.5°C 1/4	a	Wheat (different types)	12	3	2	4	1	
				b	Rye, corn, rice and pea flour	11	0	1	2	-1	
				c	Raw doughs	11	2	1	3	0	
				TOTAL		34	5	4	9	0	
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	
All categories						166	23	5	51	-23	5

FDRS: iQ-Check Free DNA Removal Solution

** PPND not included

Table 27 - Interpretation of the sensitivity study results- CFX Opus Deep Well

Without FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPND	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10	a	Raw milk (cow, ewe, goat)	10	1	0	2	-1	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	12	3	0	3	0	
				TOTAL		33	6	0	8	-2	
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW 10 h at 41.5°C 1/4	a	Chilled (beef, veal, pork, lamb...)	10	0	0	9	-9	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	10	1	1	2	0	
				TOTAL		32	2	1	14	-11	
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 18h at 41.5°C 1/4	a	Wheat (different types)	12	3	2	4	1	
				b	Rye, corn, rice and pea flour	11	0	1	2	-1	
				c	Raw doughs	11	3	0	3	0	
				TOTAL		34	6	3	9	0	
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	
All categories						164	24	4	49	-21	5

With FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPN D	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10	a	Raw milk (cow, ewe, goat)	10	1	0	2	-1	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	13	3	0	4	-1	
				TOTAL		34	6	0	9	-3	
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW 10 h at 41.5°C 1/4	a	Chilled (beef, veal, pork, lamb)	11	0	0	10	-10	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	10	1	1	2	0	
				TOTAL		33	2	1	15	-12	
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 18h at 41.5°C 1/4	a	Wheat (different types)	12	4	2	4	2	
				b	Rye, corn, rice and pea flour	11	0	1	2	-1	
				c	Raw doughs	11	2	1	3	0	
				TOTAL		34	6	4	9	1	
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	
All categories						166	24	5	51	-22	5

FDRS: iQ-Check Free DNA Removal Solution

** PPND not included

The observed values for ND + PPND - PD for the individual categories and for the five categories combined meet the acceptability limits (observed values ≤ AL) whatever the protocol applied (with or without FRDS) and the PCR instruments (CFX96 or CFX Opus Deep Well).

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

Enrichment broth storage was tested at $5^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 72 h.

252 samples were tested again after enrichment broth storage.

One change was observed for the raw dairy products category and the raw meat category. For the flours and raw doughs category, three changes were observed No change was observed for multicomponent foods and meal components.

They are listed in Table 28.



Table 28 - Observed changes in results before and after storage of the enrichment broth

Category		Test portion	Sample N°	Product	Before storage							After storage										
					PCR Result CFX96		PCR Result CFX Opus		Final result all confirmatory tests	Agreement CFX96		Agreement CFX Opus		PCR Result CFX96		PCR Result CFX Opus		Final result all confirmatory tests	Agreement		Agreement CFX Opus	
					Without FDRS	With FDRS	Without FDRS	With FDRS		Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		Without FDRS	With FDRS	Without FDRS	With FDRS
1	Raw dairy	25 g	7656	Raw ewe milk cheese	-	+	-	+	+	NA	PD	NA	PD	-	+	-	-	+	NA	PD	NA	NA
2	Raw meat	375 g	7724	Fresh beef meat	+	+	-	+	+	PD	PD	NA	PD	+	+	+	-	+	PD	PD	PD	NA
3	Flours and raw doughs	375 g	2773	Rye flour	+	+	+	+	+	PA	PA	PA	PA	-	+	+	+	+	ND	PA	PA	PA
			6103	Wheat flour T80	-	+	+	+	- (+ 72h)	NA	PD	PD	PD	-	-	-	-	+	NA	NA	NA	NA
			6104	Wheat flour T55	+	+	+	-	+	PA	PA	PA	ND	+	+	+	+	+	PA	PA	PA	PA

FDRS: iQ-Check Free DNA Removal Solution

The analyses of discordant results become (See Table 29 for CFX96 Deep Well and Table 30 for CFX Opus Deep Well).

**Table 29 - Interpretation of the sensitivity study results
 after storage of the enrichment broth at 5°C ± 3°C**
CFX96 Deep Well

Without FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPND	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	10	1	1	2	0	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	12	3	0	3	0	
				TOTAL		33	6	1	8	-1	
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb)	11	0	0	10	-10	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	9	1	1	1	1	
				TOTAL		32	2	1	14	-11	
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	11	2	3	3	2	
				b	Rye, corn, rice and pea flour	11	1	1	2	0	
				c	Raw doughs	11	3	0	3	0	
				TOTAL		33	6	4	8	2	
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	
All categories						163	24	6	48	-18	5

With FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPND	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	10	1	0	2	-1	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	13	3	0	4	-1	
				TOTAL		34	6	0	9	-3	3
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb)	11	0	0	10	-10	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	10	1	1	2	0	
				TOTAL		33	2	1	15	-12	3
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	12	3	2	4	1	
				b	Rye, corn, rice and pea flour	11	0	1	2	-1	
				c	Raw doughs	11	2	1	3	0	
				TOTAL		34	5	4	9	0	3
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	3
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	3
All categories						166	23	5	51	-23	5

FDRS: iQ-Check Free DNA Removal Solution

** PPND not included

**Table 30 - Interpretation of the sensitivity study results
 after storage of the enrichment broth at 5°C ± 3°C**
CFX Opus Deep Well

Without FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPND	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	10	1	1	2	0	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	12	3	0	3	0	
				TOTAL		33	6	1	8	-1	
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb)	11	0	0	10	-10	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	10	0	2	2	0	
				TOTAL		33	1	2	15	-12	
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	11	3	2	3	2	
				b	Rye, corn, rice and pea flour	11	0	1	2	-1	
				c	Raw doughs	11	3	0	3	0	
				TOTAL		33	6	3	8	1	
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	
All categories						164	23	6	49	-20	5

With FDRS											
Category		Test portion	Protocol	Type		N+	ND**	PPND	PD	(ND+ PPND)-PD	AL
1	Raw dairy products	25 g	+225ml BPW+STEC supp 16 h at 41.5°C 1/10 18h	a	Raw milk (cow, ewe, goat)	10	1	1	2	0	
				b	Raw cow's milk cheeses	11	2	0	3	-1	
				c	Raw milk cheeses originating from other than cow's milk	12	3	0	3	0	
				TOTAL		33	6	1	8	-1	
2	Raw meat products (except poultry)	Up to 375 g	+1125ml Pre-warmed BPW at 41.5°C 1/4 10h	a	Chilled (beef, veal, pork, lamb)	10	0	0	9	-9	
				b	Frozen (beef, veal, pork, lamb)	12	1	0	3	-2	
				c	Seasoned (beef, veal, pork, lamb)	10	0	2	2	0	
				TOTAL		32	1	2	14	-11	
3	Flours and raw doughs	Up to 375 g	+1125ml BPW+STEC supp at 41.5°C 1/4 18h	a	Wheat (different types)	11	3	2	3	2	
				b	Rye, corn, rice and pea flour	11	0	1	2	-1	
				c	Raw doughs	11	3	0	3	0	
				TOTAL		33	6	3	8	1	
4	Multicomponent foods and meal components	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Composite food with substantial raw ingredients (pasta salad, sandwich, stuffed fresh pasta...)	10	0	0	0	0	
				b	Ready to reheat food (refrigerated or frozen): pizza, quiche, pie...	12	0	0	1	-1	
				c	Ready to reheat food (dry): dehydrated (instant) soup, pasta ...	10	3	0	4	-1	
				TOTAL		32	3	0	5	-2	
5	Raw produces and fruits	25 g	BPW d 1/10 41.5°C ± 1°C 18-26 h	a	Sprouts and leafy greens	12	1	0	5	-4	
				b	Fresh and frozen raw produces (cut and ready to eat)	10	3	0	4	-1	
				c	Fresh and frozen raw fruits (cut and ready to eat)	11	3	0	4	-1	
				TOTAL		33	7	0	13	-6	
All categories						163	23	6	48	-19	5

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** PPND not included

The observed values for ND + PPND - PD for the individual categories and for the three combined categories meet the acceptability limits (observed values ≤ AL) whatever the protocol applied (with or without FDRS) and the PCR instrument used (CFX96 or CFX Opus Deep Well).

4.1.8 PCR inhibitions

2456 PCR were tested were tested during the validation and extension studies, combining before and after storage, with or without FDRS protocol and the 2 PCR instruments.

Inhibitions were observed for three samples.

For two samples (n°1091 Frozen berries and 1425 Frozen whole raspberries), the re-test of the DNA extract allowed to obtain interpretable results.

For two samples (n°737 Fresh basil, with or without FDRS, 2 PCR instruments; n°1091 without FDRS with CFX Opus Deep Well), a dilution in distilled water using 10 µL of the DNA extract was required to obtain a result.

The inhibitions are listed in Table 31.



Table 31 - Samples with inhibited PCR results

Sample N°	Product	Artificial contamination s	Inoculation level	CFX96 Deep well								CFX Opus Deep well								Final result all confirmatory tests	Category	Type
				iQ Check STEC VirX Easy II without FDRS			Final PCR result	iQ Check STEC VirX Easy II with FDRS			Final PCR result	iQ Check STEC VirX Easy II without FDRS			Final PCR result	iQ Check STEC VirX Easy II with FDRS			Final PCR result			
				PCR Result				PCR Result				PCR Result				PCR Result						
				stx1 & stx2 (Ct FAM)	eae (Ct Cy5)	IC (Ct HEX)		stx/eae	stx1 & stx2 (Ct FAM)	eae (Ct Cy5)		IC (Ct HEX)	stx/eae	stx1 & stx2 (Ct FAM)		eae (Ct Cy5)	IC (Ct HEX)	stx/eae		stx1 & stx2 (Ct FAM)		
737	Fresh basil	E. coli Ad3406	3,0	N/A N/A N/A N/A*	N/A N/A N/A N/A*	N/A N/A N/A 31,37*	i/i/i/-**	N/A N/A N/A N/A*	N/A N/A N/A N/A*	N/A N/A N/A 31,28*	i/i/i/-**	N/A N/A N/A N/A*	N/A N/A N/A N/A*	N/A N/A N/A 30,27*	i/i/i/-**	N/A N/A N/A N/A*	N/A N/A N/A N/A*	N/A N/A N/A 30,27*	i/i/i/-**	-	5	a
1091	Frozen berries	E. coli O111 Ad981	0,4	N/A N/A N/A	N/A N/A N/A	N/A 32,26 32,48	i/-/-	N/A N/A N/A	N/A N/A N/A	N/A 34,16 33,75	i/-/-	N/A N/A N/A	N/A N/A N/A	N/A 32,59 35,02	i/i/i/-**	N/A N/A N/A	N/A N/A N/A	N/A 38,55 N/A	i/-/i	-	5	c
1425	Frozen whole raspberries	/	/	N/A	N/A	31,00	-	N/A N/A N/A	N/A N/A N/A	N/A 33,28 32,39	i/-/-	N/A	N/A	30,74	-	N/A 42,04 N/A	N/A N/A N/A	N/A 30,68 31,01	i/+(AT)/-	-	5	c

**.: Dilution in distilled water using 10µL of the DNA extract

4.1.9 Confirmation

Two protocols were applied during the study:

- **Confirmation A:** direct streaking onto selective agar plates (TBX and CHROMagar STEC)
- **Confirmation B:** Dilute to 1/100 the enriched broth (0.1 ml + 9 ml BPW + STEC sup). Incubate for 16 - 24 h at $41.5^{\circ}\text{C} \pm 1^{\circ}\text{C}$.
 - Streak 10 μl onto selective agar plates (TBX, CHROMagar STEC, RAPID'E. coli 2 and RAPID'E. coli O157)

In case of negative results using these two protocols, an IMS step was performed before streaking on the plates when the serogroup of the strain was known (for artificially contaminated samples for example). Sometimes, the confirmation applied on the enriched samples stored for 72h at $5^{\circ}\text{C} \pm 3^{\circ}\text{C}$ allowed to confirm the positive PCR result.

Additionally for the category flours and raw doughs, the acid treatment protocol (AP) described in the MLG5 C.01 USDA method was tested when it was impossible to isolate the strain using all the other protocols.

A summary of the results obtained per confirmation protocol combining the five tested categories (before and after storage of the enriched samples) is given Table 32.

Table 32 – Summary of the number of samples giving positive PCR results and confirmed using the different protocols

	Without FDRS		With FDRS	
	CFX96 Deep Well	CFX Opus Deep Well	CFX96 Deep Well	CFX Opus Deep Well
Number of positive PCR iQ Check STEC VirX -	334	342	344	340
Percentage of samples confirmed by confirmation A	71.6%	70.2%	70.3%	70.6%
Percentage of additional samples confirmed by confirmation B	4.8%	4.4%	4.7%	4.4%
Percentage of additional samples confirmed using IMS or Acid protocol (AP)	4.5%	4.7%	4.7%	4.7%
Percentage of samples confirmed	81.4%	79.2%	79.7%	79.7%
Number of samples not confirmed (PPNA + PPND)	62	67	66	65
Percentage of samples not confirmed (PPNA +PPND)	18.6%	19.6%	19.2%	19.1%

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Despite the application of all these protocols, it was not possible to confirm the presence of the *stx* positive strains for:

- 1) CFX96 Deep Well:
 - a) Before storage
 - i) 31 samples without FDRS
 - ii) 33 samples with FDRS
 - b) After storage
 - i) 31 samples without FDRS
 - ii) 33 samples with FDRS
- 2) CFX Opus Deep Well:
 - a) Before storage
 - i) 33 samples without FDRS
 - ii) 34 samples with FDRS
 - b) After storage
 - i) 32 samples without FDRS
 - ii) 33 samples with FDRS

The positive presumptive not confirmed samples (PPNA or PPND) concern mainly the flour and raw dough category and specifically the wheat flours with up to 21 samples with positive PCR results not confirmed using the cultural methods after incubation time. Note that for the flours, a high level of background microflora was present on the selective agar plates and despite the fact that several confirmation protocols were tested (Protocols A, B, IMS and Acid protocol), it was not possible to isolate the stx positive *E. coli* strains from the enrichment broth. For the multicomponent foods and meal components and raw produces and fruits categories, the percentage of samples confirmed varies from 92,9% (raw produces and fruits with FDRS) to 100% (for multicomponent foods and meal components with FDRS) with respectively 2 and 0 PPN samples.

This high level of PPN can also be explained by the fact that the original study was design for stx detection only. The absence of eae gene on the isolated strain was therefore not investigated.

The samples which were not confirmed are listed in Table 33.



Table 33 - Samples which were not confirmed

Date	Sample N°	Product	Artificial contaminations		ISO/TS 13136		iQ-Check STEC VirX																								Category	Type				
							Before storage																After storage													
							CFX96 Deep WellI		CFX Opus Deep Well		Final result all confirmatory tests	Final result iQ-Check STEC VirX CFX96		Final result iQ-Check STEC VirX CFX Opus		Agreement CFX96		Agreement CFX Opus		CFX96 Deep well		CFX Opus Deep well		Final result all confirmatory tests	Final result iQ-Check STEC VirX CFX96		Final result iQ-Check STEC VirX CFX Opus		Agreement CFX96 after storage				Agreement CFX Opus after storage			
							Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS		Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS		Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			Without FDRS	With FDRS		
Strain	Inoculation level/ sample	Final result	Serogroup	Stx/eae	Stx/eae	Stx/eae	Stx/eae	stx	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	stx	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae	Stx/eae						
2021	7472	Raw cow milk			-	/	+/+	+/+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+/+	+/+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	1	a				
2021	7475	Raw cow milk cheese			-	/	+/-	-	+	-	-	-	-	PPNA	NA	PPNA	NA	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	c					
2021	7480	Raw goat milk cheese			-	/	+/-	-	-	-	-	-	-	PPNA	NA	NA	NA	-	-/-	-	-	-	-	-	-	NA	NA	NA	NA	1	c					
2021	7638	Raw ewe milk cheese			-	/	-/-	+/+	-	+	-	-	-	NA	PPNA	NA	PPNA	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	c					
2021	7650	Raw cow milk cheese	E.coli O26 Ad2670	1,6	-	/	+/+	+/+	+	+	-IMS (O26)	-	-	-	PPNA	PPNA	PPNA	PPNA	+/+	+/+	+	+	-IMS (O26)	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b				
2021	7651	Raw cow milk cheese	E.coli O145 Ad3029	2,0	-	/	+/+	+/+	+	+	-IMS (O145)	-	-	-	PPNA	PPNA	PPNA	PPNA	+/+	+/+	+	+	-IMS (O145)	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b				
2021	7823	Raw goat milk	E.coli O145 Ad3176	2,6	+	O145	+	+	+	+	+(ISO, BPW 18 h)	+	+	+	+	PA	PA	PA	PA	+	+	+	+	-	-	PPND	PPND	PPND	PPND	1	a					
2022	124	Raw cow milk cheese	E.coli O103 Ad3104	3,4	-	/	+/+	-	-	-	-IMS (O103)	-	-	-	PPNA	NA	NA	NA	+/+	+/+	+	+	-IMS (O103)	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b				
2022	125	Raw cow milk cheese			-	/	+/+	+/+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+/+	+/+	+	+	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b					
2023	5909	Raw cow milk cheese	E.coli O145 Ad3054	1,6	-	/	+	+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b					
2021	7715	Seasoned ground veal	E.coli Ad3103	3,2	-	stx	-	-	+	-	-	-	-	NA	NA	PPNA	NA	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	c					
2021	7988	Seasoned lamb trim	E.coli O26 14-53	2,4	+	O26	-	-	-	-	-	-	-	ND	ND	ND	ND	-	-	+	+	-	-	-	ND	ND	PPND	PPND	2	c						
2021	7995	Frozen lamb meat			-	/	+	+	+	+	-(PCR ISO stx+/eae-/Top 5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-	-	-	PPNA	PPNA	PPNA	PPNA	2	b				
2021	7997	Seasoned pork trim			-	/	-	-	-	-	-	-	-	NA	NA	NA	NA	-/-	-/-	+	-	-	-	-	-	NA	NA	PPNA	NA	2	c					
2021	8094	Seasoned veal trim			-	/	-	+/+	-	+	-(PCR ISO stx+/eae-/Top 5 -)	-	-	-	-	NA	PPNA	NA	PPNA	+/+	+/+	+	+	-	-	PPNA	PPNA	PPNA	PPNA	2	c					
2021	8096	Seasoned pork trim			-	stx	-	-	+	-	-	-	-	NA	NA	PPNA	NA	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	c					
2021	8100	Fresh pork meat			-	/	-	+/-	-	+	-	-	-	NA	PPNA	NA	PPNA	-	+/+	+	+	-	-	-	-	NA	PPNA	PPNA	PPNA	2	a					
2021	8101	Fresh pork meat			-	/	+/+	+/+	+	+	-	-	-	PPNA	PPNA	PPNA	PPNA	-	+	+	+	-	-	-	-	NA	PPNA	PPNA	PPNA	2	a					
2021	8104	Fresh lamb meat			-	/	-	-	+	-	-(PCR ISO stx+/eae-/Top 5 -)	-	-	-	-	NA	NA	PPNA	NA	-	-	-	-	-	-	NA	NA	NA	NA	2	a					
2022	119	Fresh ground beef (5% fat)	E.coli O111: H8- Ad1774	9,6	-	O111	+	+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-	-	-	PPNA	PPNA	PPNA	PPNA	2	a					
2022	120	Fresh ground beef	E.coli O111 :H8- Ad1774	9,6	-	O111	-	+	-	+	-	-	-	NA	PPNA	NA	PPNA	+	+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	2	a					
2022	122	Frozen beef meat			-	/	+/+	-/-	+	-	-	-	-	PPNA	NA	PPNA	NA	-/-	+/-	-	-	-	-	-	-	NA	PPNA	NA	NA	2	b					
2023	5946	Seasoned lamb trim	E.coli O26 Ad3253	0,8	+	O26	+	+	+	+	-	-	-	-	PPND	PPND	PPND	PPND	+	+	+	+	-	-	-	PPND	PPND	PPND	PPND	2	c					
2022	1918	Pizza dough bio with wheat flour	E.coli O26 Ad980	2,0	+	O26	-	+/+	-	+	-(IMS O26-/AP-)	-	-	-	-	ND	PPND	ND	PPND	-	-	-	-	-	-	ND	ND	ND	ND	3	c					

Date	Sample N°	Product	Artificial contaminations		ISO/TS 13136		iQ-Check STEC VirX																						Category	Type				
							Before storage												After storage															
							CFX96 Deep WellI		CFX Opus Deep Well		Final result all confirmatory tests	Final result iQ-Check STEC VirX CFX96		Final result iQ-Check STEC VirX CFX Opus		Agreement CFX96		Agreement CFX Opus		CFX96 Deep well		CFX Opus Deep well		Final result all confirmatory tests	Final result iQ-Check STEC VirX CFX96		Final result iQ-Check STEC VirX CFX Opus		Agreement CFX96 after storage		Agreement CFX Opus after storage			
							Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS		Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS		Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
Strain	Inoculation level/ sample	Final result	Serogroup	Stx/ea	Stx/ea	Stx/ea	Stx/ea	stx	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	stx	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea	Stx/ea			
2022	2115	Organic wheat flour T65	E.coli O157 Ad3383	<1	-	/	+	+	+	+	-(IMS O157-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-(IMSO157-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a
2022	2116	Wheat flour T45	E.coli O145 Ad3384	<1	-	/	+	+	+	+	-(IMS O145-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-(IMSO145-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a
2022	2117	Wheat flour T80	E.coli Ad3387	1	-	/	+	+	+	+	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a	
2022	2120	Wheat flour T65	E.coli O145 Ad3384	<1	-	O145	+	+	+	+	-(IMS O145-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-(IMS O145-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a
2022	2122	Whole wheat flour T150	E.coli Ad3388	s	-	/	+	+	+	+	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a
2022	2177	Buckwheat flour			-	Stx (O145)	+	+	+	+	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b	
2022	2178	Buckwheat flour			-	stx	+	+	-	+	-(IMS O145-/AP-)	-	-	-	-	PPNA	PPNA	NA	PPNA	+	+	+	+	-(IMS O145-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b
2022	2180	Wheat flour T45			-	/	+	+	+	+	- (PCR ISO stx1+/stx2-/ eae-/TOP5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a	
2022	2181	Wheat flour T65			-	/	+	+	+	+	-(72h) (PCR ISO stx1+/stx2-/ eae-/TOP5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-(PCR ISO stx1+/ stx2-/eae-/TOP5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a
2022	2182	Rye flour T130			-	/	+	+	+	+	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b	
2022	2488	Wheat flour T55	E.coli O157:H7 Ad3118	1,3	+	O157	+	+	+	+	-	-	-	-	-	PPND	PPND	PPND	PPND	+	+	+	+	-	-	-	-	PPND	PPND	PPND	PPND	3	a	
2022	2490	Wheat flour	E.coli O145 Ad983	1,0	+	O145	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	+/-/-	-	-	-	-	-	-	-	PPND	ND	ND	ND	3	a	
2022	2491	Corn flour	E.coli O111:H8 Ad3021	1,1	-	/	-	-	-	+	-	-	-	-	-	NA	NA	NA	PPNA														3	b
2022	2500	Wheat flour			-	/	+	+	+	+	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a
2022	2501	Rye flour			-	/	-	-	+	-	-	-	-	-	-	NA	NA	PPNA	NA														3	b
2022	2502	Buckwheat flour			-	O145	+	+	-	+	-(AP-)	-	-	-	-	PPNA	PPNA	NA	PPNA	+	+	+	+	-(AP-)	-	-	-	-	NA	NA	NA	NA	3	b
2022	2506	Pizza dough with wheat flour			-	/	+	+	+	+	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+	+	+	+	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	c
2022	2768	Wheat flour T55	E.coli O103:H2 Ad3097	1,7	-	/	+	+	-	-	-(IMS O103-)	-	-	-	-	PPNA	PPNA	NA	NA	-	-	-	-	-(IMS O103)	-	-	-	-	NA	NA	NA	NA	3	a
2024	978	Whole wheat	E.coli O26 Ad3385	5	-	/	-(eae+)	+	-(eae+)	-(eae+)	-	-	-	-	-	NA	PPNA	NA	NA	+	+	+	+	-					PPNA	PPNA	PPNA	PPNA	3	a
2024	979	Buckwheat flour	E.coli O145 Ad3175	<1	+	O145	+	+	+	+	-	-	-	-	-	PPND	PPND	PPND	PPND	+	+	+	+	-					PPND	PPND	PPND	PPND	3	a
2024	980	Buckwheat flour	E.coli O145 Ad3175	<1	+	O145	+	+	+	+	-	-	-	-	-	PPND	PPND	PPND	PPND	+	+	+	+	-					PPND	PPND	PPND	PPND	3	b
2023	419	RTRH (pizza ham and mushrooms)			-	/	-	-	+/-/+	-	-	-	-	-	-	NA	NA	PPNA	NA	-	-	-	-	-	-	-	-	NA	NA	NA	NA	4	b	
2023	314	Sprouted seeds (radishes)	E.coli Ad3401	4,2	-	/	-	-	+	-	-	-	-	-	-	NA	NA	PPNA	NA	-	-	-	-/-/-	-	-	-	-	NA	NA	NA	NA	5	a	
2023	1087	Frozen peas	E.coli O103 Ad2309	1,8	-	/	+/+/+	+/+/+	+/+/+	+/+/+	IMS O103-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	+/+/+	+/+/+	+/+/+	+/+/+	IMS O103-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	5	b

FDRS: iQ-Check Free DNA Removal Solution

4.2 Relative level of detection

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

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

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

4.2.1 Categories, sample types and strains

Five (matrix/strain) pairs were analyzed by the reference method and by the alternative method (See Table 34).



Table 34 - List of selected types and strains per category, as tested within the relative level of detection study

Category		Matrix	Test portion	Strain	Origin	Storage conditions before analysis	Alternative method protocol
1	Raw dairy products	Raw milk cheese	25 g	<i>E. coli</i> O26:H11 375-122 (stx1+, stx2+, eae+)	Cheese	48 h at 3°C ± 2°C	BPW + STEC supplement 25 g + 225 ml (d 1/10) 16 - 24 h at 41.5°C
2	Raw meat products	Beef meat	Up to 375 g	<i>E. coli</i> O157:H7 Ad683 (stx1-, stx2+, eae+)	Beef balls	48 h at 3°C ± 2°C	Pre-warmed BPW (41.5°C) 375 g + 1125 ml (d 1/4) 10 - 18 h at 41.5°C
3	Flours and raw doughs	Pizza raw dough	Up to 375 g	<i>E. coli</i> O26 Ad3385 (stx1 -, stx2+, eae+)	Buckwheat flour	Inoculation with a liquid suspension and storage for 48 - 72 h at 3°C ± 2°C	BPW + STEC supplement 375 g + 1125 mL (d 1/4) 18 - 26 h at 41,5°C
4	Multicomponent foods or meal components	Pasta salad	25 g	<i>E. coli</i> O103 Ad3318 (stx1+, stx2-, eae+)	Salad	Inoculation with a liquid suspension and storage for 48-72 h at 3°C ± 2°C	25 g + 225 mL BPW (d1/10) 18-26 h at 41.5°C
5	Raw produces and fruits	Cut fruits	25 g	<i>E. coli</i> O145 Ad3181 (stx1+, stx2+, eae+)	Raw material for dairy industry	Inoculation with a liquid suspension and storage for 48-72 h at 3°C ± 2°C	25 g + 225 mL BPW (d1/10) 18-26 h at 41.5°C

4.2.2 Test sample preparations

Three levels of artificial contamination were prepared for each type:

- Negative control level: one non-inoculated in order to get 5 test portions,
- Low level: one inoculated between 0.9 and 1.9 CFU/sample in order to get 20 test portions providing fractional recovery,
- Higher level: one inoculated between 4.2 and 5.7 CFU/sample in order to get 5 test portions contaminated at a higher level.

After inoculation, the matrices were stored as described in Table 34.

Test portions were individually inoculated and kept at an appropriate time/temperature for stabilization before actual testing.

4.2.3 RLOD study results

The tabulated raw data on the RLOD are given in **Appendix 5**.

The RLOD calculations were performed using the Excel spreadsheet available at <http://standards.iso.org/iso/16140> - RLOD (clause 5-1-4-2 Calculation and interpretation of RLOD) version 15.08.2015. The RLOD are given Table 35.

Table 35 – Presentation of RLOD before and after confirmation of the alternative method results for CFX96 Deep Well and CFX Opus Deep Well

(Strain / matrix) pair	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value	AL
Raw milk cheese <i>E. coli</i> O26:H11 375-122	0,276	0,106	0,723	-1,286	0,481	2,675	1,993	2.5
Ground beef <i>E. coli</i> O157:H7 Ad683	0,721	0,260	1,996	-0,328	0,509	0,643	1,480	
Pizza raw dough <i>E. coli</i> O26 Ad3385	1,170	0,437	3,132	0,157	0,492	0,320	0,749	
Pasta salad <i>E. coli</i> O103 Ad3318	1,321	0,590	2,956	0,278	0,403	0,690	0,490	
Cut fruits <i>E. coli</i> O145 Ad3181	0,868	0,355	2,123	-0,142	0,447	0,316	1,248	
Combined	0,749	0,515	1,091	-0,289	0,188	1,536	1,875	

The RLOD values (using the confirmed alternative method results) meet the acceptability limit, which is 2.5 for unpaired studies, for the five categories tested.

4.2.4 LOD₅₀ results

The LOD₅₀ calculations according to Wilrich & Wilrich POD-LOD calculation program
 - version 11, 2022-10-12 test are given in Table 36 for both thermocyclers tested.

Table 36 - LOD₅₀ results for CFX96 Deep Well and CFX Opus Deep Well

Category	Test portion	(Strain / matrix) pair	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich ¹	
			Reference method	Alternative method
Raw dairy	25 g	Raw milk cheese <i>E. coli</i> O26:H11 375-122	4,5 [2,2; 9,2]	1,3 [0,8; 2,3]
Raw meat	Up to 375 g	Ground beef <i>E. coli</i> O157:H7 Ad683	1,2 [0,7; 2,3]	1,0 [0,5; 1,7]
Flours and raw doughs	Up to 375 g	Pizza raw dough <i>E. coli</i> O26	0,8 [0,4;1,43]	0,9 [0,5;1,6]
Multicomponent foods or meal components	25 g	Pasta salad <i>E. coli</i> O103 Ad3318	0,6 [0,3;1,0]	0,8 [0,4;1,4]
Raw produces and fruits	25 g	Cut fruits <i>E. coli</i> O145 Ad3181	1,0 [0,5;1,6]	0,8 [0,5;1,4]
Combined			1,2 [0,9;1,5]	1,0 [0,7;1,2]

The LOD values varies from 0.6 to 4.5 CFU/test portion for the reference method and from 0.8 to 1.3 CFU/ test portion for the alternative method.

4.3 Inclusivity / exclusivity

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

4.3.1 Protocols

> Inclusivity

E. coli strain cultures were performed in BHI medium at 37°C. Dilutions were be done in order to inoculate 10 - 100 cells/225 mL of pre-warmed BPW + STEC supplement. The broth was incubated for 16 h at 41.5°C. The alternative method and the confirmatory tests were then performed.

51 strains were tested. The repartition of the strains was the following (See Table 37).

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

Table 37 - Repartition of the strains per target

stx+, eae+ O26	stx+, eae+ O103	stx+, eae+ O111	stx+, eae+ O145	stx+, eae+ O157	stx+ eae+ ≠ TOP 5	Total
10	10	10	10	10	1	51

> **Exclusivity**

The non-target strains (30) were grown in BHI medium. Dilutions were done to inoculate 10⁵ cells/ml of BPW. The broths were incubated for 20 h at 37°C. The alternative protocol was then performed.

4.3.2 Results

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

> **Inclusivity**

A total of 51 strains were tested for **inclusivity**. all the strains showed the expected positive result using the iQ-Check STEC VirX kit (stx and eae detection). Some of the strains were not able to grow on CHROMagar STEC but all of them shown colonies on TBX plates.

> **Exclusivity**

A total of 41 strains were tested for **exclusivity**. All these strains showed the expected negative result.

4.3.3 Conclusion

The alternative iQ-Check STEC VirX detection method is selective and specific.

5 INTER-LABORATORY STUDY

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

5.1 Study organization

> Collaborators number

Samples were sent to 11 laboratories; as 2 collaborators were involved in the study for Labs A and B, 13 collaborators were included in the study.

> Matrix and strain used

Chilled ground beef samples (25 g test portions) were individually inoculated with *Escherichia coli* O26:H11 12-62 (stx1+, stx2-, eae+) isolated from meat.

> Samples

Samples were prepared and inoculated on Monday 11 April 2022, as described below:

- 24 blind coded samples (25 g) for Shiga-toxin-producing *Escherichia coli* (STEC) from O26, O103, O111, O145 and O157 detection based on the **ISO/TS 13136** reference method.
- 24 blind coded samples (25 g) for Shiga-toxin-producing *Escherichia coli* detection by the **iQ-Check STEC VirX method**. **Two sample preparation protocols were available: with or without FDRS.**
- 1 sample (labelled “**Sample for Total Count enumeration**”) for Aerobic mesophilic flora enumeration by the ISO 4833-1 method.
- 1 water flask labelled “Temperature Control” with a temperature probe.

> Inoculation

The targeted inoculation levels were the following:

- Level: 0 CFU/25 g,
- Level 1: 1,0 CFU/25 g, inoculation level providing as much as possible fractional positive recovery data,
- Level 2: 8,0 CFU/25 g.

> *Labelling and shipping*

Blind coded samples were placed in isothermal boxes, which contained cooling blocks, and express-shipped to the different laboratories, in isotherm packages using the UN2814 transport.

A temperature control flask containing a sensor was added to the package to register the temperature profiles for samples:

- During the transport
- At receipt
- During storage until analyses
- During the enrichment broth incubation for the alternative method.

Samples were shipped in 24 h to 48 h to the involved laboratories. The temperature conditions had to stay lower or equal to 8°C during transport, and between 0°C – 8°C in the labs.

> *Analyses*

Collaborative study laboratories and the expert laboratory carried out the analyses on Wednesday 13th April 2022 with the alternative and reference methods. **The analyses by the reference method and the alternative method were performed on the same day.**

For the alternative method, the protocol raw meat products (25 g test portion, BPW ¼ dilution) was tested during the study with the minimum incubation time (10 h at 41.5°C ± 1°C). Two sample preparation protocols were proposed: with or without FDRS (iQ-Check Free DNA Removal Solution).

The confirmation of positive results was performed (after 10 h incubation time) by direct streaking onto CHROMagar STEC and TBX selective agar plates.

For the ISO/TS 13136 reference method, two options were proposed:

- **OPTION 1**: ISO/TS 13136 using **their own extraction** and **PCR protocols** according to the recommendations of the ISO/TS 13136 method.

- **OPTION 2:** ISO/TS 13136 using the extraction protocol from a commercial kit (PACKFOOD 2 PFOOD2096 from PALL®), and a ready to use PCR mix from a commercial kit (GeneDisc® Plate STEC GSTEHEC112006 from PALL®).

The flow diagram of the reference method applied during the inter-laboratory study is given in **Appendix 8**.

All information concerning the 2 methods and the 2 samples preparation used by the collaborators are presented in **Appendix 9**.

5.2 Experimental parameters controls

5.2.1 Detection of STEC in the matrix before inoculation

In order to detect the presence of STEC *Escherichia coli*, the reference method was performed on five portions (25 g) before the inoculation. All the results were negative.

5.2.2 Strain stability during transport

Strain stability was checked by inoculating the matrix at 1 CFU/25 g and 1000 CFU/g. Enumerations were performed for the high contamination level and detection analyses were performed for the low contamination level after 24 h, 48 h and 72 h storage at $5 \pm 3^\circ\text{C}$. *Triplicates* were analyzed. The mesophilic aerobic flora was also enumerated; the results are given in Table 38.

Table 38 - *E. coli* O26 and aerobic mesophilic flora stability

Day	STEC detection (low contamination level)						<i>E. coli</i> enumeration (high contamination level) (CFU/g)			Aerobic mesophilic flora (CFU/g)
	Reference method			Alternative method						
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3	
Day 0	+	+	+	+	+	+	780	1380	1450	1,3 10 ⁵
Day 1	-	+	+	+	-	+	980	900	940	2,7 10 ⁵
Day 2	-	+	+	-	+	+	910	780	1020	1,0 10 ⁵
Day 3	-	-	+	-	+	+	650	860	640	8,7 10 ⁷

A slight decrease was observed for the *E. coli* O26 enumeration after 3 days storage at $3 \pm 2^\circ\text{C}$.

For the detection methods, after 2 days storage, no decrease in recovery was observed for both methods. After 3 days storage, only one positive result was

obtained for the reference method while two positive results were observed for the alternative method.
Two log growth was observed for the aerobic mesophilic enumeration between Day 0 and Day 3.

5.2.3 Contamination levels

The contamination levels and the sample codification were the following (see Table 39).

Table 39 - Contamination levels

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

5.2.4 Logistic conditions

The temperatures measured at reception by the collaborators, the temperatures registered by the thermo-probe, and the receipt dates are given in Table 40.

Table 40 - Sample temperatures at receipt

Collaborators	Temperature measured		Receipt date and time		Analysis date
	by the probe (°C)	at receipt (°C)			
A	Out of order	3,9	13/04/2022	11:00	Day 2
B	1,5	6,3	13/04/2022	09:00	Day 2
C	1,0	3,3	12/04/2022	15:00	Day 2
D	Out of order	5,0	13/04/2022	11:30	Day 2
E	1,0	1,8	12/04/2022	10:30	Day 2
F	0,5	4,7	12/04/2022	16:00	Day 3
G	1,0	2,2	12/04/2022	13:25	Day 2
H	0,5	5,5	13/04/2022	09:00	Day 2
I	1,5	4,9	12/04/2022	09:45	Day 2
J	1,0	1,4	12/04/2022	08:30	Day 2
K	1,0	5,0	12/04/2022	10:55	Day 2
ADRIA	1,0	3,6	12/04/2022	09:15	Day 2

No problem was encountered during the transport or receipt of samples for the 13 collaborators.

All the samples were delivered on time and in appropriate conditions.

Unfortunately, two probes were out of order when received by the expert lab (Labs A and D).

The recording of temperature during storage period of the samples before analysis was requested for these 2 labs.

All the collaborators initiated the analysis on Day 2, except Lab F, which initiated the analysis on Day 3.

5.3 Calculation and summary of data

The raw data are given in **Appendix 9**.

5.3.1 MicroVal Expert laboratory results

The results obtained by the expert laboratory are given in Table 41.

Table 41 – Results obtained by the expert Lab.

Level	Reference method	Alternative method	
		With FDRS	Without FDRS
L0	0/8	0/8	0/8
L1	2/8	7/8	7/8
L2	7/8	8/8	8/8

Negative results were observed for the reference and the alternative methods for the inoculation Level 1 as well as for Level 2 (ISO/TS 13136 method). The same results were observed with or without applying the FDRS protocol for the VirX method.

5.3.2 Results observed by the collaborators

5.3.2.1 Aerobic mesophilic flora enumeration

Depending on the Lab results, the enumeration levels varied from < 10 UFC/g to $9.6 \cdot 10^6$ CFU/g (See Table 42).

Table 42 - Mesophilic flora enumeration

Collaborators	Mesophilic flora enumeration (CFU/g)
A1	$9,6 \cdot 10^6$
A2	$1,0 \cdot 10^6$
B1	$6,3 \cdot 10^5$
B2	$2,6 \cdot 10^5$
C	$3,0 \cdot 10^5$
D	<10 ⁽¹⁾
E	$2,8 \cdot 10^5$
F	$5.7 \cdot 10^5$
G	$3,2 \cdot 10^5$
H	$1,2 \cdot 10^5$
I	$2,3 \cdot 10^6$
J	$3,5 \cdot 10^6$
K	$1,2 \cdot 10^5$
ADRIA	$1,1 \cdot 10^5$

⁽¹⁾: result confirmed by the collaborator

5.3.2.2 Shiga-toxin producing *E. coli* detection

Thirteen collaborators participated to the study. All the collaborators performed the analysis for the reference and the alternative methods the same day (Wednesday 13th April 2022), except Lab F which carried out the analysis on Thursday 14th April 2022. Even if the strain stability study shows that storage for three days slightly affects the viability of the inoculated strain, the number of positive samples obtained by this

collaborator for both the reference and the alternative methods is in agreement with the results obtained by the other collaborators.

All the collaborators incubated the enrichment broths from the alternative method for 10 h at 41.5°C.

For collaborators C and F, the incubation temperatures curves indicate that the incubator did not reach 41.5°C; this was probably due to the high load of the incubator. However, despite the lower temperature, these labs were kept for the interpretation.

The probes from Labs A and D were out of order. The temperature curves of the incubator (alternative method enrichment) were provided to ADRIA. They confirmed the correct temperature and incubation times.

The results obtained are provided in Table 43 (reference method) and Table 44 (alternative method)

Table 43 - Positive results for stx and eae detection (before and after confirmation) by the reference method (ALL the collaborators)

Collaborators	Contamination level								
	L0			L1			L2		
	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result
A1	0	0	0	3	3	3	8	8	8
A2	0	0	0	2	2	2	1	1	1
B1	0	0	0	6	4	4	8	8	8
B2	4	0	0	6	4	4	8	7	7
C	1	0	0	7	6	6	8	8	8
D	0	0	0	6	6	6	8	8	8
E	1	0	0	6	6	6	8	8	8
F	0	1	0	6	6	6	8	8	8
G	0	0	0	5	5	5	8	8	8
H	0	0	0	5	4	4	7	7	7
I	0	0	0	5	5	5	8	8	8
J	0	0	0	5	5	5	8	8	8
K	1	0	0	4	4	4	8	8	8
Total	P ₀ =7	C ₀ =1	CP ₀ =0	P ₁ =66	C ₁ =60	CP ₁ =60	P ₂ =96	C ₂ =95	CP ₂ =95

Table 44 - Positive results for stx and eae detection (before and after confirmation) by the alternative method (ALL the collaborators)

Collaborators	Contamination level								
	L0			L1			L2		
	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result
A1	1	0	0	6	7	6	8	8	8
A2	2	3	1	6	6	5	8	8	8
B1	0	0	0	6	6	6	8	8	8
B2	1	0	0	8	8	8	8	8	8
C	0	0	0	5	5	5	8	8	8
D	0	0	0	8	8	8	8	8	8
E	0	0	0	5	5	5	8	8	8
F	1	0	0	7	7	7	8	8	8
G	0	0	0	8	8	8	8	8	8
H	0	0	0	4	4	4	8	8	8
I	0	0	0	8	8 (stx+) 0 (stx & eae +)	8	8	8 (stx+) 0 (stx & eae +)	8
J	0	0	0	8	8	8	8	8	8
K	0	0	0	6	6	6	8	8	8
Total	P₀=5	C₀=3	CP₀=1	P₁=85	C₁=86	CP₁=84	P₂=104	C₂=104	CP₂=104

5.3.2.3 Results observed with the reference method

> **PCR results**

For 7 samples from Level 0 (B39, B42, B45, B48, C15, E7 and K5), 6 samples from Level 1 (B6, B16, B32, B44, C18 and H6) and 1 sample from Level 2 (B31), positive PCR results were observed, while the cultural confirmation gave negative results. For some of the samples concerned, late Ct values were observed; these false-positive results could be due to cross-contamination during the extraction step.

> **Confirmation results**

All the positive PCR results (except for false positive results listed above) were confirmed by direct streaking of the enrichment broth onto CHROMagar STEC and TBX.

All the characteristics colonies observed were confirmed as STEC (indole and PCR tests). Note that collaborator I obtained inconsistent results for eae detection on colonies. The PCR results for eae on enrichment broths were all positives when stx results were positives. It is proposed to keep the data from this collaborator despite the fact that eae detection was negative on typical colonies.

For one sample (F20, unspiked sample), a positive confirmation result was obtained while the PCR result was negative. The confirmatory tests were repeated, and the final result was negative. Note that for routine testing, sample F20 should not have been tested for confirmation as the PCR result was negative. This procedure is applied in the context of the ILS only.

It is proposed to keep the data from all the collaborators even if unexpected positive upfront PCR results (with late Ct values) were observed.

5.3.2.4 Results observed with the alternative method

> **PCR results**

For 5 samples (A12, A33, A40, B48 and F12) positive PCR results were observed on the enriched samples while the cultural confirmation gave negative results.

The lysates from the samples concerned (except Lab A) were tested again as well as the confirmation protocol B; all the tests were then negative (PCR and confirmation). The positive PCR results initially observed were probably linked to cross-contamination.

> **Confirmation results**

All the positive PCR results (except for false positive results listed above) were confirmed by direct streaking of the enrichment broth onto CHROMagar STEC and TBX.

All the characteristics colonies observed were confirmed as STEC (indole and PCR tests).

For 4 samples (A6, A42, A48 and A35), a positive confirmation result was obtained while the PCR result was negative.

For one unspiked sample (A39), positive PCR and confirmation test result were observed.

Many unexpected results were observed for collaborator A2 (positive results on unspiked samples); it has been asked to lab A to perform additional tests, but this has not been done yet. It is proposed to not retain collaborator A2 for the interpretations.

5.3.3 Results of the collaborators retained for interpretation

The results obtained with the 12 collaborators kept for interpretation are presented in Table 45 (reference method) and Table 46 (alternative method).

Table 45 - Positive results by the reference method (Without Lab A2)

Collaborators	Contamination level								
	L0			L1			L2		
	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result
A1	0	0	0	3	3	3	8	8	8
B1	0	0	0	6	4	4	8	8	8
B2	4	0	0	6	4	4	8	7	7
C	1	0	0	7	6	6	8	8	8
D	0	0	0	6	6	6	8	8	8
E	1	0	0	6	6	6	8	8	8
F	0	1	0	6	6	6	8	8	8
G	0	0	0	5	5	5	8	8	8
H	0	0	0	5	4	4	7	7	7
I	0	0	0	5	5	5	8	8	8
J	0	0	0	5	5	5	8	8	8
K	1	0	0	4	4	4	8	8	8
Total	P ₀ =7	C ₀ =1	CP ₀ =0	P ₁ =64	C ₁ =58	CP ₁ =58	P ₂ =95	C ₂ =94	CP ₂ =94

**Table 46 - Positive results (before and after confirmation)
by the alternative method (Without Lab A2)**

Collaborators	Contamination level								
	L0			L1			L2		
	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result	PCR result	Confirmation result	Final result
A1	1	0	0	6	7	6	8	8	8
B1	0	0	0	6	6	6	8	8	8
B2	1	0	0	8	8	8	8	8	8
C	0	0	0	5	5	5	8	8	8
D	0	0	0	8	8	8	8	8	8
E	0	0	0	5	5	5	8	8	8
F	1	0	0	7	7	7	8	8	8
G	0	0	0	8	8	8	8	8	8
H	0	0	0	4	4	4	8	8	8
I	0	0	0	8	8	8	8	8	8
J	0	0	0	8	8	8	8	8	8
K	0	0	0	6	6	6	8	8	8
Total	P ₀ =3	C ₀ =0	CP ₀ =0	P ₁ =79	C ₁ =80	CP ₁ =79	P ₂ =96	C ₂ =96	CP ₂ =96

5.3.4 Calculation of the specificity percentage (SP)

The percentage specificities (SP) of the reference method and of the alternative method, using the data after confirmation, based on the results of level L0, are the following (See Table 47).

Table 47 - Percentage specificity

Specificity for the reference method	$SP_{ref} = \left(1 - \left(\frac{P_0}{N_-} \right) \right) \times 100 \% =$	100.0 %
Specificity for the alternative method	$SP_{alt} = \left(1 - \left(\frac{CP_0}{N_-} \right) \right) \times 100 \% =$	100.0 %

N: number of all L0 tests

P₀ = total number of false-positive results obtained with the blank samples before confirmation

CP₀ = total number of false-positive results obtained with the blank samples

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

Negative results were obtained for the low and the high inoculation levels (L1 + L2). Fractional positive results (60% for the reference method) were observed for the low inoculation level (L1). The low inoculation level was retained for calculation.

A summary of the results of the collaborators retained for interpretation and obtained with the reference and the alternative methods for Level 1 or Level 2 is provided in Table 48.

Table 48 - Summary of the obtained results with the reference method and the alternative method for Level 1 and Level 2

Level	Response	Reference method positive (R+)	Reference method negative (R-)
1	Alternative method positive (A+)	Positive agreement (A+/R+) PA = 51	Positive deviation (R-/A+) PD = 28
	Alternative method negative (A-)	Negative deviation (A-/R+) ND = 7	Negative agreement (A-/R-) NA = 10
2	Alternative method positive (A+)	Positive agreement (A+/R+) PA = 94	Positive deviation (R-/A+) PD = 2
	Alternative method negative (A-)	Negative deviation (A-/R+) ND = 0	Negative agreement (A-/R-) NA = 0

Based on the data summarized in Table 50, the values of sensitivity of the alternative and reference methods, as well as the relative trueness and false positive ratio for the alternative method taking account the confirmations, are the following (See Table 49).

Table 49 - Sensitivity, relative trueness and false positive ratio percentages

		Level 1
Sensitivity for the alternative method:	$SE_{alt} = \frac{(PA+PD)}{(PA+PD+ND)} \times 100\% =$	91,9 %
Sensitivity for the reference method:	$SE_{ref} = \frac{(PA+ND)}{(PA+PD+ND)} \times 100\% =$	67,4 %
Relative trueness	$RT = \frac{(PA+NA)}{N} \times 100\% =$	63,5 %
False positive ratio for the alternative method	$FPR = \frac{FP}{NA} \times 100\% =$	0,0 %

5.3.6 Interpretation of data

Negative deviations are listed in Table 50 for Level 1, no deviation negative was observed for Level 2. None of the samples in negative deviation was confirmed positive using the cultural confirmation.

Positive deviations are listed in Table 51 for Level 1 and in Table 52 for Level 2.

Table 50 - Negative deviations for Level 1

Collaborator	Sample N°	Confirmation
C	6, 22	-
E	2, 11, 22	-
F	1	-
H	1	-

Table 51 - Positive deviations for Level 1

Collaborator	Sample N°
A1	1, 16, 21
B1	11, 16
B2	25, 32, 40, 44
C	18
D	1, 16
E	1, 21
F	6, 11
G	2, 11, 16
H	6
I	6, 11, 18
J	2, 6, 11
K	2, 11

Table 52 - Positive deviation for Level 2

Lab	Sample N°
B2	18
H	20

For an **unpaired study design**, the difference between (ND – PD) is calculated for the level(s) where fractional recovery is obtained (so L_1 and possibly L_2). The observed value found for (ND – PD) shall not be higher than the AL. The AL is defined as $[(ND - PD)_{max}]$ and calculated per level where fractional recovery is obtained as described below using the following three parameters:

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

where

P_x = number of samples with a positive result obtained with the reference method at level x (L_1 or L_2) for all the collaborators

N_x = number of samples tested at level x (L_1 or L_2) with the reference method by all the collaborators

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

where

CP_x = number of samples with a confirmed positive result obtained with the alternative method at level x (L_1 or L_2) for all the collaborators;

N_x = number of samples tested at level x (L_1 or L_2) with the alternative method by all the collaborators.

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

where

N_x = number of samples tested for level x (L_1 or L_2) with the reference method by all the collaborators.

In this study, fractional recovery was observed at Level 1. The calculations are the following, according to the EN ISO 16140-2:2016 (See Table 53).

Table 53 - Calculations

	Level 1
N_x	96
$(p+)_{\text{ref}}$	0.58
$(p+)_{\text{alt}}$	0.59
AL = (ND - PD) max	11.83
ND - PD	-21
Conclusion	ND-PD < AL

The ISO 16140-2 (2016) requirements are fulfilled as (ND - PD) meet the Acceptability limit (AL) for the low inoculation level for which fractional recovery was observed.

5.3.7 Evaluation of the LOD_{50%}, LOD_{95%} and RLOD between laboratories

The RLOD was calculated using the EN ISO 16140-2:2016 Excel spreadsheet available at https://standards.iso.org/iso/16140/-5/ed-1/en/RLOD_inter-lab-study_16140-2_AnnexF_ver1_28-06-2017.xls. The results are used only for information (see Table 54).

Table 54 - LOD_{50%}, LOD_{95%} and RLOD

Method	LOD 50%	LOD 95%	RLOD
Reference	0.9 [0.7;1.2]	3.8 [2.9;5.0]	0.4 [0.3;0.6]
Alternative	0.4 [0.3;0.5]	1.6 [1.2-2.0]	

6 GENERAL CONCLUSION

Overall, the conclusions for the Method Comparison Study are:

- ☒ The observed values for ND-PD for the individual categories and for all categories meet the acceptability limits (observed values $\leq$ AL) for both PCR systems used (CFX96 or CFX Opus Deep Well).
- ☒ The RLOD values (using the confirmed alternative method results) meet the acceptability limit, 2.5 for unpaired studies, for all categories tested and both PCR systems used (CFX96 or CFX Opus Deep Well).
- ☒ The alternative detection iQ-Check STEC VirX method is selective and specific.

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

- ☒ The observed values for ND-PD meet the acceptability limits.
- ☒ The data and interpretations comply with the EN ISO 16140-2:2016 requirements.
- ☒ The iQ-Check STEC VirX method for the detection of *stx* and *eae* in a broad range of food sample is considered equivalent to the ISO standard.

Quimper, 09 July 2024

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Validation of Alternative methods
Food Safety & Quality

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Validation of Alternative methods
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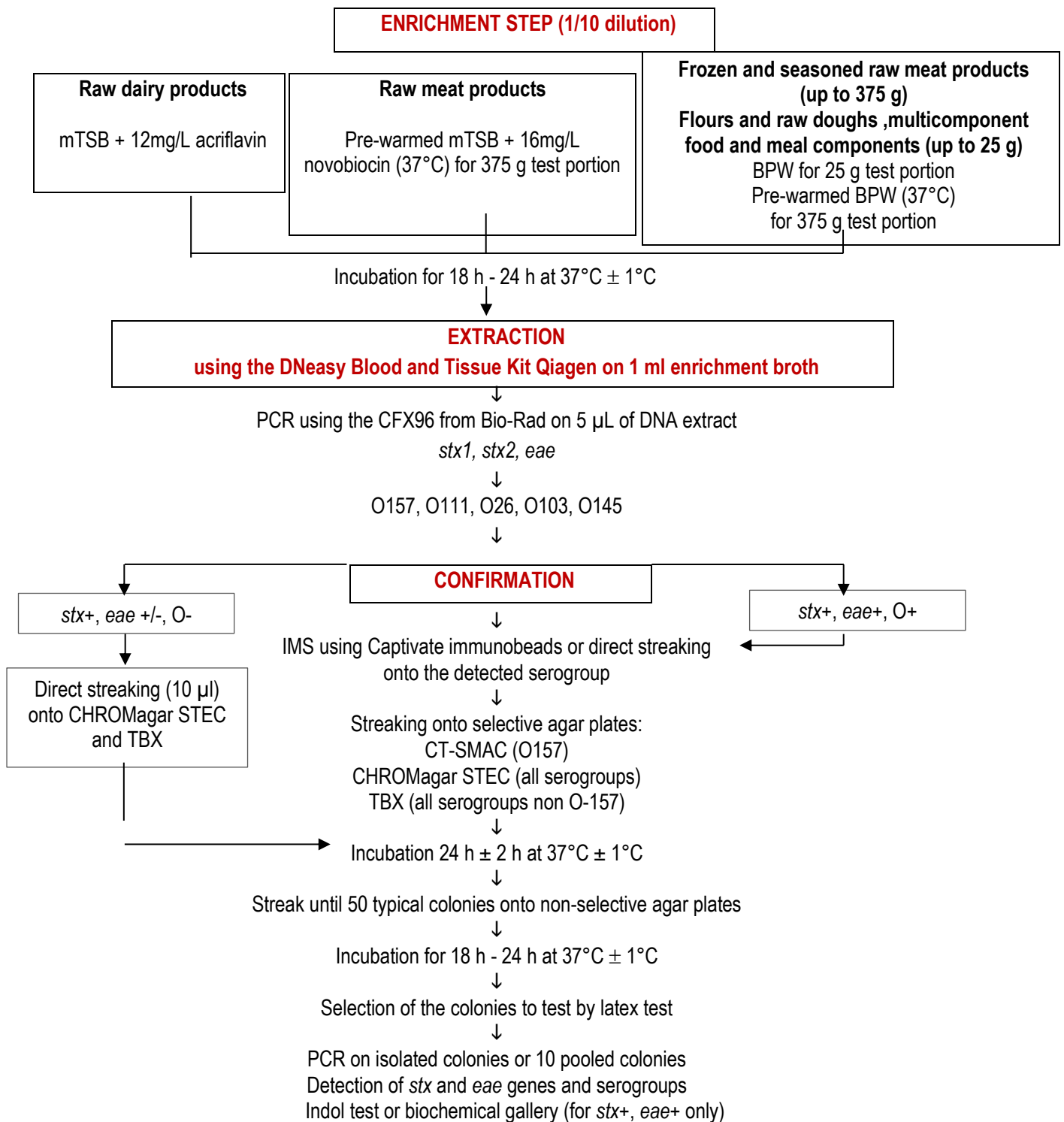
I hereby attest to the validation of the results of the analyses carried out under the COFRAC accreditation.

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

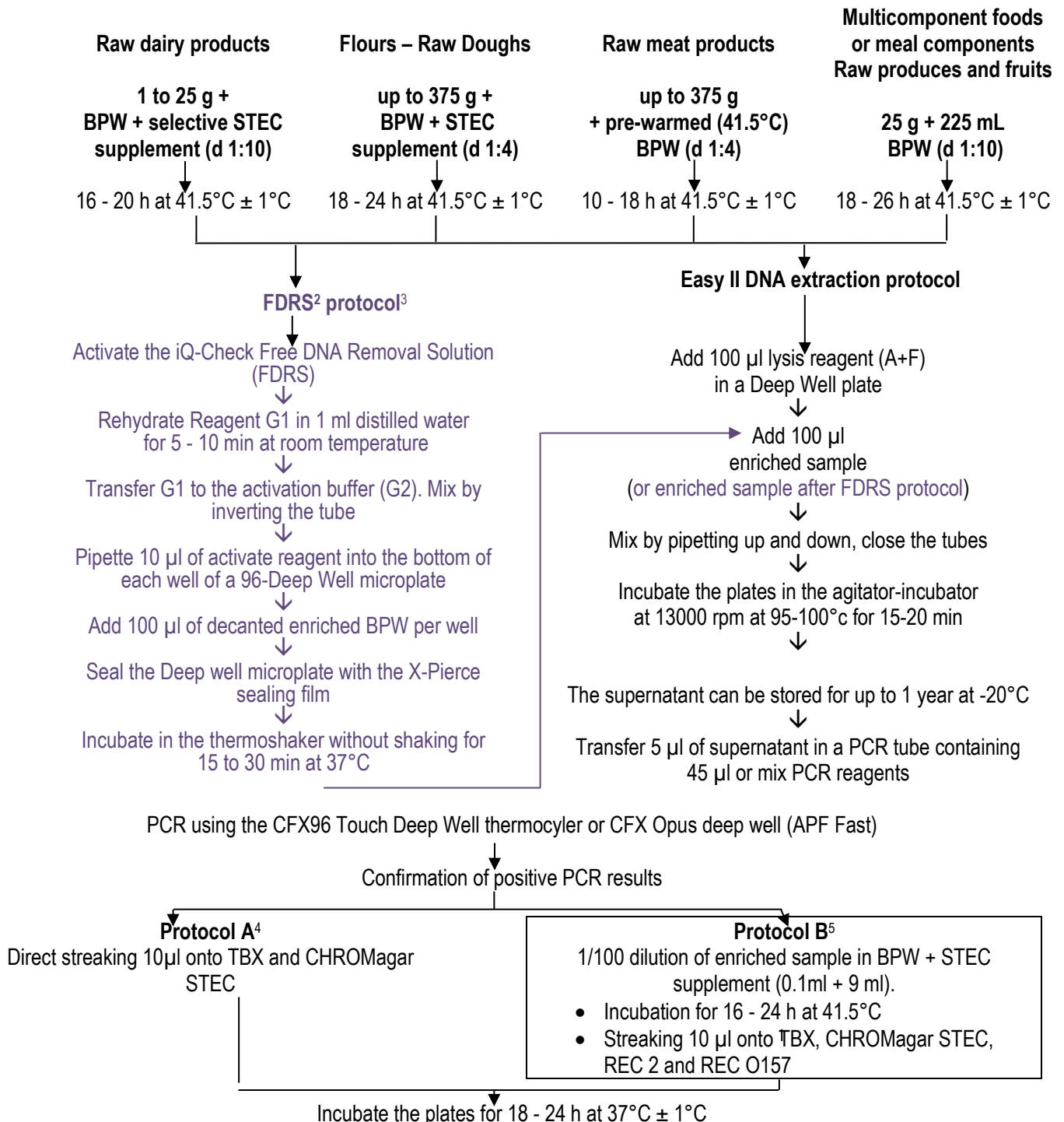
7 REFERENCES

- ISO/TS 13136 (November 2012): Microbiology of food and animal feed - Real-Time Polymerase Chain Reaction (PCR) based method for the detection of food-borne pathogens. Horizontal method for the detection of Shiga-toxin producing (STEC) and the determination of O26, O103, O111, O145 and O157 serogroups
- ISO 4833-1:2013; Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 1: Colony count at 30 degrees C by the pour plate technique
- ISO 6887-1; Microbiology of the food chain -- Preparation of test samples, initial suspension and decimal dilutions for microbiological examination – All parts.
- ISO 7218; Microbiology of food and animal feeding stuffs -- General requirements and guidance for microbiological examinations.
- ISO 16140-2:2016; Microbiology of the food chain -- Method validation -- Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method.
- 2016-028 (GC) Proposed MicroVal Technical committee interpretation of ISO 16140-2 and ISO
- 2017-063 (TC) The MicroVal Process

Appendix 1 – Flow diagram of the reference method: ISO/TS 13136 (November 2012)



Appendix 2 – Flow diagram of the alternative method: iQ-Check STEC VirX method



² FDRS: iQ-Check Free DNA Removal Solution

³ This option was tested during the validation study

⁴ For protocol A: using a single colony, detection of virulence genes using the iQ-Check VirX STEC kit (pooling up to 10 colonies is possible. Confirm to *E. coli* species using biochemical gallery.

⁵ For protocol B: screen up to 50 colonies as recommended in the ISO/TS 13136 for detection of *stx1/stx2* and *eae* genes using the kit iQ-Check STEC VirX. Pooling 10 typical colonies is possible. From pooled colonies giving a positive result, test individual colonies. Confirm to *E. coli* species using biochemical gallery.



Appendix 3 - Artificial inoculations

Date	Sample N°	Product (french name)	Product	Artificial contaminations								Global result				Category	Type
												CFX96		CFX OPUS			
				Strain	Virulence genes			Origin	Injury protocol	Inoculation level/sample		w/o FDRS	with FDRS	w/o FDRS	w/o FDRS		
					stx1	stx2	eae			Enumeration	Mean	stx/eae	stx/eae	stx/eae	stx/eae		
2021	7643	Lait cru de vache	Raw cow milk	E. coli O26 Ad2831	+	-	+	Cheese	Seeding 48 h at 5±3°C	3-2-2-3-0	2,0	+	+	+	+	1	a
2021	7644	Lait cru de vache	Raw cow milk	E. coli O26 Ad2831	+	-	+	Cheese	Seeding 48 h at 5±3°C	3-2-2-3-0	2,0	+	+	+	+	1	a
2021	7645	Lait cru de vache	Raw cow milk	E. coli O145 Ad3173	-	+	+	Raw material	Seeding 48 h at 5±3°C	3-4-1-2-1	2,2	+	+	+	+	1	a
2021	7646	Lait cru de vache	Raw cow milk	E. coli O145 Ad3173	-	+	+	Raw material	Seeding 48 h at 5±3°C	3-4-1-2-1	2,2	+	+	+	+	1	a
2021	7648	Lait cru de brebis	Raw ewe milk	E. coli O145 Ad3029	-	+	+	Goat milk	Seeding 48 h at 5±3°C	3-1-2-3-1	2,0	+	+	+	+	1	a
2021	7649	Fromage au lait cru de vache (Saint Nectaire)	Raw cow milk cheese	E. coli O26 Ad2831	+	-	+	Cheese	Seeding 48 h at 5±3°C	3-2-2-3-0	2,0	-	-	-	-	1	b
2021	7650	Fromage au lait cru de vache (Saint Nectaire)	Raw cow milk cheese	E. coli O26 Ad2670	+	-	+	Dairy product	Seeding 48 h at 5±3°C	1-5-1-0-1	1,6	-	-	-	-	1	b
2021	7651	Fromage au lait cru de vache (Tomme des bauges)	Raw cow milk cheese	E. coli O145 Ad3029	-	+	+	Goat milk	Seeding 48 h at 5±3°C	3-1-2-3-1	2,0	-	-	-	-	1	b
2021	7652	Fromage au lait cru de vache (Provolone piquant)	Raw cow milk cheese	E. coli O145 Ad3173	-	+	+	Raw material	Seeding 48 h at 5±3°C	3-4-1-2-1	2,2	+	+	+	+	1	b
2021	7653	Fromage au lait cru de vache (Provolone piquant)	Raw cow milk cheese	E. coli O26 Ad2831	+	-	+	Cheese	Seeding 48 h at 5±3°C	3-2-2-3-0	2,0	+	+	+	+	1	b
2021	7654	Fromage au lait cru de vache (Saint Mont des Alpes)	Raw cow milk cheese	E. coli O26 Ad2670	+	-	+	Dairy product	Seeding 48 h at 5±3°C	1-5-1-0-1	1,6	+	+	+	+	1	b
2021	7655	Fromage de lait cru de vache (Parmiggiano)	Raw cow milk cheese	E. coli O145 Ad3173	-	+	+	Raw material	Seeding 48 h at 5±3°C	3-4-1-2-1	2,2	+	+	+	+	1	b
2021	7656	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	E. coli O26 Ad2670	+	-	+	Dairy product	Seeding 48 h at 5±3°C	1-5-1-0-1	1,6	-	+	-	+	1	c
2021	7657	Fromage au lait cru de brebis (Lo Feda)	Raw ewe milk cheese	E. coli O145 Ad3029	-	+	+	Goat milk	Seeding 48 h at 5±3°C	3-1-2-3-1	2,0	+	+	+	+	1	c
2021	7823	Lait cru de chèvre	Raw goat milk	E. coli O145 Ad3176	+	-	+	Raw material	Seeding 48 h at 5±3°C	1-0-5-4-3	2,6	+	+	+	+	1	a
2021	7824	Lait cru de chèvre	Raw goat milk	E. coli O145 Ad3054	+	+	+	Raw milk cheese	Seeding 48 h at 5±3°C	2-3-1-2-3	2,2	+	+	+	+	1	a
2021	7825	Lait cru de brebis	Raw ewe milk	E. coli O26 Ad2623	+	-	+	Dairy product	Seeding 48 h at 5±3°C	3-6-3-2-2	3,2	+	+	+	+	1	a
2021	7826	Lait cru de brebis	Raw ewe milk	E. coli O111:H8 622-4	+	+	+	Dairy product	Seeding 48 h at 5±3°C	3-2-2-3-1	2,2	+	+	+	+	1	a
2021	7827	Lait cru de brebis	Raw ewe milk	E. coli O157 Ad3183	-	+	+	Raw material	Seeding 48 h at 5±3°C	3-1-3-1-1	1,8	+	+	+	+	1	a
2021	7828	Fromage au lait cru de vache (Pont l'évêque)	Raw cow milk cheese	E. coli O111:H8 622-4	+	+	+	Dairy product	Seeding 48 h at 5±3°C	3-2-2-3-1	2,2	+	+	+	+	1	b
2021	7829	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	E. coli O111:H8 622-4	+	+	+	Dairy product	Seeding 48 h at 5±3°C	3-2-2-3-1	2,2	+	+	+	+	1	b
2021	7830	Fromage au lait cru de vache (Salers)	Raw cow milk cheese	E. coli O157 Ad3183	-	+	+	Raw material	Seeding 48 h at 5±3°C	3-1-3-1-1	1,8	+	+	+	+	1	b
2021	7831	Fromage au lait cru de vache (Emmental)	Raw cow milk cheese	E. coli O157 Ad3183	-	+	+	Raw material	Seeding 48 h at 5±3°C	3-1-3-1-1	1,8	+	+	+	+	1	b
2021	7832	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	E. coli O26 Ad2623	+	-	+	Dairy product	Seeding 48 h at 5±3°C	3-6-3-2-2	3,2	+	+	+	+	1	c
2021	7833	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	E. coli O111:H8 622-4	+	+	+	Dairy product	Seeding 48 h at 5±3°C	3-2-2-3-1	2,2	+	+	+	+	1	c



Date	Sample N°	Product (french name)	Product	Artificial contaminations								Global result				Category	Type
				Strain	Virulence genes			Origin	Injury protocol	Inoculation level/sample		CFX96		CFX OPUS			
					stx1	stx2	eae			Enumeration	Mean	w/o FDRS	with FDRS	w/o FDRS	w/o FDRS		
												stx/eae	stx/eae	stx/eae	stx/eae		
2021	7834	Fromage au lait cru de chèvre (Rigotte)	Raw goat milk cheese	<i>E. coli</i> Ad3188	+	+	-	Raw cow milk curd	Seeding 48 h at 5±3°C	3-6-1-1-3	2,8	+	+	+	+	1	c
2021	7836	Fromage au lait cru de chèvre (Picodon)	Raw goat milk cheese	<i>E. coli</i> O26 Ad2623	+	-	+	Dairy product	Seeding 48 h at 5±3°C	3-6-3-2-2	3,2	-	-	-	-	1	c
2021	7837	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	<i>E. coli</i> O145 Ad3054	+	+	+	Raw milk cheese	Seeding 48 h at 5±3°C	2-3-1-2-3	2,2	+	+	+	+	1	c
2021	7838	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	<i>E. coli</i> O145 Ad3176	+	-	+	Raw material	Seeding 48 h at 5±3°C	1-0-5-4-3	2,6	+	+	+	+	1	c
2023	5909	Fromage au lait cru de vache (Brie de Melun)	Raw cow milk cheese	<i>E. coli</i> O145 Ad3054	-	+	+	Raw milk cheese	Seeding 48 h at 5±3°C	1-0-2-3-2	1,6	-	-	-	-	1	b
2023	5910	Fromage au lait cru de vache (Munster)	Raw cow milk cheese	<i>E. coli</i> O157:H7 Ad3398	-	+	+	Raw milk cheese	Seeding 48 h at 5±3°C	0-3-4-3-2	2,4	-	-	-	-	1	b
2023	5911	Fromage au lait cru de brebis (Pérail)	Raw ewe milk cheese	<i>E. coli</i> O157:H7 Ad3398	-	+	+	Raw milk cheese	Seeding 48 h at 5±3°C	0-3-4-3-2	2,4	-	-	-	-	1	c
2023	5912	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	<i>E. coli</i> O145 Ad3054	-	-	+	Raw milk cheese	Seeding 48 h at 5±3°C	1-0-2-3-2	1,6	-	-	-	-	1	c
2023	5913	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	<i>E. coli</i> O103 Ad3153	+	-	+	Goat milk	Seeding 48 h at 5±3°C	3-2-2-0-2	1,8	+	+	+	+	1	c
2023	5914	Fromage au lait cru de chèvre (Valençay)	Raw goat milk cheese	<i>E. coli</i> O157:H7 Ad3398	-	+	+	Raw milk cheese	Seeding 48 h at 5±3°C	0-3-4-3-2	2,4	-	-	-	-	1	c
2023	5915	Fromage au lait cru de chèvre (Grand Caprin)	Raw goat milk cheese	<i>E. coli</i> O103 Ad3153	+	-	+	Goat milk	Seeding 48 h at 5±3°C	3-2-2-0-2	1,8	+	+	+	+	1	c
2024	219	Fromage au lait cru de vache (St Nectaire)	Raw cow milk cheese	<i>E. coli</i> O103 Ad3153	+	-	+	Goat milk	Seeding 48h 3±2°C	/	3	+	+	+	+	1	b
2024	220	Fromage au lait cru de vache (Abondance)	Raw cow milk cheese	<i>E. coli</i> O145 Ad3054	-	+	+	Raw milk cheese	Seeding 48h 3±2°C	/	1,2	+	+	+	+	1	b
2024	221	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	<i>E. coli</i> O157:H7 Ad3398	-	+	+	Raw milk cheese	Seeding 48h 3±2°C	/	1	+	+	+	+	1	c
2024	222	Fromage au lait cru de brebis (Brebis fermier)	Raw ewe milk cheese	<i>E. coli</i> O103 Ad3153	+	-	+	Goat milk	Seeding 48h 3±2°C	/	3	+	+	+	+	1	c
2024	223	Fromage au lait cru de chèvre (Crottins de Chavignol)	Raw goat milk cheese	<i>E. coli</i> O145 Ad3054	-	+	+	Raw milk cheese	Seeding 48h 3±2°C	/	1,2	+	+	+	+	1	c
2024	224	Fromage au lait cru de chèvre (Rocamadour)	Raw goat milk cheese	<i>E. coli</i> O157:H7 Ad3398	-	+	+	Raw milk cheese	Seeding 48h 3±2°C	/	1	+	+	+	+	1	c
2021	7713	Pavé de bœuf mariné aux 3 poivres	Marinated beef trim	<i>E. coli</i> O157:H7 Ad485	+	+	+	Ground beef	Seeding 48 h at 5±3°C	1-1-4-1-6	2,6	+	+	+	+	2	c
2021	7714	Steak haché de bœuf à l'oignon	Seasoned ground beef	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat Product	Seeding 48 h at 5±3°C	2-3-3-2-5	3,0	+	+	+	+	2	c
2021	7717	Veau à l'échalotte	Seasoned veal trim	<i>E. coli</i> O103 Ad3257	+	-	+	Beef meat	Seeding 48 h at 5±3°C	2-4-1-3-1	2,2	+	+	+	+	2	c
2021	7718	Lomo de porc tendre marinés au piment doux	Seasoned pork trim	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat Product	Seeding 48 h at 5±3°C	2-3-3-2-5	3,0	+	+	+	+	2	c
2021	7719	Filet mignon marinés à l'ail et persil	Marinated pork meat	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat Product	Seeding 48 h at 5±3°C	2-3-3-2-5	3,0	+	+	+	+	2	c
2021	7720	Agneau à la tomate	Seasoned Lamb trim	<i>E. coli</i> Ad3247	+	-	+	Lamb meat	Seeding 48 h at 5±3°C	7-1-3-3-4	3,6	-	-	-	-	2	c



Date	Sample N°	Product (french name)	Product	Artificial contaminations								Global result				Category	Type
												CFX96		CFX OPUS			
				Strain	Virulence genes			Origin	Injury protocol	Inoculation level/sample		w/o FDRS	with FDRS	w/o FDRS	w/o FDRS		
					stx1	stx2	eae			Enumeration	Mean	stx/eae	stx/eae	stx/eae	stx/eae		
2021	7721	Agneau à l'ail	Seasoned Lamb trim	<i>E. coli</i> Ad3247	+	-	+	Lamb meat	Seeding 48 h at 5±3°C	7-1-3-3-4	3,6	-	-	-	-	2	c
2021	7724	Faux filet de bœuf	Fresh beef meat	<i>E. coli</i> O157:H7 Ad485	+	+	+	Ground beef	Seeding 48 h at 5±3°C	1-1-4-1-6	2,6	+	+	-	+	2	a
2021	7726	Escalope de veau	Fresh veal meat	<i>E. coli</i> O157:H7 Ad485	+	+	+	Ground beef	Seeding 48 h at 5±3°C	1-1-4-1-6	2,6	+	+	+	+	2	a
2021	7727	Jarret de veau en tranche façon Osso bucco	Fresh veal meat	<i>E. coli</i> O103 Ad3257	+	-	+	Beef meat	Seeding 48 h at 5±3°C	2-4-1-3-1	2,2	+	+	+	+	2	a
2021	7766	Viande hachée de bœuf surgelée 15%MG	Frozen ground beef	<i>E. coli</i> O157:H7 d3260	-	+	+	Ground beef	Seeding 2 weeks at -20°C	2-2-0-1-0	1,0	+	+	+	+	2	b
2021	7767	Viande à bourguignon surgelée	Frozen beef trim	<i>E. coli</i> O157:H7 d3260	-	+	+	Ground beef	Seeding 2 weeks at -20°C	2-2-0-1-0	1,0	+	+	+	+	2	b
2021	7768	Bavette d'Aloyau surgelée	Frozen beef trim	<i>E. coli</i> O26 Ad3256	+	-	+	Beef meat	Seeding 2 weeks at -20°C	2-3-1-2-0	1,6	+	+	+	+	2	b
2021	7769	Escalope de veau à griller surgelée	Frozen veal meat	<i>E. coli</i> O26 Ad3256	+	-	+	Beef meat	Seeding 2 weeks at -20°C	2-3-1-2-0	1,6	+	+	+	+	2	b
2021	7770	Sauté de veau surgelé	Frozen veal meat	<i>E. coli</i> O26 Ad3256	+	-	+	Beef meat	Seeding 2 weeks at -20°C	2-3-1-2-0	1,6	+	+	+	+	2	b
2021	7771	Blanquette de veau surgelée	Frozen veal meat	<i>E. coli</i> O157:H7 d3260	-	+	+	Ground beef	Seeding 2 weeks at -20°C	2-2-0-1-0	1,0	+	+	+	+	2	b
2021	7772	Sauté de porc surgelé	Frozen pork meat	<i>E. coli</i> O145:H28 1502-105	-	+	+	Meat Product	Seeding 2 weeks at -20°C	2-5-2-2-4	3,0	+	+	+	+	2	b
2021	7773	Côte de porc surgelée	Frozen pork meat	<i>E. coli</i> O145:H28 1502-105	-	+	+	Meat Product	Seeding 2 weeks at -20°C	2-5-2-2-4	3,0	+	+	+	+	2	b
2021	7893	Viande porc (jambon avec os)	Fresh pork meat	<i>E. coli</i> O145:H28 092-4	-	+	+	Meat Product	Seeding 48 h at 5±3°C	2-4-4-6-3	3,8	+	+	+	+	2	a
2021	7894	Filet de porc à rôtir	Fresh pork meat	<i>E. coli</i> O145:H28 092-4	-	+	+	Meat Product	Seeding 48 h at 5±3°C	2-4-4-6-3	3,8	+	+	+	+	2	a
2021	7895	Sauté de porc surgelé	Fresh pork meat	<i>E. coli</i> O111:H28 Ad511	+	+	+	Clinic	Seeding 48 h at 5±3°C	2-1-4-4-2	2,6	+	+	+	+	2	a
2021	7896	Côtes d'agneau	Fresh Lamb meat	<i>E. coli</i> O145:H28 092-4	-	+	+	Meat Product	Seeding 48 h at 5±3°C	2-4-4-6-3	3,8	+	+	+	+	2	a
2021	7897	Gigot d'agneau	Fresh Lamb meat	<i>E. coli</i> O111:H28 Ad511	+	+	+	Clinic	Seeding 48 h at 5±3°C	2021	2,6	+	+	+	+	2	a
2021	7986	Tranche d'agneau à l'ail	Seasoned Lamb trim	<i>E. coli</i> O157:H7 803	-	+	+	Meat Product	Seeding 48 h at 5±3°C	3-1-5-4-6	3,8	+	+	+	+	2	c
2021	7987	Pavé d'agneau à la tomate	Seasoned Lamb trim	<i>E. coli</i> O157:H7 803	-	+	+	Meat Product	Seeding 48 h at 5±3°C	3-1-5-4-6	3,8	-	+	+	+	2	c
2021	7988	Pavé d'agneau à la tomate	Seasoned Lamb trim	<i>E. coli</i> O26 14-53	+	-	+	Meat Product	Seeding 48 h at 5±3°C	0-4-3-2-3	2,4	+	+	+	+	2	c
2023	5943	Blanquette de veau	Veal meat	<i>E. coli</i> O103 Ad3284	+	+	+	Veal breast	Seeding 48 h at 5±3°C	2-1-1-0-1	1	+	+	+	+	2	a
2023	5944	Porc pointe sans os à mijoter	Pork meat	<i>E. coli</i> O103 Ad3284	+	+	+	Veal breast	Seeding 48 h at 5±3°C	2-1-1-0-1	1	+	+	+	+	2	a
2023	5945	Bifteck persille	Beef meat	<i>E. coli</i> O26 Ad3253	+	-	+	Beef meat	Seeding 48 h at 5±3°C	2-0-1-1-0	0,8	+	+	+	+	2	c
2023	5946	Pavé d'agneau à la tomate	Seasoned Lamb trim	<i>E. coli</i> O26 Ad3253	+	-	+	Beef meat	Seeding 48 h at 5±3°C	2-0-1-1-0	0,8	+	+	+	+	2	c
2023	6096	Sauté d'agneau surgelé	Frozen Lamb meat	<i>E. coli</i> O157:H7 Ad683	+	+	+	Frozen beef meatball	Seeding 2 weeks at -20°C	1-1-3-1-1	1,4	+	+	+	+	2	b
2023	6097	Côte de porc surgelée	Frozen pork meat	<i>E. coli</i> O157:H7 Ad558	-	+	+	Environment	Seeding 2 weeks at -20°C	2-1-2-2-1	1,6	+	+	+	+	2	b
2023	6098	Souris d'agneau surgelé	Frozen Lamb meat	<i>E. coli</i> O157:H7 Ad683	+	+	+	Frozen beef meatball	Seeding 2 weeks at -20°C	1-1-3-1-1	1,4	+	+	+	+	2	b
2022	1917	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	<i>E. coli</i> O157:H7 Ad571	+	+	+	Clinic	Seeding 48h 3±2°C	3-0-1-4-2	2,0	+	+	+	+	3	c
2022	1918	Pâte à pizza bio (Farine de blé)	Pizza dough bio with wheat flour	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 48h 3±2°C	3-1-1-2-3	2,0	+	+	+	+	3	c
2022	1919	Pâte à pizza (Farine de blé 63%)	Pizza dough with wheat flour	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 48h 3±2°C	1-1-2-1-1	1,2	+	+	+	+	3	c
2022	1920	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	2-3-5-3-0	2,6	+	+	+	+	3	c
2022	1922	Pâte brisée (farine de blé)	Dough with wheat flour	<i>E. coli</i> O157:H7 Ad571	+	+	+	Clinic	Seeding 48h 3±2°C	3-0-1-4-2	2,0	+	+	+	+	3	c
2022	1923	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 48h 3±2°C	3-1-1-2-3	2,0	+	+	+	+	3	c
2022	1924	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 48h 3±2°C	1-1-2-1-1	1,2	+	+	+	+	3	c
2022	1925	Pâte sablée (farine de blé)	Dough with wheat flour	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	2-3-5-3-0	2,6	+	+	+	+	3	c
2022	2115	Farine de blé bio T65	Organic wheat flour T65	<i>E. coli</i> O157 Ad3383	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	<1	-	-	-	-	3	a
2022	2119	Farine de blé bio T55	Organic wheat flour T55	<i>E. coli</i> O26 Ad3385	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	3,3	-	-	-	-	3	a



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					stx1	stx2	eae			Enumeration	Mean	stx/eae	stx/eae	stx/eae	stx/eae		
2022	2123	Farine de seigle	Rye flour	E. coli O157 Ad3383	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	<1	-	-	-	-	3	b
2022	2127	Farine de manioc	Cassava flour	E. coli O26 Ad3385	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	3,3	-	-	-	-	3	b
2022	2487	Farine de blé blanche T65	Wheat flour T65	E. coli O111:H8 Ad3021	+	-	+	Unknown	Seeding lyophilized strain 2 weeks at room temperature	/	1,1	+	+	+	+	3	a
2022	2488	Farine de blé bio T55	Wheat flour T55	E. coli O157:H7 Ad3118	+	+	+	Sprouts	Seeding lyophilized strain 2 weeks at room temperature	/	1,3	+	+	+	+	3	a
2022	2489	Farine de blé T45	Wheat flour T45	E. coli O26:H11 Ad1507	+	-	+	Unknown	Seeding lyophilized strain 2 weeks at room temperature	/	0	-	-	-	-	3	a
2022	2490	Farine de blé	Wheat flour	E. coli O145 Ad983	-	+	+	Clinic	Seeding lyophilized strain 2 weeks at room temperature	/	1,0	+	+	+	+	3	a
2022	2491	Farine de maïs sans gluten	Corn flour	E. coli O111:H8 Ad3021	+	-	+	Unknown	Seeding lyophilized strain 2 weeks at room temperature	/	1,1	-	-	-	-	3	b
2022	2492	Farine d'épeautre blanche Type 70	Spelt flour Type 70	E. coli O157:H7 Ad3118	+	+	+	Sprouts	Seeding lyophilized strain 2 weeks at room temperature	/	1,3	+	+	+	+	3	b
2022	2493	Farine d'orge mondée	Barley flour	E. coli O26:H11 Ad1507	+	-	+	Unknown	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	b
2022	2494	Farine bio de sarrasin	Buckwheat flour	E. coli O145 Ad983	-	+	+	Clinic	Seeding lyophilized strain 2 weeks at room temperature	/	1,0	+	+	+	+	3	b
2022	2495	Farine complète de riz sans gluten bio	Rice flour	E. coli O111:H8 Ad3021	+	-	+	Unknown	Seeding lyophilized strain 2 weeks at room temperature	/	1,1	+	+	+	+	3	b
2022	2769	Farine de blé T55	Wheat flour T55	E. coli O103 Ad982	+	-	+	Clinic	Seeding lyophilized strain 2 weeks at room temperature	/	1,3	+	+	+	+	3	a
2022	2770	Farine de blé T65	Wheat flour T65	E. coli O145 Ad983	-	+	+	Clinic	Seeding lyophilized strain 2 weeks at room temperature	/	3,0	+	+	+	+	3	a
2022	2773	Farine de seigle	Rye flour	E. coli O103 Ad982	+	-	+	Clinic	Seeding lyophilized strain 2 weeks at room temperature	/	1,3	+	+	+	+	3	b
2023	5947	Pâte à pizza (farine de blé)	Pizza raw dough with wheat flour	E. coli O145 Ad3168	-	+	+	Dairy product	Seeding 48h 3±2°C	1-0-0-4-1	1,2	+	+	+	+	3	c
2023	5948	Pâte brisée pur beurre (farine de blé)	Raw dough with wheat flour	E. coli O145 Ad3168	-	+	+	Dairy product	Seeding 48h 3±2°C	1-0-0-4-1	1,2	-	-	-	-	3	c
2023	5949	Pâte sablée (farine de blé)	Shor bread raw dough (wheat flour)	E. coli O157:H7 Ad557	-	+	+	Environment	Seeding 48h 3±2°C	2-1-2-1-2	1,6	-	-	-	-	3	c
2023	6102	Farine de blé T45	Wheat flour T45	E. coli O157 Ad3383	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	0,4	+	+	+	+	3	a
2023	6103	Farine de blé T80	Wheat flour T80	E. coli O157 Ad3383	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	0,4	-	+	+	+	3	a
2023	6104	Farine de blé T55	Wheat flour T55	E. coli O26 Ad3385	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	1,4	+	+	+	+	3	a
2024	975	Farine de blé T45	Wheat flour T45	E. coli O145 Ad3175	+	-	+	Dairy product raw material	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	a



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					stx1	stx2	eae			Enumeration	Mean	stx/eae	stx/eae	stx/eae	stx/eae		
2024	976	Farine de blé T80	Wheat flour T80	E. coli O157:H7 Ad975	-	+	+	Beef meat	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	a
2024	977	Farine de blé T55	Wheat flour T55	E. coli O26 Ad3430	+	-	+	Dehydrated soup	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	a
2024	978	Farine de blé complet T150	Whole wheat	E. coli O26 Ad3385	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	5	-	-	-	-	3	a
2024	979	Farine de blé noir	Buckwheat flour	E. coli O145 Ad3175	+	-	+	Dairy product raw material	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	a
2024	980	Farine de Sarrasin	Buckwheat flour	E. coli O145 Ad3175	+	-	+	Dairy product raw material	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	b
2024	981	Farine de seigle T80	Rye flour T130	E. coli O157:H7 Ad975	-	+	+	Beef meat	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	b
2024	982	Farine d'épeautre T80	Spelt flour	E. coli O26 Ad3430	+	-	+	Dehydrated soup	Seeding lyophilized strain 2 weeks at room temperature	/	<1	-	-	-	-	3	b
2024	983	Farine de pois chiche	Chick pea flour	E. coli O26 Ad3385	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	5	+	+	+	+	3	b
2024	984	Farine de quinoa	Quinoa flour	E. coli O157:H7 Ad975	-	+	+	Beef meat	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	b
2024	985	Farine de riz complet	Whole rice flour	E. coli O157:H7 Ad975	-	+	+	Beef meat	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	b
2024	986	Farine d'orge mondé	Hulled barley flour	E. coli O145 Ad3175	+	-	+	Dairy product raw material	Seeding lyophilized strain 2 weeks at room temperature	/	<1	+	+	+	+	3	b
2024	1227	Pâte brisée épaisse	Raw dough	E. coli O145 Ad3175	+	-	+	Dairy product	Seeding 48h 3±2°C	2-4-0-0-1	1,4	+	+	+	+	3	c
2024	1228	Pâte sablée (farine de blé)	Shor bread raw dough (wheat flour)	E. coli O26 Ad3430	+	-	+	Dehydrated tomato and vermicelli soup	Seeding 48h 3±2°C	5-2-4-0-2	2,6	-	-	-	-	3	c
2024	1229	Pâte à pizza (farine de blé)	Pizza raw dough (wheat flour)	E. coli O26 Ad3430	+	-	+	Dehydrated tomato and vermicelli soup	Seeding 48h 3±2°C	5-2-4-0-2	2,6	+	+	+	+	3	c
2023	151	Salade de pâtes (Fettucine aux 2 saumons)	RTE (pasta salad with salmon)	E. coli O157:H7 Ad3118	+	+	+	Leek sprouts	Seeding 48h 3±2°C	11-10-4-3-4	6,4	+	+	+	+	4	a
2023	152	Salade de pâtes (Fettucine aux 2 saumons)	RTE (pasta salad with salmon)	E. coli O26 Ad3254	+	-	+	Onion burger	Seeding 48h 3±2°C	2-0-3-4-1	2,0	+	+	+	+	4	a
2023	153	Wraps (duo de saumon sauce fromage blanc)	RTE (wraps with salmon)	E. coli O103 Ad3255	+	-	+	Onion burger	Seeding 48h 3±2°C	2-4-5-3-1	3,0	+	+	+	+	4	a
2023	154	Sandwich (Poulet rôti crudités)	RTE (sandwich with chicken and vegetables)	E. coli O103 Ad3255	+	-	+	Onion burger	Seeding 48h 3±2°C	2-4-5-3-1	3,0	+	+	+	+	4	a
2023	155	Sandwich (Poulet rôti crudités)	RTE (sandwich with chicken and vegetables)	E. coli O103 Ad3318	+	-	+	Batavia	Seeding 48h 3±2°C	1-2-3-0-2	1,6	+	+	+	+	4	a
2023	156	Raviolis frais au bœuf	Stuffed fresh pasta (beef)	E. coli O103 Ad3318	+	-	+	Batavia	Seeding 48h 3±2°C	1-2-3-0-2	1,6	+	+	+	+	4	a
2023	157	Tortellini frais au chèvre épinards	Stuffed fresh pasta (goat cheese and spinach)	E. coli O157 Ad3383	-	+	+	Flour	Seeding 48h 3±2°C	1-3-2-0-2	1,6	+	+	+	+	4	a
2023	158	Tortellini frais au chèvre épinards	Stuffed fresh pasta (goat cheese and spinach)	E. coli O26 Ad3385	-	+	+	Flour	Seeding 48h 3±2°C	3-4-6-1-2	3,2	+	+	+	+	4	a



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					stx1	stx2	eae			Enumeration	Mean	w/o FDRS	with FDRS	w/o FDRS	w/o FDRS		
2023	159	Tortellini frais pesto, basilic et pignons	Stuffed fresh pasta (pesto, basil, pine nuts)	<i>E. coli</i> O157 Ad3383	-	+	+	Flour	Seeding 48h 3±2°C	1-3-2-0-2	1,6	+	+	+	+	4	a
2023	160	Tortellini frais pesto, basilic et pignons	Stuffed fresh pasta (pesto, basil, pine nuts)	<i>E. coli</i> O26 Ad3385	-	+	+	Flour	Seeding 48h 3±2°C	3-4-6-1-2	3,2	+	+	+	+	4	a
2023	162	Pizza aux 3 fromages	RTRH (pizza with cheese)	<i>E. coli</i> O26 Ad3254	+	-	+	Onion burger	Seeding 48h 3±2°C	2-0-3-4-1	2,0	+	+	+	+	4	b
2023	163	Tarte aux fromages	RTRH (cheese pie)	<i>E. coli</i> O26 Ad3254	+	-	+	Onion burger	Seeding 48h 3±2°C	2-0-3-4-1	2,0	+	+	+	+	4	b
2023	164	Tarte aux fromages	RTRH (cheese pie)	<i>E. coli</i> O103 Ad3255	+	-	+	Onion burger	Seeding 48h 3±2°C	2-4-5-3-1	3,0	+	+	+	+	4	b
2023	165	Tielles sétoises (poisson tomate)	RTRH (pie with fish and tomatoes)	<i>E. coli</i> O103 Ad3255	+	-	+	Onion burger	Seeding 48h 3±2°C	2-4-5-3-1	3,0	+	+	+	+	4	b
2023	166	Pizza calzone (jambon fromage)	RTRH (pizza with ham and cheese)	<i>E. coli</i> O103 Ad3318	+	-	+	Batavia	Seeding 48h 3±2°C	1-2-3-0-2	1,6	+	+	+	+	4	b
2023	167	Pizza calzone (jambon fromage)	RTRH (pizza with ham and cheese)	<i>E. coli</i> O157 Ad3383	-	+	+	Flour	Seeding 48h 3±2°C	1-3-2-0-2	1,6	+	+	+	+	4	b
2023	168	Quiche Lorraine	RTRH (Quiche Lorraine)	<i>E. coli</i> O103 Ad3318	+	-	+	Batavia	Seeding 48h 3±2°C	1-2-3-0-2	1,6	+	+	+	+	4	b
2023	169	Tarte aux poireaux et emmenthal fondant	RTRH (pie with leeks and cheese)	<i>E. coli</i> O157 Ad3383	-	+	+	Flour	Seeding 48h 3±2°C	1-3-2-0-2	1,6	+	+	+	+	4	b
2023	170	Tarte aux poireaux et emmenthal fondant	RTRH (pie with leeks and cheese)	<i>E. coli</i> O26 Ad3385	-	+	+	Flour	Seeding 48h 3±2°C	3-4-6-1-2	3,2	+	+	+	+	4	b
2023	370	Pizza surgelée (végétarienne)	RTRH frozen pizza (vegetables)	<i>E. coli</i> O157:H7 Ad3396	-	+	+	Environment	Seeding 2 weeks at -20°C	4-4-4-2-6	4,0	+	+	+	+	4	b
2023	371	Quiche Lorraine surgelée	RTRH frozen Quiche Lorraine	<i>E. coli</i> O157:H7 Ad572	-	+	+	Clinic	Seeding 2 weeks at -20°C	1-3-4-2-9	3,8	+	+	+	+	4	b
2023	372	Tarte surgelée poireaux emmenthal	RTRH frozen pie (leeks and cheese)	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 2 weeks at -20°C	3-8-0-1-5	3,4	+	+	+	+	4	b
2023	505	Bouillon de légumes déshydraté	Dehydrated vegetables broth	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	6,6	+	+	+	+	4	c
2023	507	Minestrone déshydraté	Dehydrated minestrone	<i>E. coli</i> O157:H7 Ad574	+	+	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	1	+	+	+	+	4	c
2023	508	Soupe chinois déshydratée	Dehydrated Chinese soup	<i>E. coli</i> O157:H7 Ad574	+	+	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	1	+	+	+	+	4	c
2023	509	Soupe poule au pot déshydratée	Dehydrated chicken soup	<i>E. coli</i> O111 Ad3037	+	-	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	2,5	-	-	-	-	4	c
2023	510	Nouilles instantanée seafood ramyun	Dehydrated pasta (seafood, ramyun)	<i>E. coli</i> O157:H7 Ad574	+	+	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	1	-	-	-	-	4	c
2023	511	Nouilles instantanées poulet	Dehydrated pasta (chicken)	<i>E. coli</i> O111 Ad3037	+	-	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	2,5	-	-	-	-	4	c
2023	512	Nouilles de blé instantanées sauce Teriyaki	Dehydrated wheat pasta (teriyaki sauce)	<i>E. coli</i> O111 Ad3037	+	-	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	2,5	-	-	-	-	4	c
2023	514	Nouilles instantanées pad thai crevette	Dehydrated pasta (pad Thai shrimp)	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding lyophilized 2 weeks at ambient temperature	/	6,6	-	-	-	-	4	c
2023	1105	Soupe déshydratée tomates vermicelles	Dehydrated soup (tomato and vermicelli)	<i>E. coli</i> O111 Ad3021	+	+	+	Unknown	Seeding lyophilized 2 weeks at ambient temperature	/	0,75	+	+	+	+	4	c
2023	1106	Nouilles déshydratées à poêler bœuf teriyaki	Dehydrated noodles (beef teriyaki)	<i>E. coli</i> O111 Ad3021	+	+	+	Unknown	Seeding lyophilized 2 weeks at ambient temperature	/	0,75	-	-	-	-	4	c



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					stx1	stx2	eae			Enumeration	Mean	w/o FDRS	with FDRS	w/o FDRS	w/o FDRS		
2023	1458	Burger cheese prêt à réchauffer	RTRH cheese burger	<i>E. coli</i> O26 Ad3203	+	-	+	Beef	Seeding 48h 3±2°C	1-1-1-1-2	1,2	-	-	-	-	4	b
2023	6105	Nouilles japonaises saveur légumes et sauce soja	Japanese noodles with vegetable flavor and soy sauce	<i>E. coli</i> O26 Ad3385	-	+	+	Buckwheat flour	Seeding lyophilized strain 2 weeks at room temperature	/	1,4	+	+	+	+	4	c
2023	6106	Nouilles japonaises saveur bœuf teppanyaki	Shrimp-flavoured instant noodles	<i>E. coli</i> O145 Ad3175	+	-	+	Dairy product	Seeding lyophilized strain 2 weeks at room temperature	/	1	+	+	+	+	4	c
2023	6107	Nouilles instantanées saveur crevettes	Instant noodles	<i>E. coli</i> 157:H7 Ad975	-	+	+	Beef meat	Seeding lyophilized strain 2 weeks at room temperature	/	0,5	+	+	+	+	4	c
2023	6108	Nouilles instantanées saveur poulet curry	Instant noodles	<i>E. coli</i> 157:H7 Ad975	-	+	+	Beef meat	Seeding lyophilized strain 2 weeks at room temperature	/	0,5	+	+	+	+	4	c
2023	6109	Potage déshydraté aux vermicelles saveur bœuf	Dehydrated soup	<i>E. coli</i> 157:H7 Ad975	-	+	+	Beef meat	Seeding lyophilized strain 2 weeks at room temperature	/	0,5	+	+	+	+	4	c
2023	6110	Potage déshydraté à la chinoise nouilles, champignon noir et épices	Dehydrated soup	<i>E. coli</i> O145 Ad3175	+	-	+	Dairy product	Seeding lyophilized strain 2 weeks at room temperature	/	1	+	+	+	+	4	c
2023	6111	Soupe déshydratée aux vermicelles, aux légumes et à la poule au pot	Dehydrated noodle, vegetable and chicken soup	<i>E. coli</i> O26 Ad3430	+	-	+	Dehydrated tomato and vermicelli soup	Seeding lyophilized strain 2 weeks at room temperature	/	12	-	-	-	-	4	c
2023	306	Chou-fleur coupés frais	Fresh cut cauliflower	<i>E. coli</i> O157:H7 Ad3118	+	+	+	Sprouted seeds leeks	Seeding 48h 3±2°C	4-2-5-2-3	3,2	+	+	+	+	5	b
2023	307	Baby carottes et radis frais	Fresh baby carrots and radishes	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	2-2-1-2-6	2,6	-	-	-	-	5	b
2023	308	Mangue coupée	Cut mango	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	2-2-1-2-6	2,6	+	+	+	+	5	c
2023	309	Ananas coupé	Cut pineapple	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 48h 3±2°C	4-3-1-6-3	3,4	+	+	+	+	5	c
2023	311	Graines germées de radis rose bio	Sprouted seeds (radishes)	<i>E. coli</i> O157:H7 Ad3118	+	+	+	Sprouted seeds leeks	Seeding 48h 3±2°C	4-2-5-2-3	3,2	+	+	+	+	5	a
2023	312	Alfalfa poireaux	Sprouted seeds (alfalfa leeks)	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	2-2-1-2-6	2,6	-	-	-	-	5	a
2023	313	Alfalfa bio	Sprouted seeds (alfalfa)	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 48h 3±2°C	4-3-1-6-3	3,4	+	+	+	+	5	a
2023	315	Laitue iceberg	Iceberg lettuce	<i>E. coli</i> O157:H7 Ad3118	+	+	+	Sprouted seeds leeks	Seeding 48h 3±2°C	4-2-5-2-3	3,2	+	+	+	+	5	a
2023	316	Laitue	Lettuce	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	2-2-1-2-6	2,6	+	+	+	+	5	a
2023	317	Endive	Endive	<i>E. coli</i> O26 Ad1777 + <i>E. coli</i> O157:H7 Ad3118	-/+	+/+	+/+	Clinic/Sprouted seeds leeks	Seeding 48h 3±2°C	4-3-1-6-3 +4-2-5-2-3	3,4+3,2	+	+	+	+	5	a
2023	318	Chou vert	Green cabbage	<i>E. coli</i> O26 Ad1777 + <i>E. coli</i> O157:H7 Ad3118	-/+	+/+	+/+	Clinic/Sprouted seeds leeks	Seeding 48h 3±2°C	4-3-1-6-3 +4-2-5-2-3	3,4+3,2	+	+	+	+	5	a
2023	376	Ananas surgelé en morceaux	Frozen cut pineapple	<i>E. coli</i> O157:H7 Ad572	-	+	+	Clinic	Seeding 2 weeks at -20°C	1-3-4-2-9	3,8	+	+	+	+	5	c
2023	377	Fruits rouges surgelés (framboise, groseille, myrtille, mures, cassis)	Frozen berries	<i>E. coli</i> O157:H7 Ad3396	-	+	+	Environment	Seeding 2 weeks at -20°C	4-4-4-2-6	4,0	-	-	-	-	5	c
2023	946	Spaguettis de courgettes frais	Fresh cut zucchini	<i>E. coli</i> O103 Ad3255	+	-	+	Burger onion	Seeding 48h 3±2°C	2-2-3-3-2	2,4	+	+	+	+	5	b
2023	947	Spaguettis de courgettes frais	Fresh cut zucchini	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 48h 3±2°C	0-0-3-0-4	1,4	+	+	+	+	5	b
2023	949	Salade de mangue, myrtille, framboise	Fresh fruits salad (mango, blueberry, raspberry)	<i>E. coli</i> O157:H7 Ad571	+	-	+	Clinic	Seeding 48h 3±2°C	2-1-0-1-2	1,2	+	+	+	+	5	c
2023	950	Mélange ananas, fraise, myrtille	Fresh fruit salad (pineapple, strawberry, blueberry)	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 48h 3±2°C	2-2-2-2-1	1,8	+	+	+	+	5	c



Date	Sample N°	Product (french name)	Product	Artificial contaminations								Global result				Category	Type
												CFX96		CFX OPUS			
				Strain	Virulence genes			Origin	Injury protocol	Inoculation level/sample		w/o FDRS	with FDRS	w/o FDRS	w/o FDRS		
					stx1	stx2	eae			Enumeration	Mean	stx/eae	stx/eae	stx/eae	stx/eae		
2023	1086	Haricots verts surgelés	Frozen green beans	<i>E. coli</i> O26:H11 Ad1507	+	-	+	Unknown	Seeding 2 weeks at -20°C	0-3-1-3-3	2,0	+	+	+	+	5	b
2023	1087	Petits pois surgelés	Frozen peas	<i>E. coli</i> O103 Ad2309	+	-	+	Unknown	Seeding 2 weeks at -20°C	3-1-0-2-3	1,8	-	-	-	-	5	b
2023	1088	Courgettes en rondelles surgelées	Frozen zucchini	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 2 weeks at -20°C	1-0-1-0-0	0,4	+	+	+	+	5	b
2023	1089	Epinards en branches surgelés	Frozen spinach	<i>E. coli</i> O111:H8 CDC 2010C-314	+	+	+	Unknown	Seeding 2 weeks at -20°C	0-0-0-1-1	0,4	+	+	+	+	5	a
2023	1090	Fraises entières surgelées	Frozen strawberries	<i>E. coli</i> O26:H11 Ad1507	+	-	+	Unknown	Seeding 2 weeks at -20°C	0-3-1-3-3	2,0	+	+	+	+	5	c
2023	1091	Fruits rouges surgelés (framboise, groseille, myrtille, mures, cassis)	Frozen berries	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 2 weeks at -20°C	1-0-1-0-0	0,4	-	-	-	-	5	c
2023	5916	Laitue	Lettuce	<i>E. coli</i> O26 Ad3254	+	-	+	French onion burger	Seeding 48h 3±2°C	0-1-2-1-1	1	-	-	-	-	5	a
2023	5917	Graines germées alfalfa-poireaux-lentilles	Sprouts	<i>E. coli</i> O26 Ad3430	+	-	+	Dehydrated tomato and vermicelli soup	Seeding 48h 3±2°C	0-1-1-1-1	0,8	+	+	+	+	5	a
2023	5921	Salade de fruits ananas-myrtilles-framboises	Fresh fruit salad	<i>E. coli</i> O26 Ad3254	+	-	+	French onion burger	Seeding 48h 3±2°C	0-1-2-1-1	1	+	+	+	+	5	c
2023	5922	Ananas découpé	Pineapple	<i>E. coli</i> O26 Ad3254	+	-	+	French onion burger	Seeding 48h 3±2°C	0-1-2-1-1	1	+	+	+	+	5	c
2023	5923	Ananas découpé	Pineapple	<i>E. coli</i> O26 Ad3430	+	-	+	Dehydrated tomato and vermicelli soup	Seeding 48h 3±2°C	0-1-1-1-1	0,8	+	+	+	+	5	c
2023	5950	Chou-fleur coupés frais	Cauliflower	<i>E. coli</i> O145 Ad3168	-	+	+	Dairy product	Seeding 48h 3±2°C	1-0-0-4-1	1,2	+	+	+	+	5	b
2023	5951	Mélange crudités frais (mais, carottes, salade, radis et chou rouge)	Vegetables mix	<i>E. coli</i> O157:H7 Ad557	-	+	+	Environment	Seeding 48h 3±2°C	2-1-2-1-2	1,6	+	+	+	+	5	b
2023	5952	Carottes râpées fraîches natures	Grated carrots	<i>E. coli</i> O157:H7 Ad557	-	+	+	Environment	Seeding 48h 3±2°C	2-1-2-1-2	1,6	+	+	+	+	5	b
2023	6099	Epinards surgelés	Frozen spinach	<i>E. coli</i> O157:H7 Ad558	-	+	+	Environment	Seeding 2 weeks at -20°C	2-1-2-2-1	1,6	-	-	-	-	5	b
2023	6100	Haricots beurre surgelés	Frozen beans	<i>E. coli</i> O26 Ad3109	+	-	+	Veal meat	Seeding 2 weeks at -20°C	1-1-0-1-0	0,6	+	+	+	+	5	b
2023	6101	Petits pois surgelés	Frozen peas	<i>E. coli</i> O26 Ad3109	+	-	+	Veal meat	Seeding 2 weeks at -20°C	1-1-0-1-0	0,6	+	+	+	+	5	b
2024	225	Salade verte	Salad	<i>E. coli</i> O26 Ad3430	+	-	+	Dehydrated tomato and vermicelli soup	Seeding 48h 3±2°C	/	2,0	+	+	+	+	5	a
2024	226	Graines germées alfalfa-radis-fenouil	Sprouts	<i>E. coli</i> O26 Ad3254	+	-	+	French onion burger	Seeding 48h 3±2°C	/	0,6	+	+	+	+	5	a
2024	227	Graines germées de poireaux	Sprouts (leeks)	<i>E. coli</i> O145 Ad3054	-	+	+		Seeding 48h 3±2°C	/	1,2	+	+	+	+	5	a
2024	228	Percil frais	Fresh parsley	<i>E. coli</i> O26 Ad3430	+	-	+	Dehydrated tomato and vermicelli soup	Seeding 48h 3±2°C	/	2,0	+	+	+	+	5	a
2024	229	Salade de fruits frais	Fresh fruit salad	<i>E. coli</i> O145 Ad3054	-	+	+		Seeding 48h 3±2°C	/	1,2	+	+	+	+	5	c
2024	230	Ananas découpé	Cut pineapple	<i>E. coli</i> O157:H7 Ad3398	-	+	+	Raw milk cheese	Seeding 48h 3±2°C	/	1	+	+	+	+	5	c

Appendix 4 - Sensitivity study: raw data

See attached for more detailed results

RAW DAIRY PRODUCTS																											
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																			Category	Type	
						+ 225ml BPW + STEC Selective Supp, 16 h at 41.5 ± 1°C (1/10)																		ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement										
													CFX96		CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
													without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS				Without FDRS
				Final result - PCR	ISO/TS 13136		stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	Result				
	Final result	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae					
2021	7463	Lait cru de brebis	Raw ewe milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7464	Tank lait cru de brebis	Raw ewe milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7465	Lait cru de brebis	Raw ewe milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7467	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-	-	-	- (PCR ISO stx+/eae-/ Top 5-)	-	-	-	-	NA	NA	NA	NA		1	a			
2021	7468	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7469	Lait cru de chèvre	Raw goat milk	stx	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7470	Lait cru de vache	Raw cow milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7471	Lait cru de vache	Raw cow milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7472	Lait cru de vache	Raw cow milk	O103/O145	-	/	+/+/+	+/+/+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	-	1	a			
2021	7641	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7642	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	1	a			
2021	7643	Lait cru de vache	Raw cow milk	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	a			
2021	7644	Lait cru de vache	Raw cow milk	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD		1	a			
2021	7645	Lait cru de vache	Raw cow milk	O145	+	O145	+/+/+	+/+/+	+	+	-	-	+IMS (O145)	+	+	+	+	PA	PA	PA	PA	-	1	a			
2021	7646	Lait cru de vache	Raw cow milk	O145/O103	+	O145	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	a			
2021	7647	Lait cru de brebis	Raw ewe milk	O103	-	O103	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA		1	a			
2021	7648	Lait cru de brebis	Raw ewe milk	O145	+	O145	-	-	-	-			-(18h)	-	-	-	-	ND	ND	ND	ND	-	1	a			

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

RAW DAIRY PRODUCTS																												
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*			Alternative method: iQ-Check STEC VirX																				Category	Type
							+ 225ml BPW + STEC Selective Supp, 16 h at 41.5 ± 1°C (1/10)																ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)					
							Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement										
				Final result - PCR	ISO/TS 13136		CFX96		CFX Opus					CFX96		CFX Opus		CFX96		CFX Opus								
							without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS							
				Final result	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	Result				
2021	7659	Lait cru de vache	Raw cow milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a				
2021	7660	Lait cru de vache	Raw cow milk	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	a				
2021	7822	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA		1	a				
2021	7823	Lait cru de chèvre	Raw goat milk	O145	+	O145	+	+	+	+	-	-	+(ISO, BPW 18 h)	+	+	+	+	PA	PA	PA	PA	+	1	a				
2021	7824	Lait cru de chèvre	Raw goat milk	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD		1	a				
2021	7825	Lait cru de brebis	Raw ewe milk	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	a				
2021	7826	Lait cru de brebis	Raw ewe milk	O111	+	O111	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	a				
2021	7827	Lait cru de brebis	Raw ewe milk	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	a				
2021	7473	Fromage au lait cru de vache (Saint Maure de Touraine)	Raw cow milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	b				
2021	7474	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	-	-	/	+	+	+	+	-	+	+(PCR ISO stx+/eae+/O26+)	+	+	+	+	PD	PD	PD	PD		1	b				
2021	7649	Fromage au lait cru de vache (Saint Nectaire)	Raw cow milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	b				
2021	7650	Fromage au lait cru de vache (Saint Nectaire)	Raw cow milk cheese	-	-	/	+/+/+	+/+/+	+	+	-	-	-IMS (O26)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	-	1	b				
2021	7651	Fromage au lait cru de vache (Tomme des bauges)	Raw cow milk cheese	-	-	/	+/+/+	+/+/+	+	+	-	-	-IMS (O145)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	-	1	b				
2021	7652	Fromage au lait cru de vache (Provolone piquant)	Raw cow milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	b				

RAW DAIRY PRODUCTS																										
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																			Category	Type
						+ 225ml BPW + STEC Selective Supp, 16 h at 41.5 ± 1°C (1/10)																		ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)		
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement									
				Final result - PCR	ISO/TS 13136		CFX96		CFX Opus				CFX96		CFX Opus		CFX96		CFX Opus							
							without FDRS	with FDRS	without FDRS	with FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS								
					Final result	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2021	7653	Fromage au lait cru de vache (Provolone piquant)	Raw cow milk cheese	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA		1	b			
2021	7654	Fromage au lait cru de vache (Saint Mont des Alpes)	Raw cow milk cheese	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA		1	b			
2021	7655	Fromage de lait cru de vache (Parmiggiano)	Raw cow milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA		1	b			
2021	7828	Fromage au lait cru de vache (Pont l'évêque)	Raw cow milk cheese	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		1	b			
2021	7829	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	O111	+	O111	+/+/+	+/+/+	+	+	-	-	+IMS (O111)	+	+	+	+	PA	PA	PA	PA	-	1	b		
2021	7830	Fromage au lait cru de vache (Salers)	Raw cow milk cheese	O157	+	O157	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	-	1	b			
2021	7831	Fromage au lait cru de vache (Emmenthal)	Raw cow milk cheese	O145	+	O145	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	-	1	b			
2021	7839	Fromage au lait cru de vache (Pont l'évêque)	Raw cow milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	1	b			
2021	7840	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	1	b			
2021	7841	Fromage au lait cru de vache (Salers)	Raw cow milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	1	b			
2021	7842	Fromage au lait cru de vache (Emmenthal)	Raw cow milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	1	b			

RAW DAIRY PRODUCTS																										
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																			Category	Type
						+ 225ml BPW + STEC Selective Supp, 16 h at 41.5 ± 1°C (1/10)																		ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)		
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement									
				Final result - PCR	ISO/TS 13136		CFX96		CFX Opus		CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	CFX96		CFX Opus		CFX96		CFX Opus						
							without FDRS	with FDRS	without FDRS	with FDRS				Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS					
					Final result	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2022	124	Fromage au lait cru de vache (camembert)	Raw cow milk cheese	-	-	/	+ / + / -	-	-	-	-	-	- IMS (O103)	-	-	-	-	PPNA	NA	NA	NA		1	b		
2022	125	Fromage au lait cru de vache (Neufchatel)	Raw cow milk cheese	-	-	/	+ / + / +	+ / + / +	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA		1	b		
2022	126	Fromage au lait cru de vache à l'ail des ours	Raw cow milk cheese	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	1	b		
2023	5909	Fromage au lait cru de vache (Brie de Melun)	Raw cow milk cheese	-	-	/	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA		1	b		
2023	5910	Fromage au lait cru de vache (Munster)	Raw cow milk cheese	-	-	/	-	-	-	-		-	-	-	-	-	-	NA	NA	NA	NA		1	b		
2024	219	Fromage au lait cru de vache (St Nectaire)	Raw cow milk cheese	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD		1	b		
2024	220	Fromage au lait cru de vache (Abondance)	Raw cow milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	b		
2021	7475	Fromage au lait cru de vache (Saint Maure de Touraine)	Raw cow milk cheese	-	-	/	+ / - / -	-	+	-	-	-	-	-	-	-	-	PPNA	NA	PPNA	NA	-	1	c		
2021	7476	Fromage au lait cru de vache (Saint Maure de Touraine)	Raw cow milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	c		
2021	7477	Fromage au lait cru de chèvre (Couronne)	Raw goat milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	c		
2021	7478	Fromage au lait cru de chèvre (Bûche)	Raw goat milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	c		

RAW DAIRY PRODUCTS																										
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																			Category	Type
						+ 225ml BPW + STEC Selective Supp, 16 h at 41.5 ± 1°C (1/10)																		ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)		
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement									
				Final result - PCR	ISO/TS 13136		CFX96		CFX Opus		CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	CFX96		CFX Opus		CFX96		CFX Opus		Result				
							without FDRS	with FDRS	without FDRS	with FDRS				Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS					
					Final result	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2021	7479	Fromage au lait cru de chèvre (Valencay)	Raw goat milk cheese	-	-	/	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	1	c			
2021	7480	Fromage au lait cru de chèvre (Valencay)	Raw goat milk cheese	O26	-	/	+/-/-	-	-	-	-	-	-	-	-	-	PPNA	NA	NA	NA	-	1	c			
2021	7481	Fromage au lait cru de chèvre (Valencay)	Raw goat milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	c		
2021	7638	Fromage au lait cru de brebis	Raw ewe milk cheese	-	-	/	-/-/-	+ /+ /+	-	+	-	-	-	-	-	-	-	NA	PPNA	NA	PPNA	-	1	c		
2021	7639	Fromage au lait cru de brebis	Raw ewe milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	c		
2021	7640	Fromage au lait cru de chèvre	Raw goat milk cheese	-	-	/	-	-	-	-			-(18h)	-	-	-	-	NA	NA	NA	NA	-	1	c		
2021	7656	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	stx	-	stx	-	+	-	+	+		+	-	+	-	+	NA	PD	NA	PD		1	c		
2021	7657	Fromage au lait cru de brebis (Lo Feda)	Raw ewe milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	c		
2021	7658	Fromage au lait cru de brebis (Lo Feda)	Raw ewe milk cheese	stx(O103)	-	stx(O103)	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA		1	c		
2021	7832	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		1	c		
2021	7833	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	O111	+	O111	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	-	1	c		
2021	7834	Fromage au lait cru de chèvre (Rigotte)	Raw goat milk cheese	stx/eae	-	stx	+	+	+	+	-		+(72h)	+	+	+	+	PD	PD	PD	PD		1	c		
2021	7835	Fromage au lait cru de chèvre (Le Chevrot)	Raw goat milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	-	1	c		

RAW DAIRY PRODUCTS																										
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																			Category	Type
						+ 225ml BPW + STEC Selective Supp, 16 h at 41.5 ± 1°C (1/10)																		ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)		
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement				Result					
				CFX96									CFX Opus		CFX96		CFX Opus		CFX96			CFX Opus				
				Final result - PCR	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS		With FDRS	Without FDRS	With FDRS		
Final result	Serogroup	stx/eae	stx/eae	stx/eae			stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae						
2021	7836	Fromage au lait cru de chèvre (Picodon)	Raw goat milk cheese	-	-	/	-	-	-	-	-	-	+(72h)	-	-	-	-	NA	NA	NA	NA	-	1	c		
2021	7837	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		1	c			
2021	7838	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA		1	c			
2021	7843	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	1	c			
2021	7844	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	1	c			
2023	5911	Fromage au lait cru de brebis (Pérail)	Raw ewe milk cheese	-	-	/	-	-	-	-			-	-	-	-	NA	NA	NA	NA		1	c			
2023	5912	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	-	-	/	-	-	-	-			-	-	-	-	NA	NA	NA	NA		1	c			
2023	5913	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA		1	c			
2023	5914	Fromage au lait cru de chèvre (Valençay)	Raw ewe milk cheese	-	-	/	-	-	-	-			-	-	-	-	NA	NA	NA	NA		1	c			
2023	5915	Fromage au lait cru de chèvre (Grand Caprin)	Raw goat milk cheese	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		1	c			
2024	221	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA		1	c			
2024	222	Fromage au lait cru de brebis (Brebis fermier)	Raw ewe milk cheese	O103	+	O103	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND		1	c			



RAW DAIRY PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																		Category	Type
						+ 225ml BPW + STEC Selective Supp, 16 h at 41.5 ± 1°C (1/10)																ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				Final result - PCR	ISO/TS 13136		CFX96		CFX Opus				CFX96		CFX Opus		CFX96		CFX Opus						
							without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS				
					Final result	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2024	223	Fromage au lait cru de chèvre (Crottins de Chavignol)	Raw goat milk cheese	O145	+	O145	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		1	c	
2024	224	Fromage au lait cru de chèvre (Rocamadour)	Raw goat milk cheese	O157	+	O157	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND		1	c	

RAW DAIRY PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		iQ-Check STEC VirX																		Category	Type
						After storage BPW + STEC Selective Supp 72h at 5±3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				CFX96		CFX Opus		CFX96					CFX Opus		CFX96		CFX Opus								
										without FDRS	with FDRS	without FDRS							with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS		
Final result PCR	ISO/TS 13136		stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae				
2021	7467	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	a		
2021	7469	Lait cru de chèvre	Raw goat milk	stx	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	a		
2021	7472	Lait cru de vache	Raw cow milk	O103/O145	-	/	+/+	+/+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	1	a		
2021	7642	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	a		
2021	7643	Lait cru de vache	Raw cow milk	O26	+	O26	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	a		
2021	7644	Lait cru de vache	Raw cow milk	-	-	/	+	+	+	+	+	+	+	+	+	+	+	PD	PD	PD	PD	1	a		
2021	7645	Lait cru de vache	Raw cow milk	O145	+	O145	+/+	+/+	+	+	-	-	+IMS (O145)	+	+	+	+	PA	PA	PA	PA	1	a		
2021	7646	Lait cru de vache	Raw cow milk	O145/O103	+	O145	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	a		
2021	7647	Lait cru de brebis	Raw ewe milk	O103	-	O103	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	a		
2021	7648	Lait cru de brebis	Raw ewe milk	O145	+	O145	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	1	a		
2021	7822	Lait cru de chèvre	Raw goat milk	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	a		
2021	7823	Lait cru de chèvre	Raw goat milk	O145	+	O145	+	+	+	+	-	-	-	-	-	-	-	PPND	PPND	PPND	PPND	1	a		
2021	7824	Lait cru de chèvre	Raw goat milk	-	-	/	+	+	+	+	+	+	+	+	+	+	+	PD	PD	PD	PD	1	a		
2021	7825	Lait cru de brebis	Raw ewe milk	O26	+	O26	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	a		
2021	7826	Lait cru de brebis	Raw ewe milk	O111	+	O111	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	a		
2021	7827	Lait cru de brebis	Raw ewe milk	O157	+	O157	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	a		
2021	7474	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	-	-	/	+	+	+	+	-	+	+	+	+	+	+	PD	PD	PD	PD	1	b		
2021	7650	Fromage au lait cru de vache (Saint Nectaire)	Raw cow milk cheese	-	-	/	+/+	+/+	+	+	-	-	-IMS (O26)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b		
2021	7651	Fromage au lait cru de vache (Tomme des bauges)	Raw cow milk cheese	-	-	/	+/+	+/+	+	+	-	-	-IMS (O145)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b		
2021	7652	Fromage au lait cru de vache (Provolone piquant)	Raw cow milk cheese	O145	+	O145	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	b		
2021	7653	Fromage au lait cru de vache (Provolone piquant)	Raw cow milk cheese	O26	+	O26	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	b		
2021	7654	Fromage au lait cru de vache (Saint Mont des Alpes)	Raw cow milk cheese	O26	+	O26	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA	1	b		

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

RAW DAIRY PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		iQ-Check STEC VirX																		Category	Type
						After storage BPW + STEC Selective Supp 72h at 5±3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result	Serogroup	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae	stx/ eae				
2021	7655	Fromage de lait cru de vache (Parmiggiano)	Raw cow milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	1	b			
2021	7828	Fromage au lait cru de vache (Pont l'évêque)	Raw cow milk cheese	-	-	/	+	+	+	+	-	+	+	+	+	+	PD	PD	PD	PD	1	b			
2021	7829	Fromage au lait cru de vache (Morbier)	Raw cow milk cheese	O111	+	O111	+ / + / +	+ / + / +	+	+	-	-	+IMS (O111)	+	+	+	+	PA	PA	PA	PA	1	b		
2021	7830	Fromage au lait cru de vache (Salers)	Raw cow milk cheese	O157	+	O157	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	1	b			
2021	7831	Fromage au lait cru de vache (Emmenthal)	Raw cow milk cheese	O145	+	O145	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	1	b			
2022	124	Fromage au lait cru de vache (camembert)	Raw cow milk cheese	-	-	/	+ / + / +	+ / + / +	+	+	-	-	- IMS (O103)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b		
2022	125	Fromage au lait cru de vache (Neufchatel)	Raw cow milk cheese	-	-	/	+ / + / +	+ / + / +	+	+	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b			
2023	5909	Fromage au lait cru de vache (Brie de Melun)	Raw cow milk cheese	-	-	/	+	+	+	+	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	1	b			
2024	219	Fromage au lait cru de vache (St Nectaire)	Raw cow milk cheese	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	1	b			
2024	220	Fromage au lait cru de vache (Abondance)	Raw cow milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	1	b			
2021	7475	Fromage au lait cru de vache (Saint Maure de Touraine)	Raw cow milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	1	c			
2021	7479	Fromage au lait cru de chèvre (Valencay)	Raw goat milk cheese	-	-	/	-	- / - / -	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	c			
2021	7480	Fromage au lait cru de chèvre (Valencay)	Raw goat milk cheese	O26	-	/	-	- / - / -	-	-	-	-	-	-	-	-	NA	NA	NA	NA	1	c			
2021	7638	Fromage au lait cru de brebis	Raw ewe milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	1	c			
2021	7656	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	stx	-	stx	-	+	-	-	+		+	+	-	-	NA	PD	NA	NA	1	c			
2021	7657	Fromage au lait cru de brebis (Lo Feda)	Raw ewe milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	1	c			
2021	7658	Fromage au lait cru de brebis (Lo Feda)	Raw ewe milk cheese	stx(O103)	-	stx(O103)	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	1	c			

RAW DAIRY PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		iQ-Check STEC VirX																		Category	Type
						After storage BPW + STEC Selective Supp 72h at 5±3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
Final result	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2021	7832	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	1	c		
2021	7833	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	O111	+	O111	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	1	c		
2021	7834	Fromage au lait cru de chèvre (Rigotte)	Raw goat milk cheese	stx/eae	-	stx	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	1	c		
2021	7836	Fromage au lait cru de chèvre (Picodon)	Raw goat milk cheese	-	-	/	-	-	-	-	+		+	-	-	-	-	NA	NA	NA	NA	1	c		
2021	7837	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	1	c		
2021	7838	Fromage au lait cru de chèvre (Le menez-hom)	Raw goat milk cheese	O145	+	O145	+	+	+	+	-	+	+	+	+	+	+	PA	PA	PA	PA	1	c		
2023	5913	Fromage au lait cru de brebis (Roquefort)	Raw ewe milk cheese	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	1	c		
2023	5914	Fromage au lait cru de chèvre (Valençay)	Raw goat milk cheese	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	1	c		
2023	5915	Fromage au lait cru de chèvre (Grand Caprin)	Raw goat milk cheese	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	1	c		
2024	221	Fromage au lait cru de brebis (Ossau Iraty)	Raw ewe milk cheese	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	1	c		
2024	222	Fromage au lait cru de brebis (Brebis fermier)	Raw ewe milk cheese	O103	+	O103	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	1	c		
2024	223	Fromage au lait cru de chèvre (Crottins de Chavignol)	Raw goat milk cheese	O145	+	O145	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	1	c		
2024	224	Fromage au lait cru de chèvre (Rocamadour)	Raw goat milk cheese	O157	+	O157	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	1	c		

RAW MEAT PRODUCTS																										
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																			Category	Type
						+1125ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																				
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement				Result					
				CFX96									CFX Opus		CFX96		CFX Opus		CFX96			CFX Opus				
				Final result PCR	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS		With FDRS	Without FDRS	With FDRS		
							stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		stx/eae	stx/eae	stx/eae	stx/eae	
2021	7722	Steak de bœuf	Fresh beef meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA		2	a			
2021	7723	Pièce de fondue de bœuf	Fresh beef meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	2	a			
2021	7724	Faux filet de bœuf	Fresh beef meat	-	-	/	+	+	-	+	-	+	+	+	+	-	PD	PD	NA	PD		2	a			
2021	7725	Côte de veau	Fresh veal meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	2	a			
2021	7726	Escalope de veau	Fresh veal meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		2	a			
2021	7727	Jarret de veau en tranche façon Osso bucco	Fresh veal meat	-	-	/	+	+	+	+	-		+(72h)	+	+	+	+	PD	PD	PD	PD		2	a		
2021	7893	Viande porc (jambon avec os)	Fresh pork meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		2	a			
2021	7894	Filet de porc à rôtir	Fresh pork meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		2	a			
2021	7895	Sauté de porc surgelé	Fresh pork meat	-	-	/	+	+	+	+	-	-	+(72h)	+	+	+	+	PD	PD	PD	PD	-	2	a		
2021	7896	Côtes d'agneau	Fresh lamb meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		2	a			
2021	7897	Gigot d'agneau	Fresh lamb meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD		2	a			
2021	8097	Sauté de veau	Fresh veal meat	-	-	/	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	2	a			
2021	8098	Viande de veau à rotir	Fresh veal meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	2	a			
2021	8099	Rouelle jambon avec os	Fresh pork meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	-	2	a			
2021	8100	Filet porc sans os	Fresh pork meat	O157/ O26/ O103/ P145	-	/	-	+/-/+	-	+	-	-	-	-	-	-	NA	PPNA	NA	PPNA	-	2	a			
2021	8101	Sauté de porc	Fresh pork meat	-	-	/	+/+/+	+/+/+	+	+	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	-	2	a			
2021	8102	Viande bovine filet	Fresh beef meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA		2	a			
2021	8103	Viande bovine, pièce à brochette	Fresh beef meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA		2	a			

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

RAW MEAT PRODUCTS																										
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																		Category	Type	
						+1125ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																				ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement				Result					
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96			CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		Without FDRS	With FDRS			
stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		stx/eae	stx/eae			
2021	8104	Gigot d'agneau entier	Fresh lamb meat	stx(O157)	-	/	-	-	+	-	-	- (PCR ISO stx+/eae-/ Top 5 -)	-	-	-	-	NA	NA	PPNA	NA	-	2	a			
2021	8105	Gigot d'agneau	Fresh lamb meat	stx/eae	+	stx/eae	+	+	+	+	-	+	+	+	+	PA	PA	PA	PA		2	a				
2022	119	Steak haché pur boeuf 5% MG	Fresh ground beef (5% fat)	O26/O111	-	O111	+	+	+	+	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA		2	a			
2022	120	Steak haché	Fresh ground beef	stx(O111)	-	O111	-	+	-	+	-	-	-	-	-	-	NA	PPNA	NA	PPNA		2	a			
2022	121	Haché de veau	Fresh ground veal	stx(O26)	-	stx	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA		2	a			
2023	5943	Blanquette de veau	Veal meat	-	-	/	+	+	+	+	+	+	+	+	+	+	PD	PD	PD	PD		2	a			
2023	5944	Porc pointe sans os à mijoter	Pork meat	-	-	/	+	+	+	+	+	+	+	+	+	+	PD	PD	PD	PD		2	a			
2021	7766	Viande hachée de bœuf surgelée 15%MG	Frozen ground beef	O157	+	O157	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	-	2	b			
2021	7767	Viande à bourguignon surgelée	Frozen beef trim	O157	+	O157	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		2	b			
2021	7768	Bavette d'Aloyau surgelée	Frozen beef trim	O26	+	O26	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		2	b			
2021	7769	Escalope de veau à griller surgelée	Frozen veal meat	O26	+	O26	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		2	b			
2021	7770	Sauté de veau surgelé	Frozen veal meat	O26/O145	+	O26	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		2	b			
2021	7771	Blanquette de veau surgelée	Frozen veal meat	O157	+	O157	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		2	b			
2021	7772	Sauté de porc surgelé	Frozen pork meat	O145	+	O145	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		2	b			
2021	7773	Côte de porc surgelée	Frozen pork meat	O145	+	O145	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA		2	b			

RAW MEAT PRODUCTS																											
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																			Category	Type	
						+1125ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																					ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement				Result						
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96			CFX Opus					
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		Without FDRS	With FDRS	Without FDRS			With FDRS
stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		stx/eae	stx/eae				
2021	7774	Souris d'agneau surgelé	Frozen lamb meat	stx	-	stx	-	-	-	-	+		+	-	-	-	-	NA	NA	NA	NA		2	b			
2021	7775	Viande d'agneau à mijoter surgelée	Frozen lamb meat	O26	-	stx	+	+	+	+	-		+(72h)	+	+	+	+	PD	PD	PD	PD		2	b			
2021	7991	Tournedos de bœuf surgelé	Frozen beef trim	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	-	2	b			
2021	7992	Bavette d'Aloyau surgelée	Frozen beef trim	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	-	2	b			
2021	7993	Sauté de veau surgelé	Frozen veal meat	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	-	2	b			
2021	7994	Filet mignon de porc surgelé	Frozen pork meat	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	-	2	b			
2021	7995	Sauté d'agneau surgelé	Frozen lamb meat	stx	-	/	+	+	+	+	-	-	- (PCR ISO stx+/eae-/ Top 5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA		2	b			
2021	8091	Sauté d'agneau surgelé	Frozen lamb meat	O157	-	/	-	-	-	-	-	-	- (PCR ISO stx+/eae-/ Top 5 -)	-	-	-	-	NA	NA	NA	NA	-	2	b			
2021	8092	Sauté de veau surgelé	Frozen veal meat	-	-	/	-	-	-	-	-		- (PCR ISO stx+/eae-/ Top 5 -)	-	-	-	-	NA	NA	NA	NA		2	b			
2021	8093	Sauté de porc surgelé	Frozen pork meat	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	-	2	b			
2022	122	Viande de bœuf crue surgelée	Frozen beef meat	-	-	/	+/+/+	-/-/-	+	-	-	-	-	-	-	-	-	PPNA	NA	PPNA	NA		2	b			
2022	123	Viande de veau sauté surgelée	Frozen veal meat	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	-	2	b			
2023	6096	Sauté d'agneau surgelé	Frozen lamb meat	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD		2	b			
2023	6097	Côte de porc surgelée	Frozen pork meat	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA		2	b			

RAW MEAT PRODUCTS																												
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																				Category	Type	
						+1125ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																		ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)				
						Final PCR result				Confirmation				Final result iQ-Check STEC VirX				Agreement				Result						
				Final result PCR		ISO/TS 13136		CFX96						CFX Opus		CFX96		CFX Opus		CFX96				CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS			With FDRS	Without FDRS			With FDRS
						Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae			stx/eae	stx/eae	stx/eae	stx/eae	stx/eae
2023	6098	Souris d'agneau surgelé	Frozen lamb meat	-	-	/	+	+	+	+	+eae	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	b
2021	7712	Haché de boeuf bolognaise	Seasoned ground beef	stx	-	stx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	c
2021	7713	Pavé de bœuf mariné aux 3 poivres	Marinated beef trim	O157	+	O157	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	c
2021	7714	Steak haché de bœuf à l'oignon	Seasoned ground beef	O145	+	O145	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	c
2021	7715	Boulettes de veau assaisonnées	Seasoned ground veal	stx	-	stx	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	c
2021	7716	Veau à la provençale	Seasoned veal trim	-	-	/	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	2	c
2021	7717	Veau à l'échalotte	Seasoned veal trim	O103	+	O103	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	c
2021	7718	Lomo de porc tendre marinés au piment doux	Seasoned pork trim	O111/ O103/ O145	+	O145	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	c
2021	7719	Filet mignon marinés à l'ail et persil	Marinated pork meat	O157/ O26/ O103/ O145	+	O145	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	c
2021	7720	Agneau à la tomate	Seasoned lamb trim	-	-	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	c
2021	7721	Agneau à l'ail	Seasoned lamb trim	-	-	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	c
2021	7986	Tranche d'agneau à l'ail	Seasoned lamb trim	O157	+	O157	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	c
2021	7987	Pavé d'agneau à la tomate	Seasoned lamb trim	stx	-	/	-/+	+/-/+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	2	c
2021	7988	Pavé d'agneau à la tomate	Seasoned lamb trim	O26	+	O26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	c

RAW MEAT PRODUCTS																											
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						+1125ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																					ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10)
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement				Result						
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96			CFX Opus					
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		Without FDRS	With FDRS	Without FDRS			With FDRS
stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae					
2021	7996	Veau à l'échalotte	Seasoned veal trim	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	2	c			
2021	7997	Roti de porc Orloff	Seasoned pork trim	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	2	c			
2021	7998	Bœuf provençale	Seasoned beef trim	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	2	c			
2021	7999	Bœuf haché saveur oignon	Seasoned ground beef	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	2	c			
2021	8000	Bœuf haché oignon	Seasoned ground beef	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	2	c			
2021	8094	Pavé de veau échalotte	Seasoned veal trim	-	-	/	-	+/+/+	-	+	-	-	- (PCR ISO stx+/eae-/ Top 5 -)	-	-	-	-	NA	PPNA	NA	PPNA	-	2	c			
2021	8095	Côte de porc mexicaine	Seasoned pork trim	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	-	2	c			
2021	8096	Porc sans os à l'ail	Seasoned pork trim	stx/eae	-	stx	-	-	+	-	-	-	-	-	-	-	-	NA	NA	PPNA	NA	-	2	c			
2023	5945	Bifteck persille	Beef meat	-	-	/	+	+	+	+	+	-	+	+	+	+	+	PD	PD	PD	PD	-	2	c			
2023	5946	Pavé d'agneau à la tomate	Seasoned lamb trim	O103	+	O26	+	+	+	+	-	-	-	-	-	-	-	PPND	PPND	PPND	PPND	-	2	c			

RAW MEAT PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136♦		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + 72h at 5±3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2021	7722	Steak de bœuf	Fresh beef meat	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	2	a			
2021	7724	Faux filet de bœuf	Fresh beef meat	-	-	/	+	+	+	-	-	+	+	+	+	-	PD	PD	PD	NA	2	a			
2021	7726	Escalope de veau	Fresh veal meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	7727	Jarret de veau en tranche façon Osso bucco	Fresh veal meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	7893	Viande porc (jambon avec os)	Fresh pork meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	7894	Filet de porc à rôtir	Fresh pork meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	7895	Sauté de porc surgelé	Fresh pork meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	7896	Côtes d'agneau	Fresh lamb meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	7897	Gigot d'agneau	Fresh lamb meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	8097	Sauté de veau	Fresh veal meat	-	-	/	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	a			
2021	8100	Filet porc sans os	Fresh pork meat	O157/ O26/ O103/ P145	-	/	-	+/+	+	+	-	-	-	-	-	-	NA	PPNA	PPNA	PPNA	2	a			
2021	8101	Sauté de porc	Fresh pork meat	-	-	/	-	+	+	+	-	-	-	-	-	-	NA	PPNA	PPNA	PPNA	2	a			
2021	8104	Gigot d'agneau entier	Fresh lamb meat	stx(O157)	-	/	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	a			
2021	8105	Gigot d'agneau	Fresh lamb meat	stx/ eae	+	stx/eae	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	2	a			
2022	119	Steak haché pur boeuf 5% MG	Fresh ground beef (5% fat)	O26/ O111	-	O111	+	+	+	+	-		-	-	-	-	PPNA	PPNA	PPNA	PPNA	2	a			

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

RAW MEAT PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136♦		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + 72h at 5±3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2022	120	Steak haché	Fresh ground beef	stx(O111)	-	O111	+	+	+	+	-		-	-	-	-	PPNA	PPNA	PPNA	PPNA	2	a			
2022	121	Haché de veau	Fresh ground veal	stx(O26)	-	stx	-/-	-/-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	a			
2023	5943	Blanquette de veau	Veal meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2023	5944	Porc pointe sans os à mijoter	Pork meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	a			
2021	7766	Viande hachée de bœuf surgelée 15%MG	Frozen ground beef	O157	+	O157	-	-/-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	2	b			
2021	7767	Viande à bourguignon surgelée	Frozen beef trim	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	b			
2021	7768	Bavette d'Aloyau surgelée	Frozen beef trim	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	b			
2021	7769	Escalope de veau à griller surgelée	Frozen veal meat	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	b			
2021	7770	Sauté de veau surgelé	Frozen veal meat	O26/O145	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	b			
2021	7771	Blanquette de veau surgelée	Frozen veal meat	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	b			
2021	7772	Sauté de porc surgelé	Frozen pork meat	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	b			
2021	7773	Côte de porc surgelée	Frozen pork meat	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	b			
2021	7774	Souris d'agneau surgelé	Frozen lamb meat	stx	-	stx	-	-	-	-	+		+	-	-	-	-	NA	NA	NA	NA	2	b		
2021	7775	Viande d'agneau à mijoter surgelée	Frozen lamb meat	O26	-	stx	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	b			
2021	7995	Sauté d'agneau surgelé	Frozen lamb meat	stx	-	/	+	+	+	+	-		-	-	-	-	PPNA	PPNA	PPNA	PPNA	2	b			

RAW MEAT PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136♦		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + 72h at 5±3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2021	8091	Sauté d'agneau surgelé	Frozen lamb meat	O157	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	b		
2021	8092	Sauté de veau surgelé	Frozen veal meat	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	b		
2022	122	Viande de bœuf crue surgelée	Frozen beef meat	-	-	/	-/-	+/-	-	-	-	-	-	-	-	-	-	NA	PPNA	NA	NA	2	b		
2023	6096	Sauté d'agneau surgelé	Frozen lamb meat	-	-	/	+	+	+	+	+	-	+	+	+	+	+	PD	PD	PD	PD	2	b		
2023	6097	Côte de porc surgelée	Frozen pork meat	O157	+	O157	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	2	b		
2023	6098	Souris d'agneau surgelé	Frozen lamb meat	-	-	/	+	+	+	+	-	+	+	+	+	+	+	PD	PD	PD	PD	2	b		
2021	7712	Haché de boeuf bolognaise	Seasoned ground beef	stx	-	stx	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	c		
2021	7713	Pavé de bœuf mariné aux 3 poivres	Marinated beef trim	O157	+	O157	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	2	c		
2021	7714	Steak haché de bœuf à l'oignon	Seasoned ground beef	O145	+	O145	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	2	c		
2021	7715	Boulettes de veau assaisonnées	Seasoned ground veal	stx	-	stx	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	c		
2021	7716	Veau à la provencale	Seasoned veal trim	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	2	c		
2021	7717	Veau à l'échalotte	Seasoned veal trim	O103	+	O103	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	2	c		
2021	7718	Lomo de porc tendre marinés au piment doux	Seasoned pork trim	O111/ O103/ O145	+	O145	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	2	c		
2021	7719	Filet mignon marinés à l'ail et persil	Marinated pork meat	O157/ O26/ O103/ O145	+	O145	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	2	c		

RAW MEAT PRODUCTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + 72h at 5±3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2021	7986	Tranche d'agneau à l'ail	Seasoned lamb trim	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	c			
2021	7987	Pavé d'agneau à la tomate	Seasoned lamb trim	stx	-	/	-/-	+/+	+	+	-	-	+ IMS (O157)	-	+	+	+	NA	PD	PD	PD	2	c		
2021	7988	Pavé d'agneau à la tomate	Seasoned lamb trim	O26	+	O26	-	-	+	+	-		-	-	-	-	ND	ND	PPND	PPND	2	c			
2021	7989	Pavé de bœuf provençale	Seasoned beef trim	O26/O157	+	O26/O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	c			
2021	7990	Bœuf haché saveur oignons	Seasoned ground beef	O26/O157	+	O26/O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	2	c			
2021	7997	Roti de porc Orloff	Seasoned pork trim	-	-	/	-/-	-/-	+	-	-	-	-	-	-	-	NA	NA	PPNA	NA	2	c			
2021	8094	Pavé de veau échalotte	Seasoned veal trim	-	-	/	+/+	+/+	+	+	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	2	c			
2021	8096	Porc sans os à l'ail	Seasoned pork trim	stx/eae	-	stx	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	2	c			
2023	5945	Bifteck persille	Beef meat	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	2	c			
2023	5946	Pavé d'agneau à la tomate	Seasoned lamb trim	O103	+	O26	+	+	+	+	-	-	-	-	-	-	PPND	PPND	PPND	PPND	2	c			

FLOURS AND RAW DOUGHS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C		Alternative method: iQ-Check STEC VirX																		Category	Type
						375 g +1125ml BPW + STEC Selective Supp, 18 h at 41,5 ± 1°C (d 1/4)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
						CFX96		CFX Opus					CFX96		CFX Opus		CFX96		CFX Opus						
				Final result PCR	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS				
stx/eae	stx/eae	stx/eae	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae						
2022	2115	Farine de blé bio T65	Organic wheat flour T65	-	-	/	+	+	+	+	-	-	-(IMS O157- /AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2116	Farine de blé T45	Wheat flour T45	-	-	/	+	+	+	+	-	-	-(IMS O145- /AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2117	Fraine de blé T80	Wheat flour T80	-	-	/	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2118	Farine de blé T55	Wheat flour T55	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	3	a		
2022	2119	Farine de blé bio T55	Organic wheat flour T55	-	-	/	-	-	-	-	-	-	-(IMS O26- /AP-)	-	-	-	-	NA	NA	NA	NA	3	a		
2022	2120	Farine de blé T65	Wheat flour T65	O145	-	O145	+	+	+	+	-	-	-(IMS O145- /AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2121	Faine de blé T65	Wheat flour T65	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	3	a		
2022	2122	Farine de blé complète T150	Whole wheat flour T150	-	-	/	+	+	+	+	-	-	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2179	Farine de blé T55	Wheat flour T55	-	-	/	-	-	-	-	-	-	- (PCR ISO stx1+/stx2- /eae-/TOP5 -)	-	-	-	-	NA	NA	NA	NA	3	a		
2022	2180	Farine de blé T45	Wheat flour T45	-	-	/	+	+	+	+	-	-	- (PCR ISO stx1+/stx2- /eae-/TOP5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2181	Farine de blé T65	Wheat flour T65	-	-	/	+	+	+	+	-/-	-	-(72h) (PCR ISO stx1+/stx2- /eae-/TOP5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2487	Farine de blé blanche T65	Wheat flour T65	O111	+	O111	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	3	a		
2022	2488	Farine de blé bio T55	Wheat flour T55	O157	+	O157	+	+	+	+	-	-	-	-	-	-	-	PPND	PPND	PPND	PPND	3	a		
2022	2489	Farine de blé T45	Wheat flour T45	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	3	a		
2022	2490	Farine de blé	Wheat flour	O145	+	O145	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	3	a		
2022	2498	Farine de blé fluide	Wheat flour	-	-	/	-	-	-	-	-	-	-(AP-)	-	-	-	-	NA	NA	NA	NA	3	a		
2022	2499	Farine de blé T55	Wheat flour T55	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	3	a		
2022	2500	Farine de blé	Wheat flour	-	-	/	+	+	+	+	-	-	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a		
2022	2768	Farine de blé T55	Wheat flour T55	-	-	/	+	+	+	-	-	-	-(IMS O103-)	-	-	-	-	PPNA	PPNA	PPNA	NA	3	a		

FLOURS AND RAW DOUGHS																									
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						375 g +1125ml BPW + STEC Selective Supp, 18 h at 41,5 ± 1°C (d 1/4)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
						CFX96		CFX Opus					CFX96		CFX Opus		CFX96		CFX Opus						
				Final result PCR	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS				
stx/eae	stx/eae	stx/eae	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae						
2022	2769	Farine de blé T55	Wheat flour T55	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	a			
2022	2770	Farine de blé T65	Wheat flour T65	O145	+	O145	-	-	-	-	-	-	-(IMS O103- /AP-)	-	-	-	-	ND	ND	ND	ND	3	a		
2022	2771	Farine de blé T45	Wheat flour T45	O103	-	O103	-	-	-	-	-	-	-(IMS O103- /AP-)	-	-	-	-	NA	NA	NA	NA	3	a		
2023	6102	Farine de blé T45	Wheat flour T45	O157	+	O157	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	3	a		
2023	6103	Farine de blé T80	Wheat flour T80	-	-	/	-	+	+	+	-	-	- (+ 72h)	-	+	+	+	NA	PD	PD	PD	3	a		
2023	6104	Farine de blé T55	Wheat flour T55	O111	+	O26	+	+	+	-	+		+	+	+	+	-	PA	PA	PA	ND	3	a		
2024	975	Farine de blé T45	Wheat flour T45	-	-	/	+	+	+	+	-	-	- (+ 72 h)	+	+	+	+	PD	PD	PD	PD	3	a		
2024	976	Farine de blé T80	Wheat flour T80	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	3	a		
2024	977	Farine de blé T55	Wheat flour T55	stx/eae	-	/	+	+	+	+	- (+eae)	- (stx+ or eae+)	- (+72h)	+	+	+	+	PD	PD	PD	PD	3	a		
2024	978	Farine de blé complet T150	Whole wheat	-	-	/	-(eae+)	+	-(eae+)	- (eae+)	-	-	-	-	-	-	-	NA	PPNA	NA	NA	3	a		
2024	979	Farine de blé noir	Buckwheat flour	O145	+	O145	+	+	+	+	-	-	-	-	-	-	-	PPND	PPND	PPND	PPND	3	a		
2022	2123	Farine de seigle	Rye flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2124	Farine de maïs	Corn flour	O145	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2125	Farine de riz complète	Whole rice flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2126	Farine de pois chiche	Chickpea flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2127	Farine de manioc	Cassava flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2177	Farine de blé noir	Buckwheat flour	O26/ O103/ O145	-	stx(O145)	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b		
2022	2178	Farine de Sarrasin	Buckwheat flour	O145/ stx (O145/ stx(O145)	-	stx	+	+	-	+	-	-	-(IMS O145- /AP-)	-	-	-	-	PPNA	PPNA	NA	PPNA	3	b		
2022	2182	Farine de seigle T130	Rye flour T130	-	-	/	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b		
2022	2183	Farine de maïs	Corn flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2184	Farine de riz complet	Whole rice flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2185	Farine de pois chiche	Chikpea flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2186	Farine de manioc	Cassava flour	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	3	b		

FLOURS AND RAW DOUGHS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C		Alternative method: iQ-Check STEC VirX																		Category	Type
						375 g +1125ml BPW + STEC Selective Supp, 18 h at 41,5 ± 1°C (d 1/4)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
						CFX96		CFX Opus					CFX96		CFX Opus		CFX96		CFX Opus						
				Final result PCR	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS				
stx/eae	stx/eae	stx/eae	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae						
2022	2491	Farine de maïs sans gluten	Corn flour	-	-	/	-	-	-	+	-		-	-	-	-	NA	NA	NA	PPNA	3	b			
2022	2492	Farine d'épeautre blanche Type 70	Spelt flour Type 70	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2022	2493	Farine d'orge mondée	Barley flour	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	b			
2022	2494	Farine bio de Sarrasin	Buckwheat flour	O145	+	O145	+	+	+	+	-		- (+ 72 h)	+	+	+	+	PA	PA	PA	PA	3	b		
2022	2495	Farine complète de riz sans gluten bio	Rice flour	O111	+	O111	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2022	2501	Farine de seigle bio semi-complète	Rye flour	-	-	/	-	-	+	-	-		-	-	-	-	NA	NA	PPNA	NA	3	b			
2022	2502	Farine de blé noir	Buckwheat flour	O26/ O145	-	O145	+	+	-	+	-	-	-(AP-)	-	-	-	-	PPNA	PPNA	NA	PPNA	3	b		
2022	2772	Farine de maïs sans gluten	Corn flour	O103	-	O103	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	b			
2022	2773	Farine de seigle	Rye flour	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2024	980	Farine de Sarrasin	Buckwheat flour	O145	+	O145	+	+	+	+	-	-	-	-	-	-	PPND	PPND	PPND	PPND	3	b			
2024	981	Farine de seigle T80	Rye flour T130	+O103/ +O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2024	982	Farine d'épeautre T80	Spelt flour	O145	-	/	-(stx+)	-(stx+)	-(stx+)	-(stx+)	-	-	-	-	-	-	NA	NA	NA	NA	3	b			
2024	983	Farine de pois chiche	Chickpea flour		-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	b			
2024	984	Farine de quinoa	Quinoa flour	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2024	985	Farine de riz complet	Whole rice flour	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2024	986	Farine d'orge mondé	Hulled barley flour	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2022	1916	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	O111	-	stx(O111)	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	1917	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	-	-	/	+/+/+	+/+/+	+	+	-	+	+(IMS O157)	+	+	+	+	PD	PD	PD	PD	3	c		
2022	1918	Pâte à pizza bio (Farine de blé)	Pizza dough bio with wheat flour	O26	+	O26	-	+/+/+	-	+	-	-	-(IMS O26- /AP-)	-	-	-	-	ND	PPND	ND	PPND	3	c		

FLOURS AND RAW DOUGHS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C		Alternative method: iQ-Check STEC VirX																		Category	Type
						375 g +1125ml BPW + STEC Selective Supp, 18 h at 41,5 ± 1°C (d 1/4)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
						CFX96		CFX Opus					CFX96		CFX Opus		CFX96		CFX Opus						
				Final result PCR	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
stx/eae	stx/eae	stx/eae	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae					
2022	1919	Pâte à pizza (Farine de blé 63%)	Pizza dough with wheat flour	O145	-	stx(O145)	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	c			
2022	1920	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2022	1921	Pâte brisée (farine de blé)	Dough with wheat flour	O111	-	stx(O111)	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	1922	Pâte brisée (farine de blé)	Dough with wheat flour	O157/ O145	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2022	1923	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	c			
2022	1924	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	O111	+	O111	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2022	1925	Pâte sablée (farine de blé)	Dough with wheat flour	O103	+	O103	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	3	c			
2022	1926	Pâte à pizza bio (Farine de blé)	Pizza dough bio with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	1927	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	1928	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	1929	Pâte brisée (farine de blé)	Dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	1930	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	2503	Pâte brisée (farine de blé 51%)	Dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	2504	Pâte feuilletée (Farine de blé 47,5%)	Puff dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	2505	Pâte sablée (farine de blé)	Dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	2506	Pâte à pizza ronde (farine de blé)	Pizza dough with wheat flour	-	-	/	+	+	+	+	-	-	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	c		

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						375 g +1125ml BPW + STEC Selective Supp, 18 h at 41,5 ± 1°C (d 1/4)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae			
2022	2507	Pâte à pizza rectangulaire (farine de blé)	Pizza dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2023	5947	Pâte à pizza (farine de blé)	Pizza raw dough with wheat flour	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2023	5948	Pâte brisée pur beurre (farine de blé)	Raw dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2023	5949	Pâte sablée (farine de blé)	Shor bread raw dough (wheat flour)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2024	1227	Pâte brisée épaisse	Raw dough	O145/ O103	+	+O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2024	1228	Pâte sablée (farine de blé)	Shor bread raw dough (wheat flour)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2024	1229	Pâte à pizza (farine de blé)	Pizza raw dough (wheat flour)	O26	+	+O26	- (stx+)	- (stx+)	- (stx+)	- (stx+)	-		-	-	-	-	ND	ND	ND	ND	3	c			

FLOURS AND RAW DOUGHS																										
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						After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																				
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage									
						Final result PCR		ISO/TS 13136					CFX96		CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus			
													without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS			Without FDRS
Final result PCR	Final result stx/ae	Serogroup	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae	stx/ae				
2022	2115	Farine de blé bio T65	Organic wheat flour T65	-	-	/	+	+	+	+	-	-	-(IMSO157-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2022	2116	Farine de blé T45	Wheat flour T45	-	-	/	+	+	+	+	-	-	-(IMSO145-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2022	2117	Fraine de blé T80	Wheat flour T80	-	-	/	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2022	2119	Farine de blé bio T55	Organic wheat flour T55	-	-	/	-	-	-	-	-	-	-(IMS O26-/AP-)	-	-	-	-	NA	NA	NA	NA	3	a			
2022	2120	Farine de blé T65	Wheat flour T65	O145	-	O145	+	+	+	+	-	-	-(IMS O145-/AP-)	-	-	-	-	NA	NA	NA	NA	3	a			
2022	2122	Farine de blé complète T150	Whole wheat flour T150	-	-	/	+	+	+	+	-	-	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2022	2179	Farine de blé T55	Wheat flour T55	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	3	a			
2022	2180	Farine de blé T45	Wheat flour T45	-	-	/	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2022	2181	Farine de blé T65	Wheat flour T65	-	-	/	+	+	+	+	-	-	- (PCR ISO stx1+/stx2-/eae-/TOP5 -)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2022	2487	Farine de blé blanche T65	Wheat flour T65	O111	+	O111	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	3	a			
2022	2488	Farine de blé bio T55	Wheat flour T55	O157	+	O157	+	+	+	+	-	-	-	-	-	-	-	PPND	PPND	PPND	PPND	3	a			
2022	2490	Farine de blé	Wheat flour	O145	+	O145	+/-/-	-	-	-	-	-	-	-	-	-	-	PPND	ND	ND	ND	3	a			
2022	2498	Farine de blé fluide	Wheat flour	-	-	/	-	-	-	-	-	-	-(AP-)	-	-	-	-	NA	NA	NA	NA	3	a			
2022	2500	Farine de blé	Wheat flour	-	-	/	+	+	+	+	-	-	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2022	2768	Farine de blé T55	Wheat flour T55	-	-	/	-	-	-	-	-	-	-(IMS O103)	-	-	-	-	NA	NA	NA	NA	3	a			
2022	2769	Farine de blé T55	Wheat flour T55	-	-	/	+	+	+	+	+	-	+	+	+	+	+	PD	PD	PD	PD	3	a			
2022	2770	Farine de blé T65	Wheat flour T65	O145	+	O145	-	-	-	-	-	-	-(IMS O103-/AP-)	-	-	-	-	ND	ND	ND	ND	3	a			
2022	2771	Farine de blé T45	Wheat flour T45	O103	-	O103	-	-	-	-	-	-	-(IMS O103-/AP-)	-	-	-	-	NA	NA	NA	NA	3	a			
2023	6102	Farine de blé T45	Wheat flour T45	O157	+	O157	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	3	a			
2023	6103	Farine de blé T80	Wheat flour T80	-	-	/	-	-	-	-	+	-	+	-	-	-	-	NA	NA	NA	NA	3	a			
2023	6104	Farine de blé T55	Wheat flour T55	O111	+	O26	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	3	a			
2024	975	Farine de blé T45	Wheat flour T45	-	-	/	+	+	+	+	+	-	+	+	+	+	+	PD	PD	PD	PD	3	a			
2024	976	Farine de blé T80	Wheat flour T80	O157	+	O157	+	+	+	+	+	-	+	+	+	+	+	PA	PA	PA	PA	3	a			
2024	977	Farine de blé T55	Wheat flour T55	stx/ae	-	/	+	+	+	+	- (+eae)	+	+	+	+	+	+	PD	PD	PD	PD	3	a			
2024	978	Farine de blé complet T150	Whole wheat	-	-	/	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	a			
2024	979	Farine de blé noir	Buckwheat flour	O145	+	O145	+	+	+	+	-	-	-	-	-	-	-	PPND	PPND	PPND	PPND	3	a			
2022	2124	Farine de maïs	Corn flour	O145	-	O145	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	3	b			
2022	2125	Farine de riz complète	Whole rice flour	-	-	/	-	-	-	-	-	-	-(AP-)	-	-	-	-	NA	NA	NA	NA	3	b			

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						After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
						CFX96		CFX Opus					CFX96		CFX Opus		CFX96		CFX Opus						
				Final result PCR	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS				
Final result stx/eae	Serogroup	stx/eae	stx/eae		stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae								
2022	2177	Farine de blé noir	Buckwheat flour	O26/ O103/ O145	-	stx(O145)	+	+	+	+	-		-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b			
2022	2178	Farine de Sarrasin	Buckwheat flour	O145/ stx (O145/ stx(O145)	-	stx	+	+	+	+	-	-	-(IMS O145-/AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b		
2022	2182	Farine de seigle T130	Rye flour T130	-	-	/	+	+	+	+	-	-	-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	b		
2022	2493	Farine d'orge mondée	Barley flour	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	b			
2022	2494	Farine bio de sarrasin	Buckwheat flour	O145	+	O145	+	+	+	+	-	-	+	+	+	+	+	PA	PA	PA	PA	3	b		
2022	2495	Farine complète de riz sans gluten bio	Rice flour	O111	+	O111	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2022	2502	Farine de blé noir	Buckwheat flour	O26/O145	-	O145	+	+	+	+	-	-	-(AP-)	-	-	-	-	NA	NA	NA	NA	3	b		
2022	2772	Farine de maïs sans gluten	Corn flour	O103	-	O103	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	b			
2022	2773	Farine de seigle	Rye flour	O103	+	O103	-	+	+	+	+		+	-	+	+	ND	PA	PA	PA	3	b			
2024	980	Farine de Sarrasin	Buckwheat flour	O145	+	O145	+	+	+	+	-		-				PPND	PPND	PPND	PPND	3	b			
2024	981	Farine de seigle T80	Rye flour T130	+O103/+O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2024	983	Farine de pois chiche	Chickpea flour		-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	b			
2024	984	Farine de quinoa	Quinoa flour	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2024	985	Farine de riz complet	Whole rice flour	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2024	986	Farine d'orge mondé	Hulled barley flour	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	b			
2022	1916	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	O111	-	stx(O111)	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	1917	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	-	-	/	+	+	+	+	-	-	+(IMS O157)	+	+	+	+	PD	PD	PD	PD	3	c		
2022	1918	Pâte à pizza bio (Farine de blé)	Pizza dough bio with wheat flour	O26	+	O26	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	3	c			
2022	1919	Pâte à pizza (Farine de blé 63%)	Pizza dough with wheat flour	O145	-	stx(O145)	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	c			
2022	1920	Pâte à pizza (Farine de blé)	Pizza dough with wheat flour	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2022	1921	Pâte brisée (farine de blé)	Dough with wheat flour	O111	-	stx(O111)	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			



FLOURS AND RAW DOUGHS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2022	1922	Pâte brisée (farine de blé)	Dough with wheat flour	O157/ O145	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2022	1923	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	3	c			
2022	1924	Pâte feuilletée (Farine de blé)	Puff dough with wheat flour	O111	+	O111	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2022	1925	Pâte sablée (farine de blé)	Dough with wheat flour	O103	+	O103	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	3	c			
2022	2503	Pâte brisée (farine de blé 51%)	Dough with wheat flour	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	3	c			
2022	2506	Pâte à pizza ronde (farine de blé)	Pizza dough with wheat flour	-	-	/	+	+	+	+	-	-	-(AP-)	-	-	-	-	PPNA	PPNA	PPNA	PPNA	3	c		
2023	5947	Pâte à pizza (farine de blé)	Pizza raw dough with wheat flour	O145	+	O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2024	1227	Pâte brisée épaisse	Raw dough	O145/O103	+	+O145	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	3	c			
2024	1229	Pâte à pizza (farine de blé)	Pizza raw dough (wheat flour)	O26	+	+O26	- (stx+)	- (stx+)	- (stx+)	- (stx+)	-		-	-	-	-	ND	ND	ND	ND	3	c			

MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C			Alternative method: iQ-Check STEC VirX																	Category	Type
							25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																		
							Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement							
				Final result PCR ISO		ISO/TS 13136		CFX96		CFX Opus				CFX96		CFX Opus		CFX96		CFX Opus					
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
Final result stx/eae	Serogroup	stx/eae	stx/eae	stx	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2023	151	Salade de pâtes (Fettucine aux 2 saumons)	RTE (pasta salad with salmon)	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	152	Salade de pâtes (Fettucine aux 2 saumons)	RTE (pasta salad with salmon)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	153	Wraps (duo de saumon sauce fromage blanc)	RTE (wraps with salmon)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	154	Sandwich (Poulet rôti crudités)	RTE (sandwich with chicken and vegetables)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	155	Sandwich (Poulet rôti crudités)	RTE (sandwich with chicken and vegetables)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	156	Raviolis frais au bœuf	Stuffed fresh pasta (beef)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	157	Tortellini frais au chèvre épinards	Stuffed fresh pasta (goat cheese and spinach)	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	158	Tortellini frais au chèvre épinards	Stuffed fresh pasta (goat cheese and spinach)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	159	Tortellini frais pesto, basilic et pignons	Stuffed fresh pasta (pesto, basil, pine nuts)	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	160	Tortellini frais pesto, basilic et pignons	Stuffed fresh pasta (pesto, basil, pine nuts)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	a			
2023	408	Salade de penne au butternut et emmenthal	RTE (pasta salad with butternut and cheese)	-	-	/	-	-	-/-	-	-	-	-	-	-	-	NA	NA	NA	NA	4	a			
2023	409	Salade pâtes poulet rôti gingembre sésame	RTE (pasta salad with chicken, ginger, sesame)	-	-	/	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	4	a			
2023	410	Sandwich pain de mie rosette	RTE (sandwich with rosette)	-	-	/	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	4	a			

MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C		Alternative method: iQ-Check STEC VirX																		Category	Type
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
						CFX96		CFX Opus					CFX96		CFX Opus		CFX96		CFX Opus						
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS				
							stx/eae	stx/eae	stx	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae			
2023	411	Sandwich jambon beurre	RTE (sandwich with ham and cheese)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	412	Sandwich poulet rôti crudités	RTE (sandwich with chicken and vegetables)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	413	Wrap falafel tomates et salade	RTE (wraps with falafel tomato and salad)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	414	Wrap poulet rôti tomates marinées	RTE (wraps with chicken and marinated tomatoes)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	415	Ravioles gyoza au poulet	Stuffed fresh pasta (gyoza with chicken)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	416	Ravioles girasoli artichauts	Stuffed fresh pasta (artichoke girasoli)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	417	Raviolis à l'agneau	Stuffed fresh pasta (lamb ravioli)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	162	Pizza aux 3 fromages	RTRH (pizza with cheese)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	163	Tarte aux fromages	RTRH (cheese pie)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	164	Tarte aux fromages	RTRH (cheese pie)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	165	Tielles sétoises (poisson tomate)	RTRH (pie with fish and tomatoes)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	166	Pizza calzone (jambon fromage)	RTRH (pizza with ham and cheese)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	167	Pizza calzone (jambon fromage)	RTRH (pizza with ham and cheese)	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	168	Quiche Lorraine	RTRH (Quiche Lorraine)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	169	Tarte aux poireaux et emmental fondant	RTRH (pie with leeks and cheese)	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	170	Tarte aux poireaux et emmental fondant	RTRH (pie with leeks and cheese)	O26/O103	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	369	Pizza surgelée (jambon, champignons, emmental)	RTRH frozen pizza (ham and cheese)	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			

MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C		Alternative method: iQ-Check STEC VirX																		Category	Type
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				Final result PCR ISO		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2023	370	Pizza surgelée (végétarienne)	RTRH frozen pizza (vegetables)	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	4	b			
2023	371	Quiche Lorraine surgelée	RTRH frozen Quiche Lorraine	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	372	Tarte surgelée poireaux Emmental	RTRH frozen pie (leeks and cheese)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	418	Pizza chorizo poivrons grillés	RTRH (pizza chorizo grilled peppers)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	419	Pizza jambon champignons	RTRH (pizza ham and mushrooms)	-	-	/	-	-	+/-/+	-	-	-	-	-	-	-	NA	NA	PPNA	NA	4	b			
2023	420	Pizza végétale surgelée	RTRH frozen pizza (vegetables)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	421	Quiche Lorraine surgelée	RTRH frozen Quiche Lorraine	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	422	Tarte poireaux surgelée	RTRH frozen pie (leeks)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	423	Tarte poireaux	RTRH (pie with leeks))	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	1457	Burger bacon prêt à réchauffer	RTRH bacon burger	stx	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	1458	Burger cheese prêt à réchauffer	RTRH cheeseburger	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	1459	Burger bacon prêt à réchauffer	RTRH bacon burger	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	505	Bouillon de légumes déshydraté	Dehydrated vegetables broth	O111	+	O111	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	c			
2023	507	Minestrone déshydraté	Dehydrated minestrone	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	4	c			
2023	508	Soupe chinois déshydratée	Dehydrated Chinese soup	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	4	c			
2023	509	Soupe poule au pot déshydratée	Dehydrated chicken soup	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	c			
2023	510	Nouilles instantanée seafood ramyun	Dehydrated pasta (seafood, ramyun)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	c			

MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C		Alternative method: iQ-Check STEC VirX																		Category	Type
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				Final result PCR ISO		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
Final result stx/eae	Serogroup	stx/eae	stx/eae	stx	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae			
2023	511	Nouilles instantanées chicken flavour	Dehydrated pasta (chicken)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	512	Nouilles de blé instantanées sauce Teriyaki	Dehydrated wheat pasta (teriyaki sauce)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	513	Nouilles instantanées saveur poulet	Dehydrated pasta (chicken)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	514	Nouilles instantanées pad thai crevette	Dehydrated pasta (pad Thai shrimp)	-	-	/	-/-	-/-	-/-	-/-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1102	Soupe déshydratée au pistou et à l'huile d'olive	Dehydrated soup with pistou and olive oil	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1103	Soupe déshydratée poule aux vermicelles	Dehydrated chicken soup with vermicelli	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1104	Soupe déshydratée thai nouilles champignons soja	Dehydrated Thai soup (noodle, mushrooms, soy)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1105	Soupe déshydratée tomates vermicelles	Dehydrated soup (tomato and vermicelli)	O26	+	O26/O111	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	c		
2023	1106	Nouilles déshydratées à poêler bœuf teriyaki	Dehydrated noodles (beef teriyaki)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1107	Nouilles instantanée saveur curry	Instant noodles curry flavor	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1108	Nouilles deshydratées japonaises bœuf teppanyaki	Dehydrated Japanese noodles (beef teppanyaki)	stx	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1109	Nouilles instantanées saveur légumes	Instant noodles vegetable flavor	stx	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1418	Soupe déshydratée tomates vermicelles	Dehydrated tomato vermicelli soup	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1419	Minestrone déshydraté	Dehydrated minestrone	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1420	Soupe au pistou déshydraté	Dehydrated pistou soup	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		

MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
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							25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																		
							Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement							
				Final result PCR ISO		ISO/TS 13136		CFX96		CFX Opus				CFX96		CFX Opus		CFX96		CFX Opus					
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2023	6105	Nouilles japonaises saveur légumes et sauce soja	Japanese noodles with vegetable flavour and soy sauce	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	4	c			
2023	6106	Nouilles japonaises saveur bœuf teppanyaki	Shrimp-flavoured instant noodles	O145	+	O145	-	-	-	-	-		-	-	-	-	ND	ND	ND	ND	4	c			
2023	6107	Nouilles instantanées saveur crevettes	Instant noodles	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	4	c			
2023	6108	Nouilles instantanées saveur poulet curry	Instant noodles	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	c			
2023	6109	Potage déshydraté aux vermicelles saveur bœuf	Dehydrated soup	O157	+	O157	+stx	-	-	-	-		-	-	-	-	ND	ND	ND	ND	4	c			
2023	6110	Potage déshydraté à la chinoise nouilles, champignon noir et épices	Dehydrated soup	O145	+	O145	+stx	+stx	+stx	+stx	-		-	-	-	-	ND	ND	ND	ND	4	c			
2023	6111	Soupe déshydratée aux vermicelles, aux légumes et à la poule au pot	Dehydrated noodle, vegetable and chicken soup	-	-	/	-	+stx	-	-	-		-	-	-	-	NA	NA	NA	NA	4	c			

MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C			Alternative method: iQ-Check STEC VirX																	Category	Type
							After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																		
							Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage							
				CFX96		CFX Opus		CFX96		CFX Opus				CFX96		CFX Opus									
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS				
							Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx	stx	stx/eae	stx/eae	stx/eae	stx/eae		
2023	151	Salade de pâtes (Fettucine aux 2 saumons)	RTE (pasta salad with salmon)	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	152	Salade de pâtes (Fettucine aux 2 saumons)	RTE (pasta salad with salmon)	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	153	Wraps (duo de saumon sauce fromage blanc)	RTE (wraps with salmon)	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	154	Sandwich (Poulet rôti crudités)	RTE (sandwich with chicken and vegetables)	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	155	Sandwich (Poulet rôti crudités)	RTE (sandwich with chicken and vegetables)	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	156	Raviolis frais au bœuf	Stuffed fresh pasta (beef)	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	157	Tortellini frais au chèvre épinards	Stuffed fresh pasta (goat cheese and spinach)	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	158	Tortellini frais au chèvre épinards	Stuffed fresh pasta (goat cheese and spinach)	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	159	Tortellini frais pesto, basilic et pignons	Stuffed fresh pasta (pesto, basil, pine nuts)	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	160	Tortellini frais pesto, basilic et pignons	Stuffed fresh pasta (pesto, basil, pine nuts)	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	a		
2023	408	Salade de penne au butternut et emmenthal	RTE (pasta salad with butternut and cheese)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	a		



MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136 25 g + 225 mL BPW, 18 h at 37°C ± 1°C			Alternative method: iQ-Check STEC VirX																	Category	Type
							After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																		
							Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage							
				Final result PCR ISO		ISO/TS 13136		CFX96		CFX Opus				CFX96		CFX Opus		CFX96		CFX Opus					
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae		
2023	409	Salade pâtes poulet rôti gingembre sésame	RTE (pasta salad with chicken, ginger, sesame)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	a			
2023	162	Pizza aux 3 fromages	RTRH (pizza with cheese)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	163	Tarte aux fromages	RTRH (cheese pie)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	164	Tarte aux fromages	RTRH (cheese pie)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	165	Tielles sétoises (poisson tomate)	RTRH (pie with fish and tomatoes)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	166	Pizza calzone (jambon fromage)	RTRH (pizza with ham and cheese)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	167	Pizza calzone (jambon fromage)	RTRH (pizza with ham and cheese)	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	168	Quiche Lorraine	RTRH (Quiche Lorraine)	O103	+	O103	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	169	Tarte aux poireaux et emmental fondant	RTRH (pie with leeks and cheese)	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	170	Tarte aux poireaux et emmental fondant	RTRH (pie with leeks and cheese)	O26/O103	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	369	Pizza surgelée (jambon, champignons, emmental)	RTRH frozen pizza (ham and cheese)	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	370	Pizza surgelée (végétarienne)	RTRH frozen pizza (vegetables)	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	4	b			
2023	371	Quiche Lorraine surgelée	RTRH frozen Quiche Lorraine	O157	+	O157	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	372	Tarte surgelée poireaux emmental	RTRH frozen pie (leeks and cheese)	O26	+	O26	+	+	+	+	+		+	+	+	+	PA	PA	PA	PA	4	b			
2023	419	Pizza jambon champignons	RTRH (pizza ham and mushrooms)	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			
2023	1457	Burger bacon prêt à réchauffer	RTRH bacon burger	stx	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	4	b			

MULTICOMPONENT FOODS AND MEAL COMPONENTS																									
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							After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																		
							Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage							
				Final result PCR ISO		ISO/TS 13136		CFX96		CFX Opus				CFX96		CFX Opus		CFX96		CFX Opus					
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir- matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
						Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx	stx	stx/eae	stx/eae	stx/eae		
2023	505	Bouillon de légumes déshydraté	Dehydrated vegetables broth	O111	+	O111	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	c		
2023	507	Minestrone déshydraté	Dehydrated minestrone	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	4	c		
2023	508	Soupe chinois déshydratée	Dehydrated Chinese soup	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	4	c		
2023	1102	Soupe déshydratée au pistou et à l'huile d'olive	Dehydrated soup with pistou and olive oil	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1105	Soupe déshydratée tomates vermicelles	Dehydrated soup (tomato and vermicelli)	O26	+	O26/O111	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	c		
2023	1108	Nouilles deshydratées japonaises bœuf teppanyaki	Dehydrated Japanese noodles (beef teppanyaki)	stx	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	1109	Nouilles instantanées saveur légumes	Instant noodles vegetable flavor	stx	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	4	c		
2023	6105	Nouilles japonaises saveur légumes et sauce soja	Japanese noodles	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	4	c		
2023	6106	Nouilles japonaises saveur bœuf teppanyaki	Japanese noodles	O145	+	O145	-	-	-	-			-	-	-	-	-	ND	ND	ND	ND	4	c		
2023	6107	Nouilles instantanées saveur crevettes	Instant noodles	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	4	c		
2023	6108	Nouilles instantanées saveur poulet curry	Instant noodles	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	4	c		
2023	6109	Potage déshydraté aux vermicelles saveur bœuf	Dehydrated soup	O157	+	O157	-	-	-	-			-	-	-	-	-	ND	ND	ND	ND	4	c		
2023	6110	Potage déshydraté à la chinoise nouilles, champignon noir et épices	Dehydrated soup	O145	+	O145	+stx	+stx	+stx	+stx	-		-	-	-	-	-	ND	ND	ND	ND	4	c		

RAW PRODUCES AND FRUITS																									
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						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				CFX96		CFX Opus		CFX96					CFX Opus		CFX96		CFX Opus								
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirma- tory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
stx/eae	stx/eae	stx	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae					
2023	310	Alfalfa bio	Sprouted seeds (alfalfa)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	311	Graines germées de radis rose bio	Sprouted seeds (radishes)	-	-	/	+	+	+	+	-	-	IMSO157 -/+(72h)	+	+	+	+	PD	PD	PD	PD	5	a		
2023	312	Alfalfa poireaux	Sprouted seeds (alfalfa leeks)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	313	Alfalfa bio	Sprouted seeds (alfalfa)	O26	+	O26	+	+	+	+	-	-	IMS O26+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	314	Graines germées de radis rose bio	Sprouted seeds (radishes)	-	-	/	-	-	+	-	-	-	-	-	-	-	-	NA	NA	PPNA	NA	5	a		
2023	315	Laitue iceberg	Iceberg lettuce	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	316	Laitue	Lettuce	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	317	Endive	Endive	O157/O26	+	O26/O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	318	Chou vert	Green cabbage	O157/O26	+	O26/O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	319	Chou vert	Green cabbage	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	737	Basilic frais	Fresh basil	stx	-	/	i/i/i/-**	i/i/i/-**	i/i/i/-**	i/i/i/-**	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	738	Coriandre fraiche	Fresh coriander	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	739	Jeunes pousses d'épinards	Baby spinach leaves	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	1049	Cœur de laitue	Lettuce	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	1050	Germes de Alfalfa	Sprouts (Alfalfa)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	1051	Germes de radis rose	Sprouts (pink radish)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	1059	Epinards en branches surgelés	Frozen spinach	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	1089	Epinards en branches surgelés	Frozen spinach	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	a		
2023	1424	Chou vert	Green cabbage	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	1426	Cèleri branche	Celery sticks	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	5916	Laitue	Lettuce	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	5917	Graines germées alfalfa-poireaux-lentilles	Sprouts	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	a		

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

RAW PRODUCES AND FRUITS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																		Category	Type
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				CFX96		CFX Opus		CFX96					CFX Opus		CFX96		CFX Opus								
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirma-tory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
stx/eae	stx/eae	stx	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae					
2024	225	Salade verte	Salad	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	a		
2024	226	Graines germées alfalfa-radis-fenouil	Sprouts	O26	+	O26	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	5	a		
2024	227	Graines germées de poireaux	Sprouts (leeks)	-	-	/	+	+	+	+	-	+	+	+	+	+	+	PD	PD	PD	PD	5	a		
2024	228	Percil frais	Fresh parsley	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	300	Chou-fleur coupés frais	Fresh cut cauliflower	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	301	Mélange crudités frais (chou blanc, carottes, céleri branche)	Fresh raw mix vegetables (cabbage, carrots, celery)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	302	Baby carottes et radis frais	Fresh baby carrots and radishes	Stx (O145)	-	O145	-	-	-	-	-		+	-	-	-	-	NA	NA	NA	NA	5	b		
2023	306	Chou-fleur coupés frais	Fresh cut cauliflower	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	b		
2023	307	Baby carottes et radis frais	Fresh baby carrots and radishes	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	735	Haricots verts crus frais	Fresh raw green beans	Stx (O111)	-	O111	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	736	Carottes râpées natures	Fresh grated carrots	-	-	/	-	-	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	946	Spaguettis de courgettes frais	Fresh cut zucchini	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	b		
2023	947	Spaguettis de courgettes frais	Fresh cut zucchini	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	b		
2023	1052	Mélange crudités frais (chou blanc, carottes, céleri branche)	Fresh raw vegetables mix (white cabbage, carrots, celery)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	1053	Chou-fleur	Cauliflower	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	1054	Baby carottes et radis frais	Fresh baby carrots and radishes	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	1055	Brocolis en fleurette surgelés	Frozen broccoli	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		

RAW PRODUCES AND FRUITS																									
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						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				CFX96		CFX Opus		CFX96					CFX Opus		CFX96		CFX Opus								
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirma-tory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
stx/eae	stx/eae	stx	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2023	1056	Courgettes en rondelles surgelées	Frozen zucchini	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	1057	Petits pois doux surgelés	Frozen peas	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	1058	Haricots verts surgelés	Frozen green beans	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	1086	Haricots verts surgelés	Frozen green beans	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	b		
2023	1087	Petits pois surgelés	Frozen peas	-	-	/	+/+/+	+/+/+	+/+/+	+/+/+	-	-	IMS O103-	-	-	-	-	PPNA	PPNA	PPNA	PPNA	5	b		
2023	1088	Courgettes en rondelles surgelées	Frozen zucchini	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	b		
2023	1421	Wok de légumes maraicher	Fresh mix vegetables	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	1422	Champignons bruns émincés	Sliced brown mushrooms	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	5950	Chou-fleur coupés frais	Cauliflower	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	b		
2023	5951	Mélange crudités frais (mais, carottes, salade, radis et chou rouge)	Vegetables mix	O157	+	O157	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	5	b		
2023	5952	Carottes râpées fraîches natures	Grated carrots	-	-		+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	b		
2023	6099	Epinards surgelés	Frozen spinach	-	-	/	-	-	-	-	+		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	6100	Haricots beurre surgelés	Frozen beans	O157	+	O157	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	5	b		
2023	6101	Petits pois surgelés	Frozen peas	O26	+	O26	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	5	b		
2023	303	Mangue coupée	Cut mango	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	304	Ananas coupé	Cut pineapple	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	305	Salade fraiche de 5 fruits (Ananas, orange, pomme, kiwi, mangue)	Fresh mix fruits (pineapple, orange, apple, kiwi, mango)	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		

RAW PRODUCES AND FRUITS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																		Category	Type
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				CFX96		CFX Opus		CFX96					CFX Opus		CFX96		CFX Opus								
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirma- tory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
stx/eae	stx/eae	stx	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2023	308	Mangue coupée	Cut mango	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	c		
2023	309	Ananas coupé	Cut pineapple	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	c		
2023	376	Ananas surgelé en morceaux	Frozen cut pineapple	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	c		
2023	377	Fruits rouges surgelés (framboise, groseille, myrtille, mures, cassis)	Frozen berries	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	740	Smoothie ananas noix de coco non pasteurisé	Unpasteurized pineapple coconut smoothie	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	948	Salade de fruits rouges, myrtille, framboise	Fresh fruits salad (blueberry, raspberry)	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	949	Salade de mangue, myrtille, framboise	Fresh fruits salad (mango, blueberry, raspberry)	O157	+	O157	-	-	-	-	-		-	-	-	-	-	ND	ND	ND	ND	5	c		
2023	950	Mélange ananas, fraise, myrtille	Fresh fruit salad (pineapple, strawberry, blueberry)	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	c		
2023	1060	Mangue, myrtilles, framboises coupés	Cut mango, blueberries, raspberries	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	1061	Myrtilles framboise coupées	Cut blueberries, raspberries	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	1062	Salade d'ananas, fraises, myrtilles	Fruits salad (pineapple, strawberry, blueberry)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	1063	Abricots en oreillons surgelés	Frozen apricots	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	1064	Fraises entières surgelées	Frozen strawberries	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		

RAW PRODUCES AND FRUITS																									
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: iQ-Check STEC VirX																		Category	Type
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement								
				CFX96		CFX Opus		CFX96					CFX Opus		CFX96		CFX Opus								
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirma- tory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
stx/eae	stx/eae	stx	stx/eae				stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae					
2023	1090	Fraises entières surgelées	Frozen strawberries	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	c		
2023	1091	Fruits rouges surgelés (framboise, groseille, myrtille, mures, cassis)	Frozen berries	-	-	/	i/-/-	i/-/-	i/i/i/-*	i/-/i	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	1423	Salade de fruits frais coupés (ananas, pommes, raisin)	Fresh cut fruit salad (pineapple, apple, grape)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	1425	Framboises entières surgelées	Frozen whole raspberries	-	-	/	-	i/-/-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	c		
2023	5921	Salade de fruits ananas-myrtilles-framboises	Fresh fruit salad	stx1/eae	+	O26	-	-	-	-			-	-	-	-	-	ND	ND	ND	ND	5	c		
2023	5922	Ananas découpé	Pineapple	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	c		
2023	5923	Ananas découpé	Pineapple	O26	+	O26	-	-	-	-			-	-	-	-	-	ND	ND	ND	ND	5	c		
2024	229	Salade de fruits frais	Fresh fruit salad	O145	+	O145	+	+	+	+	-	+	+	+	+	+	+	PA	PA	PA	PA	5	c		
2024	230	Ananas découpé	Cut pineapple	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	c		

RAW PRODUCES AND FRUITS																									
Date	Sample N°	Product (french name)	Product	Reference method: ISO/TS 13136♦		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				CFX96		CFX Opus		CFX96					CFX Opus		CFX96		CFX Opus								
				Final result PCR ISO	ISO/TS 13136		without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS		
							stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx	stx	stx/eae	stx/eae	stx/eae	stx/eae					
2023	311	Graines germées de radis rose bio	Sprouted seeds (radishes)	-	-	/	+	+	+	+	-	+	+	+	+	+	+	+	PD	PD	PD	PD	5	a	
2023	312	Alfalfa poireaux	Sprouted seeds (alfalfa leeks)	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	313	Alfalfa bio	Sprouted seeds (alfalfa)	O26	+	O26	+	+	+	+	-	-	IMS O26+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	314	Graines germées de radis rose bio	Sprouted seeds (radishes)	-	-	/	-	-	-	-/-/-	-	-	-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	315	Laitue iceberg	Iceberg lettuce	O157	+	O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	316	Laitue	Lettuce	O103	+	O103	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	317	Endive	Endive	O157/O26	+	O26/O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	318	Chou vert	Green cabbage	O157/O26	+	O26/O157	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	319	Chou vert	Green cabbage	Stx (O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	737	Basilic frais	Fresh basil	stx	-	/	i/i/i/-**	i/i/i/-**	i/i/i/-**	i/i/i/-**	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	738	Coriandre fraiche	Fresh coriander	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	739	Jeunes pousses d'épinards	Baby spinach leaves	stx(O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	a		
2023	1089	Epinards en branches surgelés	Frozen spinach	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	a		
2023	5917	Graines germées alfalfa-poireaux-lentilles	Sprouts	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	a		
2024	225	Salade verte	Salad	-	-	/	+	+	+	+	+		+	+	+	+	+	PD	PD	PD	PD	5	a		
2024	226	Graines germées alfalfa-radis-fenouil	Sprouts	O26	+	O26	-	-	-	-			-	-	-	-	-	ND	ND	ND	ND	5	a		
2024	227	Graines germées de poireaux	Sprouts (leeks)	-	-	/	+	+	+	+	-	+	+	+	+	+	+	PD	PD	PD	PD	5	a		
2024	228	Percil frais	Fresh parsley	O26	+	O26	+	+	+	+	+		+	+	+	+	+	PA	PA	PA	PA	5	a		
2023	300	Chou-fleur coupés frais	Fresh cut cauliflower	-	-	/	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		
2023	302	Baby carottes et radis frais	Fresh baby carrots and radishes	Stx (O145)	-	O145	-	-	-	-	-		-	-	-	-	-	NA	NA	NA	NA	5	b		

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

RAW PRODUCES AND FRUITS																									
Date	Sample N°	Product (french name)	Product	Reference method: ISO/TS 13136♦		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR ISO		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx	stx	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae				
2023	306	Chou-fleur coupés frais	Fresh cut cauliflower	O157	+	O157	+	+	+	+		+	+	+	+	PA	PA	PA	PA	5	b				
2023	735	Haricots verts crus frais	Fresh raw green beans	Stx (O111)	-	O111	-	-	-	-		-	-	-	-	NA	NA	NA	NA	5	b				
2023	736	Carottes râpées natures	Fresh grated carrots	-	-	/	-	-	-	-	-	-	-	-	-	NA	NA	NA	NA	5	b				
2023	946	Spaguettis de courgettes frais	Fresh cut zucchini	O103	+	O103	+	+	+	+		+	+	+	+	PA	PA	PA	PA	5	b				
2023	947	Spaguettis de courgettes frais	Fresh cut zucchini	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	b			
2023	1086	Haricots verts surgelés	Frozen green beans	O26	+	O26	+	+	+	+		+	+	+	+	PA	PA	PA	PA	5	b				
2023	1087	Petits pois surgelés	Frozen peas	-	-	/	+/+/+	+/+/+	+/+/+	+/+/+	-	-	IMS O103-	-	-	-	PPNA	PPNA	PPNA	PPNA	5	b			
2023	1088	Courgettes en rondelles surgelées	Frozen zucchini	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	b			
2023	5950	Chou-fleur coupés frais	Cauliflower	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	b			
2023	5951	Mélange crudités frais (mais, carottes, salade, radis et chou rouge)	Vegetables mix	O157	+	O157	-	-	-	-						ND	ND	ND	ND	5	b				
2023	5952	Carottes râpées fraîches natures	Grated carrots	-	-		+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	b			
2023	6100	Haricots beurre surgelés	Frozen beans	O157	+	O157	-	-	-	-			-	-	-	-	ND	ND	ND	ND	5	b			
2023	6101	Petits pois surgelés	Frozen peas	O26	+	O26	-	-	-	-			-	-	-	-	ND	ND	ND	ND	5	b			
2023	303	Mangue coupée	Cut mango	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	5	c			
2023	304	Ananas coupé	Cut pineapple	-	-	/	-	-	-	-	-		-	-	-	-	NA	NA	NA	NA	5	c			
2023	305	Salade fraiche de 5 fruits (Ananas, orange, pomme, kiwi, mangue)	Fresh mix fruits (pineapple, orange, apple, kiwi, mango)	Stx (O145)	-	O145	-	-	-	-	-					NA	NA	NA	NA	5	c				
2023	308	Mangue coupée	Cut mango	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	c			
2023	309	Ananas coupé	Cut pineapple	-	-	/	+	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	c			

RAW PRODUCE AND FRUITS																									
Date	Sample N°	Product (french name)	Product	Reference method: ISO/TS 13136♦		Alternative method: iQ-Check STEC VirX																		Category	Type
						After storage BPW + STEC Selective Supp 72h at 5 ± 3°C																			
						Final PCR result				Confirmation			Final result iQ-Check STEC VirX				Agreement after storage								
				Final result PCR ISO		ISO/TS 13136		CFX96					CFX Opus		CFX96		CFX Opus		CFX96		CFX Opus				
								without FDRS	with FDRS	without FDRS	with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confir-matory tests	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS	Without FDRS	With FDRS			
				Final result stx/eae	Serogroup	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx/eae	stx	stx	stx/eae	stx/eae	stx/eae	stx/eae		
2023	376	Ananas surgelé en morceaux	Frozen cut pineapple	O157	+	O157	+	+	+	+		+	+	+	+	PA	PA	PA	PA	5	c				
2023	740	Smoothie ananas noix de coco non pasteurisé	Unpasteurized pineapple coconut smoothie	Stx (O145)	-	O145	-	-	-	-		-	-	-	-	NA	NA	NA	NA	5	c				
2023	948	Salade de fruits rouges, myrtille, framboise	Fresh fruits salad (blueberry, raspberry)	Stx (O145)	-	O145	-	-	-	-		-	-	-	-	NA	NA	NA	NA	5	c				
2023	949	Salade de mangue, myrtille, framboise	Fresh fruits salad (mango, blueberry, raspberry)	O157	+	O157	-	-	-	-		-	-	-	-	ND	ND	ND	ND	5	c				
2023	950	Mélange ananas, fraise, myrtille	Fresh fruit salad (pineapple, strawberry, blueberry)	O26	+	O26	+	+	+	+		+	+	+	+	PA	PA	PA	PA	5	c				
2023	1090	Fraises entières surgelées	Frozen strawberries	-	-	/	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	c				
2023	5921	Salade de fruits ananas-myrtilles-framboises	Fresh fruit salad	stx1/eae	+	O26	-	-	-	-		-	-	-	-	ND	ND	ND	ND	5	c				
2023	5922	Ananas découpé	Pineapple	-	-	/	+	+	+	+		+	+	+	+	PD	PD	PD	PD	5	c				
2023	5923	Ananas découpé	Pineapple	O26	+	O26	-	-	-	-		-	-	-	-	ND	ND	ND	ND	5	c				
2024	229	Salade de fruits frais	Fresh fruit salad	O145	+	O145	+	+	+	+		-	+	+	+	PA	PA	PA	PA	5	c				
2024	230	Ananas découpé	Cut pineapple	O157	+	O157	+	+	+	+		+		+	+	PA	PA	PA	PA	5	c				



Appendix 5 - RLOD: raw data

Matrix : Raw cow milk cheese ("Reblochon au lait cru")
Strain: *E. coli* O26 375-122
stx1+/ stx2+ / eae+
48 h at 3°C ± 2°C

Aerobic mesophilic flora: 1,2 10⁸ CFU/g

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*			Alternative method: iQ-Check STEC VirX											ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10) Result	Positive/ Total CFX96 and CFX Opus
						+225ml BPW + STEC Selective Supp, 16 h at 41,5±1°C (1/10)												
			PCR Result	Final result ISO/TS 13136		Positive/ Total	CFX 96		CFX OPUS		Confirmation			Final result iQ-Check STEC VirX CFX96 and CFX Opus				
							Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS			
				Global result	Serogroup		stx	stx	stx	stx	stx	stx	stx	stx				
8051	0	/	-	-	/	0/5	-	-	-	-	-		-	-	-	0/5		
8052			-	-	/		-	-	-	-	-		-	-	-			
8053			-	-	/		-	-	-	-	-		-	-	-			
8054			-	-	/		-	-	-	-	-		-	-	-			
8055			-	-	/		-	-	-	-	-		-	-	-			
8056	1	1,9	-	-	/	5/20	+	+	+	+	+		+	+		12/20		
8057			O26	+	O26		+	+	+	+	+		+	+				
8058			-	-	/		+	+	+	+	+		+	+				
8059			O26	+	O26		+	+	+	+	+		+	+				
8060			O26	+	O26		+	+	+	+	+		+	+				
8061			-	-	/		+	+	+	+	+		+	+				
8062			-	-	/		-	-	-	-	-		-	-	-			
8063			O26	+	O26		+	+	+	+	+		+	+				
8064			-	-	/		+	+	+	+	+		+	+				
8065			-	-	/		+	+	+	+	+		+	+				
8066			-	-	/		-/-	+/+	-	+	-	-	-	-	-		-	
8067			-	-	/		-	-	-	-	-		-	-	-		-	
8068			-	-	/		-	-	-	-	-		-	-	-		-	
8069			-	-	/		+	+	+	+	+		+	+	+			
8070			-	-	/		-	-	-	-	-		-	-	-		-	
8071			-	-	/		+	+	+	+	+		+	+	+			
8072			-	-	/		-	-	-	-	-		-	-	-		-	
8073			-	-	/		-	-	-	-	-		-	-	-		-	
8074			-	-	/		-	-	-	-	-		-	-	-		-	
8075			O26	+	O26		+	+	+	+	+		+	+	+			
8076	2	5,7	-	-	/	3/5	+	+	+	+	+		+	+		5/5		
8077			O26	+	O26		+	+	+	+	+		+	+				
8078			O26	+	O26		+	+	+	+	+		+	+				
8079			-	-	/		+	+	+	+	+		+	+				
8080			O26	+	O26		+	+	+	+	+		+	+				

♦ Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)



Matrix: Ground beef
Strain: *E. coli* O157:H7 Ad683
stx1-/ stx2+ / eae+
48 h at 3°C ± 2°C

Aerobic mesophilic flora: 6,0 10³ CFU/g

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*			Alternative method: iQ-Check STEC VirX										ISO 16140 requirements BPW PW 41,5°C, 18 h at 41,5±1°C (1/10) Result	Positive/ Total CFX96 and CFX Opus
						+1125ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)											
			PCR Result	Final result ISO/TS 13136		Positive/Total	CFX 96		CFX OPUS		Confirmation		Final result iQ-Check STEC VirX CFX96 and CFX Opus				
							Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS	CONF A: Final result direct streaking	Final result all confirmatory tests	Without FDRS	With FDRS			
				Global result	Serogroup		stx	stx	stx	stx	stx	stx	stx	stx			
71	0	/	-	-	/	0/5	-	-	-	-	-	-	-	-	-	0/5	
72			-	-	/		-	-	-	+	-	-	-	-	-		
73			-	-	/		-	+/+/-	-	-	-	-	-	-	-		
74			-	-	/		-	-	-	-	-	-	-	-	-		
75			-	-	/		-	-	-	-	-	-	-	-	-		
82	1	0,9	O157	+	O157	7/20	+	+	+	+	+	+	+	+	+	9/20	
83			O157	+	O157		-	-	-	-	-	-	-	-	-		
84			-	-	/		-	-	-	-	-	-	-	-	-		-
85			-	-	/		-	-	-	-	-	-	-	-	-		-
86			-	-	/		+	+	+	+	+	+	+	+	+		+
87			-	-	/		+	+	+	+	+	+	+	+	+		+
88			-	-	/		-	-	-	-	-	-	-	-	-		-
89			-	-	/		+	+	+	+	+	+	+	+	+		+
90			-	-	/		-	-	-	-	-	-	-	-	-		-
91			-	-	/		-	-	-	-	-	-	-	-	-		-
92			O157	+	O157		-	-	-	-	-	-	-	-	-		-
93			-	-	/		-	-	-	-	-	-	-	-	-		-
94			-	-	/		+	+	+	+	+	+	+	+	+		+
95			O157	+	O157		+	+	+	+	+	+	+	+	+		+
96			O157	+	O157		+	+	+	+	+	+	+	+	+		+
97			-	-	/		-	-	-	-	-	-	-	-	-		-
98			O157	+	O157		-	-	-	-	-	-	-	-	-		-
99			O157	+	O157		-	-	-	-	-	-	-	-	-		-
100			-	-	/		+	+	+	+	+	+	+	+	+		+
101			-	-	/		+	+	+	+	+	+	+	+	+		+
76	2	4,2	O157	+	O157	5/5	+	+	+	+	+	+	+	+	+	5/5	
77			O157	+	O157		+	+	+	+	+	+	+	+	+		
78			O157	+	O157		+	+	+	+	+	+	+	+	+		
79			O157	+	O157		+	+	+	+	+	+	+	+	+		
80			O157	+	O157		+	+	+	+	+	+	+	+	+		+

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)



Matrix: Raw dough (Pizza)
Strain: *E. coli* O26 Ad3385
stx1-/ stx2+ / eae+
48 h at 3°C ± 2°C

Aerobic mesophilic flora :2,6.10^5 CFU/g

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136			Alternative method: iQ-Check STEC VirX										Positive/ Total
						375 g +1125ml BPW + STEC Selective Supp, 18 h at 41,5 ± 1°C (d 1/4)										
			PCR Result	Final result ISO/TS 13136		Positive/Total	CFX 96		CFX OPUS		Confirmation			Final result iQ-Check STEC VirX		
							Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests	Without FDRS	With FDRS	
				Global result	Serogroup											
2051	0	/	-	-		0/5	-	-	-	-	-	-	-	-	0/5	
2052			-	-			-	-	-	-	-	-	-	-		
2053			-	-			-	-	-	-	-	-	-	-		
2054			-	-			-	-	-	-	-	-	-	-		
2055			-	-			-	-	-	-	-	-	-	-		
2056	1	0,7	O26	+	O26	9/20	+	+	+	+	+	+	+	+	8/20	
2057			-	-			-	-	-	-	-	-	-	-		
2058			O26	+	O26		+	+	+	+	+	+	+	+		+
2059			-	-			+	+	+	+	+	+	+	+		+
2060			-	-			+	+	+	+	+	+	+	+		+
2061			-	-			-	-	-	-	-	-	-	-		-
2062			O26	+	O26		-	-	-	-	-	-	-	-		-
2063			O26	+	O26		+	+	+	+	+	+	+	+		+
2064			-	-			+/+/+	+/+/+	+	+	-	-	-(IMS-)	-		-
2065			O26	+	O26		-	-	-	-	-	-	-	-		-
2066			-	-			+	+	+	+	+	+	+	+		+
2067			-	-			-	-	-	-	-	-	-	-		-
2068			-	-			-	-	-	-	-	-	-	-		-
2069			O26	+	O26		-	-	-	-	-	-	-	-		-
2070			-	-			-	-	-	-	-	-	-	-		-
2071			O26	+	O26		-	-	-	-	-	-	-	-		-
2072			-	-			-	-	-	-	-	-	-	-		-
2073			O26	+	O26		-	-	-	-	-	-	-	-		-
2074			-	-			+	+	+	+	+	+	+	+		+
2075			O26	+	O26		+/+/+	+/+/+	+	+	+	+	+	+		+
2076	2	4	O26	+	O26	5/5	+	+	+	+	+	+	+	+	5/5	
2077			O26	+	O26		+	+	+	+	+	+	+	+		
2078			O26	+	O26		+	+	+	+	+	+	+	+		
2079			O26	+	O26		+	+	+	+	+	+	+	+		
2080			O26	+	O26		+	+	+	+	+	+	+	+		



Matrix: Pasta salad
Strain: *E. coli* O103 Ad3318 (salad)
stx1+/ stx2- / eae+
48 h at 3°C ± 2°C

Aerobic mesophilic flora: 1,2.10⁴ CFU/g

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136			Alternative method: iQ-Check STEC VirX										Positive/ Total CFX96 and CFX Opus
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)										
						CFX 96		CFX OPUS		Confirmation			Final result iQ-Check STEC VirX CFX96 and CFX Opus			
			Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS	CONF A: Final result direct streaking	CONF B: Final result alternative protocol	Final result all confirmatory tests				Without FDRS	With FDRS		
							stx	stx	stx	stx	stx	stx	stx	stx	stx	
783	0	/	-	-	/	0/5	-	-	-	-	-		-	-	0/5	
784			-	-	/		-	-	-	-	-	-	-	-		
785			-	-	/		-	-	-	-	-	-	-	-		
786			-	-	/		-	-	-	-	-	-	-	-		
787			-	-	/		-	-	-	-	-	-	-	-		
788	1	1,2	O103	+	O103	15/20	+	+	+	+	+		+	+	13/20	
789			-	-	/		+	+	+	+	+	+	+	+		
790			O103	+	O103		+	+	+	+	+	+	+	+		+
791			-	-	/		+	+	+	+	+	+	+	+		+
792			O103	+	O103		-	-	-	-	-	-	-	-		-
793			-	-	/		+	+	+	+	+	+	+	+		+
794			O103	+	O103		+	+	+	+	+	+	+	+		+
795			O103	+	O103		-	-	-	-	-	-	-	-		-
796			O103	+	O103		+	+	+	+	+	+	+	+		+
797			O103	+	O103		+	+	+	+	+	+	+	+		+
798			-	-	/		+	+	+	+	+	+	+	+		+
799			O103	+	O103		+	+	+	+	+	+	+	+		+
800			O103	+	O103		+	+	+	+	+	+	+	+		+
801			O103	+	O103		+	+	+	+	+	+	+	+		+
802			O103	+	O103		-	-	-	-	-	-	-	-		-
803			O103	+	O103		-	-	-	-	-	-	-	-		-
804			-	-	/		-	-	-	-	-	-	-	-		-
805			O103	+	O103		-	-	-	-	-	-	-	-		-
806			O103	+	O103		+	+	+	+	+	+	+	+		+
807			O103	+	O103		-	-	+/-/-	-	-	-	-	-		-
808	2	8,1	O103	+	O103	5/5	+	+	+	+	+		+	+	5/5	
809			O103	+	O103		+	+	+	+	+	+	+	+		
810			O103	+	O103		+	+	+	+	+	+	+	+		
811			O103	+	O103		+	+	+	+	+	+	+	+		
812			O103	+	O103		+	+	+	+	+	+	+	+		+



Matrix: Cut fruits (pineapple, strawberry and blueberries salad)
Strain: *E. coli* O145 Ad3181

stx1+ / stx2+ / eae+

48 h at 3°C ± 2°C

Aerobic mesophilic flora: 1,9 10⁴ CFU/g

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136♦			Alternative method: iQ-Check STEC VirX												Positive/ Total CFX96		Positive/ Total CFXOPUS	
						25 g +225ml BPW, 18 h at 41,5 ± 1°C (d 1/10)															
			PCR Result	Final result ISO/TS 13136		Positive/Total	CFX96		CFX OPUS		Confirmation		Final result iQ-Check STEC VirX CFX96		Final result iQ-Check STEC VirX CFX Opus						
							Final PCR result without FDRS	Final PCR result with FDRS	Final PCR result without FDRS	Final PCR result with FDRS			Without FDRS	With FDRS	Without FDRS	With FDRS					
				Global result	Serogroup		stx/eae	stx/eae	stx/eae	stx/eae	CONF A: Final result direct streaking		stx/eae	stx/eae	stx/eae	stx/eae	w/o FDRS	with FDRS	w/o FDRS	with FDRS	
59	/	0	-	-	/	0/5	-	-	-	-	-	-	-	-	-	-	0/5	0/5	0/5	0/5	
60			-	-	/		-	-	-	-	-	-	-	-	-						
61			-	-	/		-	-	-	-	-	-	-	-	-						
62			-	-	/		-	-	-	-	-	-	-	-	-						
63			-	-	/		-	-	-	-	-	-	-	-	-						
64	Low	1,0	+O145	+	O145	10/20	+	+	+	+	+	+	+	+	+	+	11/20	11/20	11/20	11/20	
65			-	-	/		+	+	+	+	+	+	+	+	+	+					
66			+O145	+	O145		+	+	+	+	+	+	+	+	+	+					
67			-	-	/		-	-	-	-	-	-	-	-	-	-					
68			-	-	/		+	+	+	+	+	+	+	+	+	+					
69			+O145	+	O145		-	-	-	-	-	-	-	-	-	-					
70			+O145	+	O145		-	-	-	-	-	-	-	-	-	-					
71			-	-	/		+	+	+	+	+	+	+	+	+	+					
72			+O145	+	O145		-	-	-	-	-	-	-	-	-	-					
73			-	-	/		+	+	+	+	+	+	+	+	+	+					
74			-	-	/		+	+	+	+	+	+	+	+	+	+					
75			-	-	/		+	+	+	+	+	+	+	+	+	+					
76			+O145	+	O145		-	-	-	-	-	-	-	-	-	-					
77			+O145	+	O145		+	+	+	+	+	+	+	+	+	+					
78			-	-	/		+	+	+	+	+	+	+	+	+	+					
79			-	-	/		-	-	-	-	-	-	-	-	-	-					
80			-	-	/		-	-	-	-	-	-	-	-	-	-					
81			+O145	+	O145		-	-	-	-	-	-	-	-	-	-					
82			+O145	+	O145		+	+	+	+	+	+	+	+	+	+					
83			+O145	+	O145		-	-	-	-	-	-	-	-	-	-					
84	High	3,7	+O145	+	O145	5/5	+	+	+	+	+	+	+	+	+	+	5/5	5/5	5/5	5/5	
85			+O145	+	O145		+	+	+	+	+	+	+	+	+						
86			+O145	+	O145		+	+	+	+	+	+	+	+	+						
87			+O145	+	O145		+	+	+	+	+	+	+	+	+						
88			+O145	+	O145		+	+	+	+	+	+	+	+	+						

♦ Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)



Appendix 6 - Inclusivity and exclusivity: raw data

INCLUSIVITY																		
N°	Strain	Serogroup		stx1	stx2	eae	Reference	Origin	Inoculation level CFU/225ml	16 h à 41,5°C BPW supp selective STEC								
										Extraction Easy II and PCR with FDRS			Confirmation		Confirmation on typical colonies			
										iQ Check STEC VirX - PCR results			Direct streaking		iQ Check STEC VirX - PCR results			
										stx (Ct)	eae (Ct)	CI (Ct)	CH STEC	TBX	Media	stx (Ct)	eae (Ct)	CI (Ct)
1	<i>Escherichia coli</i>	O26	O26	+	-	+	Ad1741	Raw milk cheese	8	19,08	16,87	36,11	+	+	TBX	18,61	16,12	31,18
2	<i>Escherichia coli</i>		O26	+	-	+	Ad2298	Dairy product	16	18,86	16,39	37,31	+	+	TBX	18,89	16,48	31,17
3	<i>Escherichia coli</i>		O26	-	+	+	Ad2303	Raw milk cheese	32	19,01	15,51	N/A	+	+	TBX	19,14	16,82	31,12
4	<i>Escherichia coli</i>		O26	-	+	+	Ad2671	Dairy product	36	18,13	16,52	31,09	+	+	TBX	18,25	16,29	31,49
5	<i>Escherichia coli</i>		O26:H11	-	+	+	1377-138 LOT 3	Meat	20	18,34	15,27	32,75	+	+	TBX	18,40	16,46	32,08
6	<i>Escherichia coli</i>		O26:H11	+ a	-	+	déc-62	Meat	13	19,23	16,82	39,72	+	+	TBX	18,44	16,08	30,86
7	<i>Escherichia coli</i>		O26:H11	-	+ (a)	+	1311-12	Cream	24	18,04	16,14	31,35	+	+	TBX	18,00	15,43	33,33
8	<i>Escherichia coli</i>		O26:H11	+	+ (c,d)	+	375-122	Cheese	28	17,00	16,49	25,06	+	+	TBX	17,12	16,51	32,74
9	<i>Escherichia coli</i>		O26:H11	+	-	+	14-53	Meat	20	19,20	16,75	32,76	+	+	TBX	19,30	16,98	31,45
10	<i>Escherichia coli</i>		O26	+	-	+	Ad3109	Veal meat	25	20,64	18,37	29,82	+	+	CH	19,68	17,74	34,02
11	<i>Escherichia coli</i>	O103	O103	+	-	+	Ad1772	Clinic	26	18,62	16,06	N/A	+	+	TBX	19,28	16,89	31,47
12	<i>Escherichia coli</i>		O103:H2	+	+	+	Ad1773	Cheese	16	18,51	14,52	N/A	st	+	TBX	18,76	16,29	31,38
13	<i>Escherichia coli</i>		O103:H2	+	-	+	1144	Dairy product	35	18,90	15,14	N/A	+	+	TBX	18,72	16,28	31,27
14	<i>Escherichia coli</i>		O103:H2	+	+	+	821-76	Dairy product	30	17,11	16,26	N/A	+	+	TBX	16,71	16,27	30,49
15	<i>Escherichia coli</i>		O103:H2	+	-	+	56-12	Meat	14	18,08	15,16	N/A	+	+	TBX	18,01	15,40	31,71
16	<i>Escherichia coli</i>		O103:H2	-	+	+	262-03-18-1	Meat	16	18,34	16,45	32,73	st	+	TBX	18,86	17,01	32,93
17	<i>Escherichia coli</i>		O103:H2	+ a	-	+	mars-35	Meat	18	18,79	16,67	33,28	st	+	TBX	18,46	15,94	31,27
18	<i>Escherichia coli</i>		O103:H2	+	-	+	72-11	Meat	20	18,88	17,12	34,91	+	+	TBX	18,74	16,24	32,13
19	<i>Escherichia coli</i>		O103	+	-	+	Ad2847	Cheese	35	19,15	17,47	29,39	+	+	CH	18,79	16,90	35,45
20	<i>Escherichia coli</i>		O103:H2	+	-	+	V92-362	Meat	16	18,20	14,99	N/A	+	+	TBX	17,62	15,82	31,20
21	<i>Escherichia coli</i>	O111	O111:H8	+	+	+	Ad511	Clinic	16	15,44	14,19	26,89	+	+	TBX	16,23	15,66	31,05
22	<i>Escherichia coli</i>		O111	+	+	+	Ad981	Animal	15	17,80	14,90	N/A	+	+	TBX	18,41	16,08	31,13
23	<i>Escherichia coli</i>		O111:H8	+ (a)	+ (c,d)	+	1251-31	Dairy product	47	15,83	14,99	24,34	+	+	TBX	16,61	16,19	30,40
24	<i>Escherichia coli</i>		O111:H8	+	-	+	1391-40	Dairy product	39	18,00	15,22	N/A	+	+	TBX	18,59	16,17	30,83
25	<i>Escherichia coli</i>		O111:H8	+ (a)	+ (c,d)	+	577-54	Dairy product	41	15,93	15,00	N/A	+	+	TBX	16,84	16,27	36,31
26	<i>Escherichia coli</i>		O111:H8	+ (a)	+ (c,d)	+	593-95	Dairy product	25	16,68	16,39	23,88	+	+	TBX	15,67	15,15	40,22
27	<i>Escherichia coli</i>		O111:H8	+ (a)	+ (c,d)	+	622-4	Dairy product	34	16,96	16,76	31,30	+	+	TBX	17,20	16,75	32,76
28	<i>Escherichia coli</i>		O111	+	-	+	Ad3037	Raw milk cheese	20	19,28	17,62	29,87	+	+	CH	19,35	17,52	33,69
29	<i>Escherichia coli</i>		O111:H8	+	+	+	DEC8b	Clinic	21	17,74	17,91	28,04	+	+	CH	18,43	18,34	28,99
30	<i>Escherichia coli</i>		O111:H8	+	-	+	Ad3021	Unknown	13	19,54	17,62	30,57	+	+	CH	18,71	16,89	35,44
31	<i>Escherichia coli</i>	O145	O145	-	+	+	Ad983	Animal	47	19,92	17,56	35,43	+	+	CH	18,54	16,53	30,30
32	<i>Escherichia coli</i>		O145	-	+	+	Ad2310	Unknown	13	21,22	18,50	32,93	+	+	CH	20,82	18,09	28,89
33	<i>Escherichia coli</i>		O145	+	+	+	Ad2841	Cheese	27	17,78	7,27	30,82	+	+	CH	18,02	17,42	31,99
34	<i>Escherichia coli</i>		O145:H28	-	+	+	2305-1	Meat	26	19,24	17,47	32,19	+	+	CH	18,83	17,92	30,07
35	<i>Escherichia coli</i>		O145:H28	-	+	+	1331-100	Meat	47	19,51	17,37	33,23	+	+	CH	17,72	16,18	30,54
36	<i>Escherichia coli</i>		O145:H28	-	+	+	1502-105	Meat	41	19,52	17,36	33,72	+	+	CH	19,26	17,47	29,76



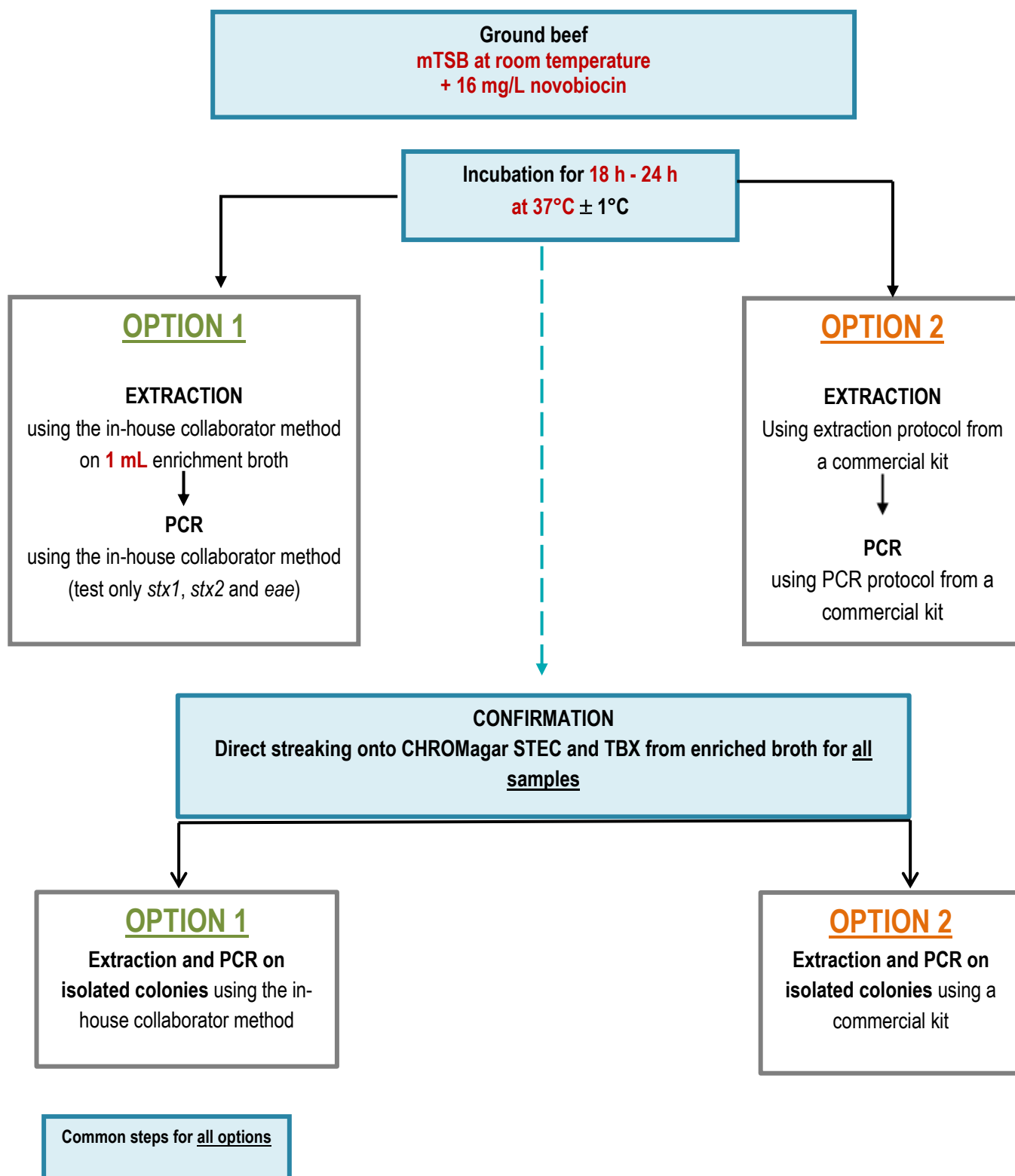
INCLUSIVITY																		
N°	Strain	Serogroup		stx1	stx2	eae	Reference	Origin	Inoculation level CFU/225ml	16 h à 41,5°C BPW supp selective STEC								
										Extraction Easy II and PCR with FDRS			Confirmation		Confirmation on typical colonies			
										iQ Check STEC VirX - PCR results			Direct streaking		iQ Check STEC VirX - PCR results			
										stx (Ct)	eae (Ct)	CI (Ct)	CH STEC	TBX	Media	stx (Ct)	eae (Ct)	CI (Ct)
37	<i>Escherichia coli</i>		O145:H28	-	+	+	1867-177	Meat	32	19,61	17,33	34,08	+	+	CH	18,92	17,00	29,85
38	<i>Escherichia coli</i>		O145:H28	-	+	+	092-4	Meat	48	19,71	17,57	33,05	+	+	CH	18,31	16,47	30,04
39	<i>Escherichia coli</i>		O145	+	-	+	Ad3040	Raw milk cheese	22	20,69	17,26	30,16	+	+	CH	20,44	17,02	37,79
40	<i>Escherichia coli</i>		O145		+	+	Ad3054	Raw milk cheese	27	18,05	17,40	30,62	+	+	CH	17,37	16,87	31,80
41	<i>Escherichia coli</i>	O157	O157:H7	-	+(a)	+	769	Ground beef and pork meat	64	19,59	17,59	33,48	+	white	CH	19,26	17,41	29,69
42	<i>Escherichia coli</i>		O157:H7	-	+(c,d)	+	803	Veal meat	36	19,99	17,72	34,52	+	white	CH	19,24	17,49	29,98
43	<i>Escherichia coli</i>		O157:H7	+(a)	+(c,d)	+	1043	Frozen ground beef	42	17,21	17,20	38,51	+	white	CH	17,01	17,14	24,02
44	<i>Escherichia coli</i>		O157:H7	+	+	+	Ad489	Frozen beef balls	35	18,16	17,46	39,48	+	white	CH	19,07	18,40	26,12
45	<i>Escherichia coli</i>		O157:H7	+	+	+	Ad683	Ground beef	43	19,39	17,41	32,31	+	white	CH	18,86	17,00	29,39
46	<i>Escherichia coli</i>		O157:H7	-	+	+	Ad685	Beef industry environment	28	19,56	17,47	33,61	+	white	CH	18,99	16,95	29,90
47	<i>Escherichia coli</i>		O157:H7	-	+	+	Ad1174	Frozen ground beef	38	19,94	17,89	33,10	+	+	CH	19,25	17,24	30,13
48	<i>Escherichia coli</i>		O157:H7	-	+	+	Ad1745	Raw milk cheese	46	19,30	17,51	32,39	+	white	CH	19,38	17,29	30,18
49	<i>Escherichia coli</i>		O157:H7	-	+	+	52-33N°34	Meat	45	19,18	17,66	34,11	st	+	TBX	18,83	17,09	29,86
50	<i>Escherichia coli</i>		O157:H7	-	+	+	1211-1	Meat	37	19,87	17,99	33,28	+	white	CH	19,54	18,18	29,77
51	<i>Escherichia coli</i>	stx+, eae+, ≠ Top 5	O45:H2	+	-	+	Ad1778	Unknown	16	19,07	17,73	29,58	+	+	CH	23,82	21,86	29,76



EXCLUSIVITY

EXCLUSIVITY											
N°	Strain	Serogroup	Reference	Origin	Genes			Inoculation level CFU/ml	BPW 24h at 37°C		
					stx1	stx2	eae		Extraction Easy II and PCR		
									iQ-Check STEC VirX - PCR results		
									stx (Ct)	eae (Ct)	CI (Ct)
1	<i>Escherichia coli</i>	O26:H11	AEEC 335	Dairy product	-	-	+	4,6E+05	N/A	16,58	30,16
2	<i>Escherichia coli</i>	O157:H26	AEEC 561	Meat product	-	-	+	6,2E+05	N/A	16,57	30,04
3	<i>Escherichia coli</i>	O145:H28	AEEC 1387-177	Dairy product	-	-	+	2,9E+05	N/A	16,73	30,28
4	<i>Escherichia coli</i>	O145:H28-	529-64	Meat product	-	-	-	3,0E+05	N/A	N/A	30,65
5	<i>Escherichia coli</i>	O145:-H28-	236-9	Dairy product	-	-	-	4,8E+05	N/A	N/A	30,68
6	<i>Escherichia coli</i>	O104:H21	Ad516	Clinic	-	-	-	3,9E+05	N/A	N/A	31,52
7	<i>Escherichia coli</i>	O44:H18	Ad519	Clinic	-	-	-	3,4E+05	N/A	N/A	30,44
8	<i>Escherichia coli</i>	O111:H2	Ad513	Clinic	-	-	+	4,7E+05	N/A	16,14	30,23
9	<i>Escherichia coli</i>	O111:H21	Ad508	Clinic	-	-	-	1,1E+05	N/A	N/A	31,38
10	<i>Escherichia coli</i>	O103	Ad1743	Meat product	-	-	-	2,8E+05	N/A	N/A	31,57
11	<i>Escherichia coli</i>	O103	Ad1862	Dairy product	-	-	+	3,7E+05	N/A	15,09	30,01
12	<i>Escherichia coli</i>	O26	Ad1739	Dairy product	-	-	+	3,6E+05	N/A	15,62	29,98
13	<i>Escherichia coli</i>	O26	Ad1864	Meat product	-	-	+	4,1E+05	N/A	15,58	30,17
14	<i>Escherichia coli</i>	O26	Ad2677	Dairy product	-	-	+	5,1E+05	N/A	15,57	30,20
15	<i>Escherichia coli</i>	O157:H7	ENV177	Environment	-	-	+	2,5E+05	N/A	17,17	31,02
16	<i>Escherichia coli</i>	O157:H7	Ad2301	Environment	-	-	+	3,6E+05	N/A	16,16	30,24
17	<i>Escherichia coli</i>	O92:H33	Ad503	Clinic	-	-	-	1,7E+05	N/A	N/A	30,58
18	<i>Escherichia coli</i>	O78:H11	ATCC 35401	Clinic	-	-	-	4,7E+05	N/A	N/A	30,28
19	<i>Escherichia coli</i>	O6:H6	Ad506	Clinic	-	-	-	3,7E+05	N/A	N/A	30,39
20	<i>Escherichia coli</i>	O6:H10	Ad507	Clinic	-	-	-	2,3E+05	N/A	N/A	30,19
21	<i>Escherichia coli</i>	O86:H43	Ad509	Elephant	-	-	-	3,6E+05	N/A	N/A	31,43
22	<i>Escherichia coli</i>	O128:H2	Ad512	Clinic	-	-	+	2,5E+05	N/A	17,14	30,83
23	<i>Escherichia coli</i>	O78:K80:H12	ATCC 43896	Clinic	-	-	-	4,8E+05	N/A	N/A	30,65
24	<i>Escherichia coli</i>	O3:H2	Ad504	Clinic	-	-	-	2,4E+05	N/A	N/A	31,63
25	<i>Escherichia coli</i>	O55:H7	Ad518	Clinic	-	-	+	3,9E+05	N/A	17,75	31,59
26	<i>Escherichia coli</i>	O127:H6	Ad520	Clinic	-	-	+	3,6E+05	N/A	18,56	32,54
27	<i>Escherichia coli</i>	O126	Ad1776	Clinic	-	-	-	2,7E+05	N/A	N/A	30,54
28	<i>Escherichia coli</i>	O45:H2	Ad3084	Beef meat	-	-	-	3,2E+05	N/A	N/A	29,87
29	<i>Escherichia coli</i>	O121	Ad1779	Unknown	-	-	+	2,6E+05	N/A	15,98	31,23
30	<i>Citrobacter rodentium</i>	/	ATCC 51116	Hamster	-	-	-	1,8E+05	N/A	N/A	30,82
31	<i>Escherichia coli</i>	O111: H8-	Ad1774	Clinic	-	+	-	16	18,30	N/A	30,94
32	<i>Escherichia coli</i>	O103:H2	Ad3097	Raw goat milk	+	-	-	49	19,37	N/A	29,94
33	<i>Escherichia coli</i>	O103	Ad3104	Dairy product	+	-	-	49	19,27	N/A	29,92
34	<i>Escherichia coli</i>	O91:H21	13482	Dairy product	+	+ b	-	36	16,37	N/A	31,92
35	<i>Escherichia coli</i>	O113:H21	STEC-19-50	Meat product	-	+	-	23	17,30	N/A	31,57
36	<i>Escherichia coli</i>	/	Ad3030	Raw ewe milk cheese	+	-	-	35	18,26	N/A	29,90
37	<i>Escherichia coli</i>	/	Ad3200	Slaughterhouse	+	-	-	44	20,79	N/A	29,98
38	<i>Escherichia coli</i>	/	Ad3103	Beef meat	+	+	-	29	16,69	N/A	26,88
39	<i>Escherichia coli</i>	/	Ad3105	Lamb meat	+	-	-	28	18,03	N/A	29,88
40	<i>Escherichia coli</i>	/	Ad3108	Lamb meat	+	-	-	35	17,92	N/A	30,25
41	<i>Escherichia coli</i>	/	Ad3188	Curdled raw goat milk	+	+	-	48	16,47	N/A	26,20

Appendix 7 – Flow diagram of the ISO/TS 13136 method applied during the inter-laboratory study



OPTION 1: In house method

EXTRACTION:

using the in-house collaborator method
on **1 mL** enrichment broth



PCR:

using the in-house collaborator method

CONFIRMATION:

Streaking 10 µL of enriched samples onto CHROMagar STEC and TBX



Incubation for 18 - 24 h at 37°C ± 1°C



Reading plate

No typical colonies



Negative confirmation

Typical colonies



Streak at least one colony
on PCA plate



Extraction and PCR on one typical colony
using the in-house collaborator method



Indol test

OPTION 2: using extraction and PCR protocols from commercial kit

See kit insert

EXTRACTION:

Using extraction protocol from a commercial kit



PCR:

Using PCR protocol from a commercial kit

CONFIRMATION:

Streaking 10 µL of enriched samples onto CHROMagar STEC and TBX



Incubation for 18 - 24 h at 37°C ± 1°C



Reading plate

No typical colonies



Negative
confirmation

Typical colonies



Streak at least one colony on
PCA plate



Extraction and PCR protocols from a commercial kit



Indol test



Appendix 8 - Information on protocols applied for the ILS

	ISO/TS 13136 Reference method					iQ-Check STEC VirX alternative method	
	Option retained	Extraction kit used	Volume of enriched sample used for extraction	PCR kit used or reagents	Thermocycler used	With FDRS	Without FDRS
A1 and A2	1	NZYTEch Bacterial Cell Lysis Buffer (In-house procedure)	200 µL	SsoAdvanced Universal Probes Supermix, Probes and primers from ISO /TS 13136, IAC = pUC19)	BIO-RAD CFX 96 Deep Well Touchscreen	/	X
B1 and B2	1	InstaGene™ Matrix #7326030 Bio-Rad	1 mL	Primer/Probe Mix for stx1/stx2; IDT PrimeTime Gene Expression Master Mix; Positive control - Synthetic construct	BIO-RAD CFX96	X	/
C	1	Instagene (Bio-Rad)	1 mL	QuantiFast Pathogen (qiagen), probe and primer (Eurofin genomics)	CFX (BIO-RAD)	/	X
D	1	Instagene Matrix - Bio-Rad	1 mL	TaqMan Universal PCR MM - Exogenous Internal Positive Control	CFX 96 Deep Well Bio-Rad	/	X
E	1	iQ-Check STEC VirX Kit 1	500 µL	TAQ UNIVERSAL PROBES SUPERMIX (BIO-RAD),I PC DNA (EUROGENTEC),IPC MIX (EUROGENTEC), PROBES STX1-STX2- EAE, PRIMERS STXf - STXr - EAEf - EAEr (METABION)	CFX096	/	X
F	1	Invisorb Spin Universal Kit (INVITEK)	200 µL	Screen - STEC Detection Kit	Real Time PCR Detection Systems CFX96	/	X
G		Instagene matrix Bio-Rad	1 mL	2x Universal Taqman PCR master mix (Applied Biosystems); probes 10 micromol (Eurofins), primers 20micromol (Metabion), TaqMan Exogenous Internal Positive Control Reagents (Applied Biosystems)	GENEVISION OPTICON II SYSTEMS	/	X



	ISO/TS 13136 Reference method					iQ-Check STEC VirX alternative method	
	Option retained	Extraction kit used	Volume of enriched sample used for extraction	PCR kit used or reagents	Thermocycler used	With FDRS	Without FDRS
H	1	MagPurix Bacterial Dna Extraction kit (Zinexts) and MagPurix EVO automated system	1 mL	Primers: Metabion Probes: Eurofins PCR RT Master mix: Master mix Low Rox (Fisher Molecular Biology) Internal control: Exo IPC Mix with Exo IPC DNA (Eurogentec)	AriaMX real time PCR System (Agilent)	/	X
I	2	Extraction type 2	50 µL	GeneDisc STEC	GeneDisc Cyclor PALL	/	X
J	2	PALL	50 µL	GeneDisc STEC 06	GeneDisc Cyclor PALL	X	/
K	2	Extraction Pack Food2	50 µL	GeneDisc Plate STEC 12	GeneDisc Cyclor PALL	/	X
ADRIA	1	QIAGEN Dneasy Blood and Tissue kit	1 mL	Primers: Eurofins MWG/operon Probes: Doublel Dye probes Eurogentec Internal Control Positive: Applied Biosystem Amplification mix: iQ Supermix BIO-RAD	CFX 96 Deep Well Bio-Rad	X	X

Appendix 9 - Inter-laboratory study: raw data

Collaborator **A1**
Aerobic mesophilic flora: 9,6 10⁶ CFU/g

Sample N°	Reference method : ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result	Agreement	
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION															
													A : Direct streaking							if necessary B : Subculture								
	PCR results	Confirmation					Final Result	stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	Reading		Confirmation on typical colony			Reading		Confirmation on typical colony										
		Direct streaking											iQ-Check® STEC VirX PCR result					iQ-Check® STEC VirX PCR result										
stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR	Result	stx	Resul (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)				
5	stx1/2 -/eae-	-	-			-	-	N/A	45,65	30,1	-	-	-												-	NA		
7	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30,17	-	-	-												-	NA		
8	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30,27	-	-	-												-	NA		
12	stx1/2 -/eae-	st	st			-	-	36,38	38,08	30,18	+	x=1; d	st	CH	Positive	N/A	41,72	31,34							-	PPNA		
14	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30,25	-	-	-												-	NA		
15	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30,07	-	-	-												-	NA		
20	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30,14	-	st	-												-	NA		
24	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30,24	-	-	-												-	NA		
1	stx1/2 -/eae-	-	-			-	-	31,8	32,01	30,44	+	P	M	CH	Positive	18,43	17,45	31,28							+	PD		
2	stx1+/eae+	P	M	CH	positive	Stx1/2+/eae+	+	+	31,03	31,36	30,83	+	P	M	CH	Positive	20,05	19,01	30,76						+	PA		
6	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30,53	-	x=1; d	-	CH	Positive	19,09	18,31	30,64							-	NA		
11	stx1+/eae+	M	M	CH	positive	Stx1/2+/eae+	+	+	26,08	25,56	29,88	+	M	M	CH	Positive	19,45	18,83	30,61						+	PA		
16	stx1/2 -/eae-	-	-			-	-	29,72	29,28	30,38	+	M	m	CH	Positive	18,16	17,67	31,02							+	PD		
18	stx1+/eae+	M	M	CH	positive	Stx1/2+/eae+	+	+	27,07	26,81	29,85	+	M	M	CH	Positive	18,3	17,23	30,75						+	PA		
21	stx1/2 -/eae-	-	-			-	-	29,64	29,22	29,83	+	M	m	CH	Positive	18,36	17,88	30,54							+	PD		
22	stx1/2 -/eae-	-	-			-	-	N/A	N/A	29,98	-	-	-												-	NA		
3	stx1+/eae+	P	M	CH	positive	Stx1/2+/eae+	+	+	26,63	26,16	30,03	+	P	M	CH	Positive	19	18,33	30,29						+	PA		
4	stx1+/eae+	P	M	CH	positive	Stx1/2+/eae+	+	+	26,29	25,95	29,64	+	P	M	CH	Positive	22,05	21,43	30,34						+	PA		
9	stx1+/eae+	P	M	CH	positive	Stx1/2+/eae+	+	+	26,07	25,7	29,96	+	P	M	CH	Positive	18,2	17,19	30,42						+	PA		
10	stx1+/eae+	M	M	CH	positive	Stx1/2+/eae+	+	+	27,6	27,55	30,04	+	M	M	CH	Positive	18,49	17,68	30,42						+	PA		
13	stx1+/eae+	M	M	CH	positive	Stx1/2+/eae+	+	+	25,83	25,75	30	+	M	M	CH	Positive	20,29	19,46	31,18						+	PA		
17	stx1+/eae+	M	M	CH	positive	Stx1/2+/eae+	+	+	27,06	26,76	30,22	+	M	M	CH	Positive	19,33	18,89	30,46						+	PA		
19	stx1+/eae+	P	M	CH	positive	Stx1/2+/eae+	+	+	23,78	23,95	29,4	+	P	M	CH	Positive	17	16,26	30,76						+	PA		
23	stx1+/eae+	P	M	CH	positive	Stx1/2+/eae+	+	+	22,88	22,38	28,99	+	P	M	CH	Positive	17,55	17,03	30,96						+	PA		

CollaboratorA2
Aerobic mesophilic flora: 1,0 10⁶ CFU/g,

Sample N°	Reference method: ISO/TS 13136							iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result	Agreement	
								Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION															
												A: Direct streaking								if necessary B: Subculture							
	PCR results	Confirmation						Final Result	stx1 & stx2 (FAM)	eae (Cy5)		IC (HEX)	Reading		Confirmation on typical colony				Reading		Confirmation on typical colony						
		Direct streaking													iQ-Check® STEC VirX PCR result						iQ-Check® STEC VirX PCR result						
stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR	Result	stx	Resul (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)			
29	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30.27	-	-	-													-	NA
30	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30.01	-	-	-													-	NA
33	stx1/2 -/eae-	-	-			-	-	38.03	39.70	30.03	+	-	-													-	PPNA
37	eae+	-	-			-	-	N/A	N/A	30.02	-	st	st													-	NA
39	stx1/2 -/eae-	-	-			-	-	35.23	35.48	29.70	+	P	M	CH	positive	18.12	17.48	30.55								+	PD
42	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30.07	-	M	M	CH	positive	18.13	17.30	30.15								-	NA
45	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30.10	-	-	-													-	NA
48	stx1/2 -/eae-	-	-			-	-	N/A	N/A	30.18	-	d	-	CH	positive	17.09	16.36	30.31								-	NA
25	stx1/2 -/eae-	-	-			-	-	28.89	28.96	29.71	+	P	M	CH	positive	16.59	15.99	30.76								+	PD
27	stx1/2 -/eae-	-	-			-	-	27.84	27.46	30.12	+	M	M	CH	positive	16.74	16.34	30.77								+	PD
28	stx1+/-eae+	P	M	CH	positive	stx1+/-eae+	+	+	36.65	36.47	30.38	+	P	M	CH	positive	17.93	16.99	30.61							+	PA
32	stx1+/-eae+	P	M	CH	positive	stx1+/-eae+	+	+	30.19	29.66	29.91	+	P	M	CH	positive	18.05	17.45	30.15							+	PA
34	stx1/2 -/eae-	-	-			-	-	29.36	25.70	29.60	+	M	M	CH	positive	19.23	18.80	30.22								+	PD
35	stx1/2 -/eae-	-	-			-	-	N/A	40.35	30.10	-	x=1; d	-	CH	positive	19.05	18.42	30.32								-	NA
40	stx1/2 -/eae-	-	-			-	-	32.39	31.84	30.04	+	d	-												-	PPNA	
44	stx1/2 -/eae-	-	-			-	-	N/A	N/A	29.98	-	-	-													-	NA
26	stx1/2 -/eae-	-	-			-	-	27.40	27.48	29.65	+	P	M	CH	positive	17.61	16.85	30.70								+	PD
31	stx1/2 -/eae-	-	-			-	-	27.89	27.40	29.77	+	M	M	CH	positive	18.12	17.40	30.61								+	PD
36	stx1/2 -/eae-	-	-			-	-	27.22	26.92	29.90	+	P	M	CH	positive	18.67	18.19	31.00								+	PD
38	stx1/2 -/eae-	-	-			-	-	26.10	25.96	29.36	+	M	M	CH	positive	18.65	18.48	30.1								+	PD
41	stx1/2 -/eae-	-	-			-	-	27.28	27.30	30.03	+	P	M	CH	positive	18.12	17.48	30.55								+	PD
43	stx1+/-eae+	P	M	CH	positive	stx1+/-eae+	+	+	27.42	27.45	29.61	+	P	M	CH	positive	18.13	17.30	30.15							+	PA
46	stx1/2 -/eae-	-	-			-	-	26.51	26.26	29.46	+	M	M	CH	positive	18.57	18.01	30.32								+	PD
47	stx1/2 -/eae-	-	-			-	-	25.70	25.17	29.43	+	M	M	CH	positive	19.19	18.62	30.13								+	PD

Collaborator

B1

Aerobic mesophilic flora: 6,3.10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result	Agreement		
									Easy II protocol WITH FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION																
													A: Direct streaking									if necessary B: Subculture							
	PCR results	Confirmation						Final Result	stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)		Reading		Confirmation on typical colony			Reading		Confirmation on typical colony									
		Direct streaking	Result	iQ-Check® STEC VirX PCR result			iQ-Check® STEC VirX PCR result																						
stx	CHROMagar STEC			TBX	Plate used	Indol	PCR	Resul (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)					
5	N/A	-	-	-	-	-	-	-	N/A	N/A	32,32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
7	N/A	-	-	-	-	-	-	-	N/A	N/A	31,93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
8	N/A	-	-	-	-	-	-	-	N/A	N/A	31,755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
12	N/A	-	-	-	-	-	-	-	N/A	N/A	32,045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
14	N/A	-	-	-	-	-	-	-	N/A	N/A	32,34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
15	N/A	-	-	-	-	-	-	-	N/A	N/A	31,885	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
20	N/A	-	-	-	-	-	-	-	N/A	38,67	31,595	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
24	N/A	-	-	-	-	-	-	-	N/A	N/A	31,98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
1	21,55	p	m	CH	Positive	17,22	+	+	31,14	28,58	31,59	+	p	M	CH	Positive	21,15	20,2	31,54	-	-	-	-	-	-	+	PA		
2	21,38	p	m	CH	Positive	17,92	+	+	26,135	23,94	30,535	+	p	M	CH	Positive	20,82	18,97	30,86	-	-	-	-	-	-	+	PA		
6	36,62	-	-	-	-	-	-	-	N/A	N/A	31,845	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
11	N/A	-	-	-	-	-	-	-	28,93	26,865	30,91	+	p	m	CH	Positive	21,23	19,45	31,13	-	-	-	-	-	-	+	PD		
16	35,54	-	-	-	-	-	-	-	32,62	30,695	31,825	+	p	d	CH	Positive	19,24	17,71	31,44	-	-	-	-	-	-	+	PD		
18	N/A	st	-	-	-	-	-	-	N/A	N/A	31,79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA		
21	30,26	2,0	-	CH	Positive	18,0	+	+	28,4	26,96	30,755	+	p	M	CH	Positive	19,9	18,62	31,17	-	-	-	-	-	-	+	PA		
22	24,88	m	1,0	CH	Positive	18,7	+	+	25,71	23,365	30,23	+	M	M	CH	Positive	19,52	18,18	32,15	-	-	-	-	-	-	+	PA		
3	24,31	p	m	CH	Positive	18,9	+	+	22,66	20,375	30,34	+	M	M	CH	Positive	20,72	18,84	30,77	-	-	-	-	-	-	+	PA		
4	23,17	M	1,0	CH	Positive	17,21	+	+	25,285	23	30,325	+	M	M	CH	Positive	19,21	17,7	31,96	-	-	-	-	-	-	+	PA		
9	25,65	p	d	CH	Positive	18,54	+	+	22,43	20,345	30,075	+	p	M	CH	Positive	19,19	17,72	32,26	-	-	-	-	-	-	+	PA		
10	28,28	p	d	CH	Positive	19,6	+	+	25,135	22,885	30,16	+	p	M	CH	Positive	19,22	17,67	31,52	-	-	-	-	-	-	+	PA		
13	25,17	p	6,0	CH	Positive	19,16	+	+	22,205	20,1	30,54	+	M	M	CH	Positive	21,53	20,15	30,61	-	-	-	-	-	-	+	PA		
17	26,94	p	d	CH	Positive	20,5	+	+	25,86	23,82	30,355	+	p	M	CH	Positive	19,74	18,39	31,47	-	-	-	-	-	-	+	PA		
19	23,32	p	10,0	CH	Positive	19,0	+	+	22,715	20,69	30,155	+	p	M	CH	Positive	21,37	19,68	30,98	-	-	-	-	-	-	+	PA		
23	23,51	p	m	CH	Positive	18,2	+	+	21,98	19,88	30,19	+	M	M	CH	Positive	19,9	18,62	31,2	-	-	-	-	-	-	+	PA		

CollaboratorB2
Aerobic mesophilic flora: 2,6.10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result	Agreement			
									Easy II protocol WITH FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION																	
	PCR results	Confirmation						stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	A: Direct streaking						if necessary B: Subculture													
		Direct streaking									Reading		Confirmation on typical colony					Reading	Confirmation on typical colony											
		stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR						Result	stx	CH	TBX	Plate used (CH or TBX)		Indole test result	iQ-Check® STEC VirX PCR result			CH	TBX	Plate used (CH or TBX)			Indole test result	iQ-Check® STEC VirX PCR result	
								Resul (Ct)	Result (Ct)	Result (Ct)																				
29	N/A	-	-	-	-	-	-	-	N/A	N/A	31,81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
30	N/A	-	-	-	-	-	-	-	N/A	N/A	31,14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
33	N/A	-	-	-	-	-	-	-	N/A	N/A	31,07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
37	N/A	-	-	-	-	-	-	-	N/A	N/A	31,09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
39	39,22	-	-	-	-	-	-	-	N/A	N/A	30,55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
42	33,92	-	-	-	-	-	-	-	N/A	N/A	30,83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
45	36,94	-	-	-	-	-	-	-	N/A	N/A	30,85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NA
48	38,78	-	-	-	-	-	-	-	38,22/N/A	37,15/N/A	30,65/31,15	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PPNA
25	N/A	-	-	-	-	-	-	-	32,175	30,125	31,09	+	p	M	CH	Positive	20,05	18,21	29,72										+	PD
27	27,35	M	d	CH	Positive	16,9	+	+	28,005	26,495	30,19	+	p	M	CH	Positive	20,68	19,04	29,53										+	PA
28	36,28	2,0	d	CH	Positive	17,97	+	+	31,105	28,725	30,53	+	p	M	CH	Positive	19,1	17,33	29,08										+	PA
32	34,05	-	-	-	-	-	-	-	31,525	29,38	30,66	+	p	M	CH	Positive	19,06	17,34	29,21										+	PD
34	28,21	M	1,0	CH	Positive	18,99	+	+	33,065	31,575	30,79	+	M	m	CH	Positive	20,33	18,7	29,36										+	PA
35	27,23	M	1,0	CH	Positive	16,9	+	+	33,605	32,195	31,03	+	M	M	CH	Positive	23,51	21,53	29,41										+	PA
40	N/A	-	-	-	-	-	-	-	33,465	31,72	30,7	+	M	d	CH	Positive	19,56	17,96	29,78										+	PD
44	37,36	-	-	-	-	-	-	-	41,47	37,555	30,59	+	p	1	CH	Positive	19,86	18,14	29,32										+	PD
26	29,11	M	d	CH	Positive	19,07	+	+	31,465	29,22	30,92	+	p	M	CH	Positive	19,62	17,89	29,46										+	PA
31	36,25	-	-	-	-	-	-	-	31,415	29,35	30,49	+	p	M	CH	Positive	23,18	21,54	29,33										+	PD
36	27,07	M	1,0	CH	Positive	17,19	+	+	29,945	28,135	30,79	+	p	M	CH	Positive	20,38	18,78	29,22										+	PA
38	27,73	1½	-	CH	Positive	18,5	+	+	29,13	27,08	30,24	+	p	M	CH	Positive	19,36	17,76	29,41										+	PA
41	25,26	1½	1,0	CH	Positive	17,34	+	+	28,735	27,135	30,22	+	p	M	CH	Positive	20,19	18,5	29,71										+	PA
43	22,52	p	3,0	CH	Positive	18,7	+	+	31,225	29,035	30,37	+	p	M	CH	Positive	19,76	18,01	29,67										+	PA
46	27,85	M	1,0	CH	Positive	20,4	+	+	29,88	27,905	30,38	+	p	M	CH	Positive	20,37	18,69	29,33										+	PA
47	26,70	p	2,0	CH	Positive	18,3	+	+	31,13	28,8	30,62	+	p	M	CH	Positive	18,65	17,18	29,6										+	PA

Collaborator

C

Aerobic mesophilic flora: 3,0 10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result confirmatory tests	Agreement	
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION															
	PCR results	Confirmation						stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	A: Direct streaking						if necessary B: Subculture											
		Direct streaking									Reading		Confirmation on typical colony			Reading	Confirmation on typical colony											
		stx	CHROMagar STEC	TBX	Plate used	Indol	PCR						Result	stx	Resul (Ct)		Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	iQ-Check® STEC VirX PCR result	CH	TBX			Plate used (CH or TBX)
5	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	31,72	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
7	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	31,86	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
8	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	31,45	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
12	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	31,39	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
14	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	32,05	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
15	31,21	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	31,96	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
20	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	32,76	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
24	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	31,04	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
1	22,62	pos	pos	CH	pos	20,29	+	+	36,37	34,34	31,69	+	pos	pos	CH	pos	17,75	15,35	30,2								+	PA
2	23,18	pos	pos	CH	pos	21,99	+	+	34,87	33,02	31,34	+	pos	pos	CH	pos	17,98	16,03	29,83								+	PA
6	29,73	pos	pos	CH	pos	20,84	+	+	N/A	N/A	32,02	-	NEG	NEG		N/A	NEG	NEG	NEG								-	ND
11	21,71	pos	pos	CH	pos	20,7	+	+	30,01	27,57	30,46	+	pos	pos	CH	pos	17,13	15,11	30,16								+	PA
16	27,28	pos	pos	CH	pos	24,25	+	+	33,81	31,85	31,14	+	pos	pos	CH	pos	15,89	14,19	30,55								+	PA
18	35,22	NEG	NEG	CH	NEG	NEG	-	-	32,24	30,09	31,17	+	pos	pos	CH	pos	16,63	14,43	30,01								+	PD
21	NEG	NEG	NEG	CH	NEG	NEG	-	-	N/A	N/A	31,75	-	NEG	NEG		N/A	NEG	NEG	NEG								-	NA
22	25,40	pos	pos	CH	pos	20,7	+	+	N/A	N/A	31,35	-	NEG	NEG		N/A	NEG	NEG	NEG								-	ND
3	22,45	pos	pos	CH	pos	23,38	+	+	31,02	28,67	30,83	+	pos	pos	CH	pos	18,94	16,43	30								+	PA
4	23,42	pos	pos	CH	pos	20,03	+	+	28,94	26,24	30,41	+	pos	pos	CH	pos	17,66	15,53	29,74								+	PA
9	21,24	pos	pos	CH	pos	22,93	+	+	30,12	27,61	30,45	+	pos	pos	CH	pos	16,67	14,52	30,54								+	PA
10	21,35	pos	pos	CH	pos	20,1	+	+	33,1	31,14	31,15	+	pos	pos	CH	pos	17,36	15,09	30,04								+	PA
13	20,76	pos	pos	CH	pos	18,88	+	+	30,43	28,03	30,63	+	pos	pos	CH	pos	17,07	15,06	30,12								+	PA
17	22,08	pos	pos	CH	pos	20,9	+	+	26,9	24,71	30,03	+	pos	pos	CH	pos	16,91	14,63	30,87								+	PA
19	27,21	pos	pos	CH	pos	21,0	+	+	31,14	29,1	30,78	+	pos	pos	CH	pos	16,72	14,52	30,07								+	PA
23	22,10	pos	pos	CH	pos	20,2	+	+	30,09	27,49	30,35	+	pos	pos	CH	pos	16,39	14,28	30,6								+	PA

Collaborator

D

Aerobic mesophilic flora: <10 CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result confirmatory tests	Agreement		
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION																
													A: Direct streaking									if necessary B: Subculture							
	PCR results	Confirmation						Final Result	stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)		Reading		Confirmation on typical colony			Reading		Confirmation on typical colony									
		Direct streaking					Result								iQ-Check® STEC VirX PCR result					iQ-Check® STEC VirX PCR result									
stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR	Result		stx	Resul (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)				
5	N/A	st	-	N/A	N/A	N/A	-	-	N/A	N/A	28,86	-	st	-	CH	N/A	N/A	N/A	N/A							-	NA		
7	N/A	-	-	N/A	N/A	N/A	-	-	N/A	N/A	29,6	-	st	-	CH	N/A	N/A	N/A	N/A							-	NA		
8	N/A	st	-	N/A	N/A	N/A	-	-	N/A	N/A	28,75	-	-	m	CH	N/A	N/A	N/A	N/A							-	NA		
12	N/A	-	-	N/A	N/A	N/A	-	-	N/A	N/A	29,11	-	st	-	CH	N/A	N/A	N/A	N/A							-	NA		
14	N/A	st	-	N/A	N/A	N/A	-	-	N/A	N/A	28,83	-	st	-	CH	N/A	N/A	N/A	N/A							-	NA		
15	N/A	st	-	N/A	N/A	N/A	-	-	N/A	N/A	29,13	-	-	-	CH	N/A	N/A	N/A	N/A							-	NA		
20	N/A	st	-	N/A	N/A	N/A	-	-	N/A	N/A	29,29	-	-	-	CH	N/A	N/A	N/A	N/A							-	NA		
24	N/A	st	-	N/A	N/A	N/A	-	-	N/A	N/A	28,92	-	st	-	CH	N/A	N/A	N/A	N/A							-	NA		
1	N/A	st	-	N/A	N/A	N/A	-	-	27,27	25,72	34,32	+	p	1/2	CH	Positive	18,18	16,48	30,83							+	PD		
2	22,38	p	m	CH	Positive	17,47	+	+	26,47	25,02	29,68	+	p	1/2	CH	Positive	18,22	16,76	29,44							+	PA		
6	26,41	p	m	CH	Positive	17,24	+	+	29,16	27,43	29,61	+	p	M	CH	Positive	18,18	16,95	29,27							+	PA		
11	22,25	M	m	CH	Positive	18,5	+	+	29,62	27,98	28,7	+	p	M	CH	Positive	18,86	17,45	29,06							+	PA		
16	N/A	st	-	N/A	N/A	N/A	-	-	28,33	26,41	29,5	+	p	M	CH	Positive	18,77	17,03	29							+	PD		
18	24,53	p	-	CH	Positive	17,0	+	+	29,98	28,45	29,27	+	p	1/2	CH	Positive	18,63	16,95	29,07							+	PA		
21	23,42	p	m	CH	Positive	17,0	+	+	29,11	27,12	28,91	+	M	M	CH	Positive	17,36	16,28	29,24							+	PA		
22	29,68	M	-	CH	Positive	17,4	+	+	29,32	28,01	29,12	+	M	M	CH	Positive	17,65	16,49	29,44							+	PA		
3	28,22	M	-	CH	Positive	17,28	+	+	27,89	26,04	29,42	+	p	M	CH	Positive	18,15	16,64	29,46							+	PA		
4	24,30	M	m	CH	Positive	17,45	+	+	29,26	27,33	29,06	+	p	M	CH	Positive	18,29	17,15	29,42							+	PA		
9	17,83	p	m	CH	Positive	17,32	+	+	29,05	26,83	28,93	+	p	M	CH	Positive	18,01	16,66	29,32							+	PA		
10	26,39	p	m	CH	Positive	16,1	+	+	29,58	27,65	29,63	+	p	M	CH	Positive	18,39	17,07	29,25							+	PA		
13	19,85	p	m	CH	Positive	17,92	+	+	26,35	24,65	28,67	+	p	M	CH	Positive	18,6	16,91	29,18							+	PA		
17	23,88	p	m	CH	Positive	17,2	+	+	29,1	27	29,72	+	p	M	CH	Positive	23,3	22,33	29,47							+	PA		
19	24,28	p	-	CH	Positive	17,8	+	+	29,25	27,27	28,57	+	p	M	CH	Positive	18,12	16,75	28,7							+	PA		
23	25,62	p	m	CH	Positive	17,0	+	+	28,8	27,27	28,87	+	p	M	CH	Positive	17,46	16,37	29,75							+	PA		

Collaborator **E**
Aerobic mesophilic flora: 2,8 10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																		Final result iQ Check STEC VirX	Agreement																																																																																																																																																																																																																																																																																																	
									Easy II protocol WITHOUT FDRS and PCR Result			CONFIRMATION																	Final result																																																																																																																																																																																																																																																																																																
												A: Direct streaking						if necessary B: Subculture																																																																																																																																																																																																																																																																																																											
	PCR results	Confirmation						Final Result	stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	Reading		Confirmation on typical colony						Reading		Confirmation on typical colony																																																																																																																																																																																																																																																																																																							
		Direct streaking												Result (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)			Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH				TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)																																																																																																																																																																																																																																																																																										
stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR	Result	stx	Resul (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (C

CollaboratorF

Aerobic mesophilic flora: 5,7 10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																		Final result	Agreement		
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION																	
													A: Direct streaking						if necessary B: Subculture											
	PCR result	Confirmation						stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	Reading		Confirmation on typical colony				Reading		Confirmation on typical colony											
		Direct streaking	Result	Final Result	stx	Resul (Ct)	Result (Ct)						IC (HEX) Result (Ct)	Plate used (CH or TBX)	Indole test result	iQ-Check® STEC VirX PCR result			Plate used (CH or TBX)	Indole test result	iQ-Check® STEC VirX PCR result									
stx	CHROMAgar STEC							TBX	Plate used	Indol	PCR	CH				TBX	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)			IC(HEX) Result (Ct)	CH	TBX	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)				
5	N/A	-	-				-	-	N/A	N/A	30,41	-	-	-														-	NA	
7	N/A	st	-				-	-	N/A	N/A	30,51	-	-	-															-	NA
8	N/A	st	-				-	-	N/A	N/A	30,48	-	-	-															-	NA
12	N/A	st	-				-	-	39,76/-/-	N/A/N/A/N/A	30,61/+/+	+/-/-	-	-							-	-							-	PPNA
14	N/A	st	-				-	-	N/A	N/A	30,33	-	st	-															-	NA
15	N/A	-	-				-	-	N/A	40,07	30,34	-	-	-															-	NA
20	N/A/-/-	p/-	M/-	CH	+	29,7	+	-	N/A	N/A	30,5	-	-	-															-	NA
24	N/A	-	-				-	-	N/A	N/A	30,6	-	-	-															-	NA
1	26,20	M	m	CH	+	22,08	+	+	N/A	N/A	30,72	-	-	-															-	ND
2	27,75	p	m	CH	+	22,41	+	+	31,22	30,39	30,43	+	m	m	CH	+	15,94	15,28	33,49										+	PA
6	N/A	st	-				-	-	35,57	35,8	30,64	+	1/2.	-	CH	+	15,7	15,25	34,1										+	PD
11	N/A	st	-				-	-	30,17	29,08	30,45	+	M	1/2.	CH	+	15,11	14,41	36,03										+	PD
16	26,15	M	m	CH	+	22,79	+	+	33,12	31,89	30,06	+	M	1/2/	CH	+	15,62	15,17	33,11										+	PA
18	25,20	M	m	CH	+	22,8	+	+	37,54	37,09	30,64	+	M	1/2/	CH	+	15,56	15,18	33,2										+	PA
21	29,06	M	m	CH	+	21,6	+	+	31,35	30,57	30,45	+	M	m	CH	+	15,3	15,03	33,82										+	PA
22	31,46	M	-	CH	+	21,9	+	+	29,54	28,64	30,38	+	M	1/2.	CH	+	15,35	15,13	33,43										+	PA
3	24,89	M	m	CH	+	21,63	+	+	30,27	29,43	30,5	+	M	M	CH	+	15,26	14,51	34,8										+	PA
4	25,62	1/2.	m	CH	+	22,13	+	+	29,46	28,42	30,3	+	M	m	CH	+	16,1	15,7	32,12										+	PA
9	26,81	M	m	CH	+	22,06	+	+	28,39	27,01	30,25	+	M	1/2.	CH	+	15,59	15,25	33,16										+	PA
10	27,18	p	m	CH	+	22,2	+	+	29,01	27,86	30,18	+	M	1/2.	CH	+	15,42	15,1	44,48										+	PA
13	24,82	M	m	CH	+	22,76	+	+	29,96	28,85	30,23	+	M	1/2.	CH	+	16,95	16,65	32,95										+	PA
17	26,00	M	-	CH	+	22,6	+	+	31,8	30,83	30,58	+	1/2.	1/2/	CH	+	15,94	15,44	33,16										+	PA
19	25,57	M	m	CH	+	21,7	+	+	27,54	26,72	30,01	+	M	1/2/	CH	+	15,95	15,7	33,08										+	PA
23	25,14	M	m	CH	+	19,6	+	+	27,49	26,67	30,07	+	m	1/2.	CH	+	16,04	15,65	33,11										+	PA

Collaborator **G**
Aerobic mesophilic flora: 3,2 10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																		Final result confirmatory tests	Agreement
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION															
	PCR results	Confirmation						stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	A: Direct streaking						if necessary B: Subculture											
		Direct streaking					Result				Reading		Confirmation on typical colony			Reading	Confirmation on typical colony											
		stx	CHROMAgar STEC	TBX	Plate used	Indol							PCR	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)		IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)				
5	N/A	NEG	NEG				-	-	N/A	N/A	32,66	-	NEG	NEG												-	NA	
7	N/A	NEG	NEG				-	-	N/A	N/A	33,7	-	NEG	NEG												-	NA	
8	N/A	NEG	NEG				-	-	N/A	N/A	33	-	NEG	NEG												-	NA	
12	N/A	NEG	NEG				-	-	N/A	N/A	32,96	-	NEG	NEG												-	NA	
14	N/A	NEG	NEG				-	-	N/A	N/A	33,16	-	NEG	NEG												-	NA	
15	N/A	NEG	NEG				-	-	N/A	N/A	32,59	-	NEG	NEG												-	NA	
20	N/A	NEG	NEG				-	-	N/A	43,39	32,8	-	NEG	NEG												-	NA	
24	N/A	NEG	NEG				-	-	N/A	N/A	32,13	-	NEG	NEG												-	NA	
1	36,31	POS	POS	CH	POS	24,54	+	+	37,75	33,66	33,13	+	POS	POS	CH	POS	19,43	18,5	30							+	PA	
2	N/A	NEG	NEG				-	-	40,19	36,47	32,89	+	POS	POS	CH	POS	19,32	18,45	29,75							+	PD	
6	36,30	POS	POS	CH	POS	22,6	+	+	36,37	34,25	32,69	+	POS	POS	CH	POS	19,79	19,08	30							+	PA	
11	N/A	NEG	NEG				-	-	38,31	35,29	32,61	+	POS	POS	CH	POS	21,43	19,53	29,7							+	PD	
16	N/A	NEG	NEG				-	-	37,58	35,28	33,22	+	POS	POS	CH	POS	18,69	17,63	29,69							+	PD	
18	35,76	POS	POS	CH	POS	23,4	+	+	39,78	37,14	33,1	+	POS	POS	CH	POS	20,25	19,65	29,39							+	PA	
21	38,08	POS	POS	CH	POS	23,0	+	+	38,47	35,43	32,96	+	POS	POS	CH	POS	20,16	19,52	29,37							+	PA	
22	36,63	POS	POS	CH	POS	22,8	+	+	37,48	34,91	32,7	+	POS	POS	CH	POS	19,28	18,48	29,27							+	PA	
3	36,58	POS	POS	CH	POS	24,27	+	+	34,62	30,99	32,71	+	POS	POS	CH	POS	19,31	18,24	30,01							+	PA	
4	38,12	POS	POS	CH	POS	24,26	+	+	35,32	32,48	32,66	+	POS	POS	CH	POS	19,96	19,19	29,53							+	PA	
9	34,83	POS	POS	CH	POS	23,3	+	+	33,66	30,66	32,19	+	POS	POS	CH	POS	19,13	18,38	29,74							+	PA	
10	34,61	POS	POS	CH	POS	23,7	+	+	31,94	30,68	30,94	+	POS	POS	CH	POS	19,65	18,81	29,64							+	PA	
13	36,28	POS	POS	CH	POS	24,44	+	+	34,31	31,03	32,39	+	POS	POS	CH	POS	19,08	18,1	29,66							+	PA	
17	33,51	POS	POS	CH	POS	23,3	+	+	34,68	31,67	32,14	+	POS	POS	CH	POS	19,68	19,11	29,89							+	PA	
19	34,76	POS	POS	CH	POS	22,7	+	+	33,77	30,63	32,13	+	POS	POS	CH	POS	18,84	18,13	29,75							+	PA	
23	34,95	POS	POS	CH	POS	23,8	+	+	34,37	31,04	32,34	+	POS	POS	CH	POS	19,14	18,39	29,58							+	PA	

Collaborator

H

Aerobic mesophilic flora: 1,2 10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result confirmatory tests	Agreement		
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION																
													A: Direct streaking						if necessary B: Subculture										
	PCR results	Confirmation						stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	Reading		Confirmation on typical colony						Reading		Confirmation on typical colony								
		Direct streaking					Result						iQ-Check® STEC VirX PCR result					iQ-Check® STEC VirX PCR result											
stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR			stx	Resul (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)				
5	N/A	NEG	NEG			-	-	N/A	N/A	31,93	-	Neg	Neg												-	NA			
7	N/A	NEG	NEG			-	-	N/A	N/A	31,33	-	Neg	Neg												-	NA			
8	N/A	NEG	NEG			-	-	N/A	N/A	32	-	Neg	Neg												-	NA			
12	N/A	NEG	NEG			-	-	N/A	N/A	30,84	-	Neg	Neg												-	NA			
14	N/A	NEG	NEG			-	-	N/A	N/A	30,97	-	Neg	Neg												-	NA			
15	N/A	NEG	NEG			-	-	N/A	N/A	30,93	-	Neg	Neg												-	NA			
20	N/A	NEG	NEG			-	-	N/A	N/A	31,02	-	Neg	Neg												-	NA			
24	N/A	NEG	NEG			-	-	N/A	N/A	31,11	-	Neg	Neg												-	NA			
1	25,63	POS	NEG	CH	POS	POS	+	+	N/A	N/A	34,07	-	Neg	Neg											-	ND			
2	N/A	NEG	NEG			-	-	N/A	N/A	31,73	-	Neg	Neg												-	NA			
6	38,72	NEG	NEG	CH+TBX		NEG	-	-	30,23	28,76	30,86	+	Pos	Pos	CH	Positive	24	24,04	30,73						+	PD			
11	N/A	NEG	NEG			-	-	N/A	N/A	30,98	-	Neg	Neg												-	NA			
16	25,17	POS	POS	CH	POS	POS	+	+	31,31	29,96	31,18	+	Pos	Pos	CH	Positive	24,76	24,03	30,54						+	PA			
18	26,48	POS	POS	CH	POS	POS	+	+	39,59	38,62	30,95	+	Pos	Pos	CH	Positive	23,37	23,64	30,89						+	PA			
21	N/A	NEG	NEG			-	-	N/A	N/A	30,85	-	Neg	Neg												-	NA			
22	38,50	POS	NEG	CH	POS	POS	+	+	34,6	33,68	30,83	+	Pos	Pos	CH	Positive	23,67	23,81	30,93						+	PA			
3	27,87	POS	NEG	CH	POS	POS	+	+	27,18	25,57	30,33	+	Pos	Pos	CH	Positive	25,51	24,51	30,7						+	PA			
4	19,51	POS	POS	CH	POS	POS	+	+	27,24	26,09	31,08	+	Pos	Pos	CH	Positive	23,32	23,71	30,88						+	PA			
9	35,95	POS	NEG	CH	POS	POS	+	+	29,6	27,87	30,42	+	Pos	Pos	CH	Positive	24,01	23,76	30,8						+	PA			
10	N/A	NEG	NEG			-	-	26,94	25,13	29,61	+	Pos	Pos	CH	Positive	23,93	23,97	30,77							+	PD			
13	33,89	POS	NEG	CH	POS	POS	+	+	29,46	27,63	30,43	+	Pos	Pos	CH	Positive	22,89	23,01	31,01						+	PA			
17	27,69	POS	NEG	CH	POS	POS	+	+	27,52	26,2	30,25	+	Pos	Pos	CH	Positive	24,57	24,27	30,74						+	PA			
19	22,83	POS	POS	CH	POS	POS	+	+	29,05	27,45	30,35	+	Pos	Pos	CH	Positive	25,62	25,17	30,45						+	PA			
23	33,64	POS	NEG	CH	POS	POS	+	+	31,01	29,55	30,39	+	Pos	Pos	CH	Positive	22,21	22,61	31,37						+	PA			

Collaborator I
Aerobic mesophilic flora: 2,3 10⁶ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result confirmatory tests	Agreement	
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION															
	PCR results	Confirmation						stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	A: Direct streaking							if necessary B: Subculture										
		Direct streaking									Reading		Confirmation on typical colony						Reading	Confirmation on typical colony								
		stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR						Result	stx	Resul (Ct)	Result (Ct)	Result (Ct)	CH		TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)			CH
5	0,00	-	NC				-	-	-	-	31,08	-		+	TBX	+	-	-	37,06								-	NA
7	0,00	NC	-				-	-	-	-	30,69	-	NC	NC													-	NA
8	0,00	NC	NC				-	-	-	-	30,8	-	NC	NC													-	NA
12	0,00	-	NC				-	-	-	-	31,2	-	NC	NC													-	NA
14	0,00	NC	NC				-	-	-	-	31,02	-	NC	NC													-	NA
15	0,00	NC	NC				-	-	-	-	30,82	-	-	NC													-	NA
20	0,00	NC	NC				-	-	-	-	31,14	-	NC	NC													-	NA
24	0,00	NC	+	TBX	+	-	-	-	-	-	30,72	-	-	NC													-	NA
1	30,00	+	+	CH	+	+	+	+	25,19	25,03	-	+	+	+	CH	+	28,09	22,4	-								+	PA
2	29,90	+	NC	CH	+	+	+	+	30,47	28,15	30,84	+	+	+	CH	+	26,58	-	-								+	PA
6	0,00	NC	NC				-	-	28,02	25,86	31,04	+	+	+	CH	+	23,99	-	-								+	PD
11	0,00	-	NC				-	-	35,93	34,36	31,01	+	+	+	CH	+	26,39	-	-								+	PD
16	32,70	+	NC	CH	+	+	+	+	30,19	28,51	30,9	+	+	+	CH	+	26,2	-	-								+	PA
18	0,00	NC	NC				-	-	29,55	27,87	30,49	+	+	+	CH	+	22,97	-	-								+	PD
21	27,50	+	NC	CH	+	+	+	+	31,09	29,22	30,55	+	+	+	CH	+	24,81	-	-								+	PA
22	27,20	+	NC	CH	+	+	+	+	33,29	31,62	30,72	+	+	+	CH	+	23,36	-	-								+	PA
3	23,30	+	+	CH	+	+	+	+	25,67	24,21	-	+	+	+	CH	+	22,98	-	-								+	PA
4	28,50	+	NC	CH	+	+	+	+	26,22	24,61	-	+	+	+	CH	+	24,72	-	-								+	PA
9	25,40	+	+	CH	+	+	+	+	30,37	28,04	30,9	+	+	+	CH	+	24,63	-	-								+	PA
10	23,80	+	+	CH	+	+	+	+	27,37	25,37	31,42	+	+	+	CH	+	24,5	-	-								+	PA
13	24,40	+	+	CH	+	+	+	+	25,34	22,87	-	+	+	+	CH	+	26,22	-	-								+	PA
17	27,30	+	+	CH	+	+	+	+	26,16	24,53	-	+	+	+	CH	+	26,82	-	-								+	PA
19	26,90	+	NC	CH	+	+	+	+	27,26	24,73	-	+	+	+	CH	+	25,16	-	-								+	PA
23	25,20	+	NC	CH	+	+	+	+	22,89	20,9	-	+	+	+	CH	+	26,76	-	-								+	PA

Collaborator J
Aerobic mesophilic flora: 3,5 10⁶ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result confirmatory tests	Agreement	
									Easy II protocol WITH FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION															
	PCR results	Confirmation						stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	A: Direct streaking						if necessary B: Subculture											
		Direct streaking									Reading		Confirmation on typical colony				Reading	Confirmation on typical colony										
		stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR						Result	stx	CH	TBX		Plate used (CH or TBX)	Indole test result	iQ-Check® STEC VirX PCR result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX			Plate used (CH or TBX)
5	x	-	-	ch	-	-	-	-	x	x	31,1	-	-	-	ch	-	x	x	30,94								-	NA
7	x	-	-	ch	+	-	-	-	x	x	30,79	-	-	-	ch	-	x	x	31,2								-	NA
8	x	st	-	ch	x	x	-	-	x	x	30,97	-	-	-	ch	+	x	x	31,21								-	NA
12	x	st	-	ch	x	x	-	-	x	x	30,83	-	-	-	ch	+	x	x	30,95								-	NA
14	x	-	-	ch	-	-	-	-	x	x	30,64	-	-	-	ch	-	x	x	30,86								-	NA
15	x	st	-	ch	x	x	-	-	x	x	30,78	-	-	-	ch	-	x	x	30,83								-	NA
20	x	st	-	ch	x	x	-	-	x	x	30,86	-	-	-	ch	-	x	x	30,79								-	NA
24	x	-	-	ch	+	-	-	-	x	x	30,95	-	-	-	ch	+	x	x	30,55								-	NA
1	26,40	>50	-	ch	+	+	+	+	32,88	30,91	30,4	+	>50	>50	ch	+	19,8	18,56	29,76								+	PA
2	x	-	-	ch	-	-	-	-	31,08	28,45	31,91	+	>50	>50	ch	+	20,46	19,32	29,2								+	PD
6	x	-	-	ch	-	-	-	-	30,39	28	30,3	+	>50	>50	ch	+	20,53	19,43	29,73								+	PD
11	x	-	-	ch	+	-	-	-	36,78	34,38	30,69	+	>50	>50	ch	+	20,93	20,02	29,31								+	PD
16	28,50	>50	-	ch	+	+	+	+	30,64	28,18	30,24	+	>50	>50	ch	+	20,05	18,85	29,35								+	PA
18	30,90	8,0	-	ch	+	+	+	+	31,15	28,8	30,63	+	>50	>50	ch	+	21,39	20,35	29,01								+	PA
21	24,30	>50	-	ch	+	+	+	+	41,52	37,99	30,41	+	>50	>50	ch	+	20,38	19,26	28,88								+	PA
22	24,30	>50	-	ch	+	+	+	+	35,93	33,55	31,15	+	>50	>50	ch	+	20,69	19,67	28,77								+	PA
3	28,00	>50	-	ch	+	+	+	+	27,92	25,65	29,87	+	>50	>50	ch	+	20,66	19,53	29,3								+	PA
4	26,00	2,0	-	ch	+	+	+	+	30,1	27,79	30,28	+	>50	>50	ch	+	20,54	19,58	29,55								+	PA
9	25,80	>50	-	ch	+	+	+	+	33,09	30,69	30,56	+	>50	>50	ch	+	21,04	20,03	29,67								+	PA
10	30,40	35,0	-	ch	+	+	+	+	29,11	26,44	30,04	+	>50	>50	ch	+	20,83	19,86	29,78								+	PA
13	23,17	>50	-	ch	+	+	+	+	29,19	26,55	30,21	+	>50	>50	ch	+	20,48	19,52	29,09								+	PA
17	28,20	>50	-	ch	+	+	+	+	27,9	25,72	30,39	+	>50	>50	ch	+	20,58	19,51	29,15								+	PA
19	30,50	11,0	-	ch	+	+	+	+	28,79	26,37	29,92	+	>50	>50	ch	+	20,6	19,43	28,83								+	PA
23	29,70	>50	-	ch	+	+	+	+	29,43	27,01	30,05	+	>50	>50	ch	+	19,58	18,56	30,57								+	PA

Collaborator **K**
Aerobic mesophilic flora: 1,2 10⁵ CFU/g

Sample N°	Reference method: ISO/TS 13136								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																	Final result confirmatory tests	Agreement		
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION																
													A: Direct streaking						if necessary B: Subculture										
	PCR results	Confirmation						Final Result	stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)		Reading		Confirmation on typical colony				Reading		Confirmation on typical colony								
		Direct streaking													iQ-Check® STEC VirX PCR result						iQ-Check® STEC VirX PCR result								
stx	CHROMAgar STEC	TBX	Plate used	Indol	PCR	Result	stx	Resul (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indole test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)					
5	37.19	-	-			-	-	-	-	31.15	-	-	-													-	NA		
7	-	-	-			-	-	-	-	31.06	-	-	-													-	NA		
8	-	-	-			-	-	-	-	31.35	-	-	-													-	NA		
12	-	-	-			-	-	-	-	31.1	-	-	-													-	NA		
14	-	-	-			-	-	-	-	30.98	-	-	-													-	NA		
15	-	-	-			-	-	-	-	31.1	-	-	-													-	NA		
20	-	-	-			-	-	-	-	31.31	-	-	-													-	NA		
24	-	-	-			-	-	-	-	31.86	-	-	-													-	NA		
1	-	-	-			-	-	-	-	31.8	-	-	-													-	NA		
2	-	-	-			-	-	29.1	26.88	30.53	+	+	+	CH	+	19.41	17.23	30.26								+	PD		
6	28.52	-	-	CH	+	+	+	+	31.69	29.6	30.86	+	+	+	CH	+	18.64	16.44	30.56							+	PA		
11	-	-	-			-	-	32.89	30.66	31.05	+	+	+	CH	+	18.21	16.01	31.66							+	PD			
16	26.36	+	+	CH	+	+	+	+	28.07	26.78	30.36	+	+	+	CH	+	18.11	16.04	31.46							+	PA		
18	27.7	+	+	CH	+	+	+	+	32.76	30.72	31.4	+	+	+	CH	+	19.04	16.80	31.70							+	PA		
21	27.53	+	+	CH	+	+	+	+	31.67	29.59	31.19	+	+	+	CH	+	18.79	16.78	29.59							+	PA		
22	-	-	-			-	-	-	-	31.27	-	-	-													-	NA		
3	26.5	+	+	CH	+	+	+	+	26.68	24.17	30.04	+	+	+	CH	+	19.27	16.97	30.08							+	PA		
4	24.41	+	+	CH	+	+	+	+	27.05	25.08	30.06	+	+	+	CH	+	18.77	16.59	30.53							+	PA		
9	25.48	+	+	CH	+	+	+	+	26.36	23.89	29.85	+	+	+	CH	+	19.23	17.21	30.42							+	PA		
10	24.42	+	+	CH	+	+	+	+	26.42	23.99	29.69	+	+	+	CH	+	18.36	16.48	33.03							+	PA		
13	26.06	+	+	CH	+	+	+	+	26.87	24.36	29.86	+	+	+	CH	+	19.66	17.42	31.41							+	PA		
17	21.83	+	+	CH	+	+	+	+	29.37	27.31	30.41	+	+	+	CH	+	19.14	16.97	30.35							+	PA		
19	25.79	+	+	CH	+	+	+	+	27.79	25.8	30.16	+	+	+	CH	+	19.38	17.31	30.43							+	PA		
23	24.06	+	+	CH	+	+	+	+	26.25	23.81	30.22	+	+	+	CH	+	18.73	16.59	29.92							+	PA		

Collaborator ADRIA
Aerobic mesophilic flora: 1,1 10⁵ CFU/g

Sampl e N°	Reference method: ISO/TS 13136 [♦]								iQ-Check® STEC VirX +75ml PW BPW (41,5°C), 10 h at 41,5±1°C (1/4)																				Final result confirmatory tests	Agreement		
									Easy II protocol WITHOUT FDRS and PCR Result			Final result iQ Check STEC VirX	Easy II protocol WITH FDRS and PCR Result			Final result iQ Check STEC VirX	CONFIRMATION															
	stx1 & stx2 (FAM)	eae (Cy5)	IC (HEX)	A: Direct streaking						if necessary B: Subculture																						
				stx	Confirmation					stx	stx1 & stx2 (FAM)		eae (Cy5)	IC (HEX)	Reading		Confirmation on typical colony				Reading		Confirmation on typical colony									
					CHROMAgar STEC	TB X	Plat e used	Indo l	PCR						Result		Result (Ct)	Result (Ct)	Result (Ct)	CH	TBX	Plate used (CH or TBX)	Indol e test result	stx1 & stx2 (FAM) Result (Ct)	eae (Cy5) Result (Ct)	IC(HEX) Result (Ct)	CH	TBX			Plate used (CH or TBX)	Indol e test result
5	-	st	-	CH			-	-	-	-	32,15	-	-	-	32,15	-	-	-													-	NA
7	-	st	-	CH			-	-	-	-	31,86	-	-	-	31,86	-	-	-													-	NA
8	-	-	-	CH			-	-	-	-	31,74	-	-	-	31,74	-	st	-													-	NA
12	-	st	-	CH			-	-	-	-	31,67	-	-	-	31,67	-	-	-													-	NA
14	-	st	-	CH			-	-	-	-	32,12	-	-	-	32,12	-	-	-													-	NA
15	-	st	-	CH			-	-	-	-	32,84	-	-	-	32,84	-	-	-													-	NA
20	-	-	-	CH			-	-	-	-	31,99	-	-	-	31,99	-	-	-													-	NA
24	-	st	-	CH			-	-	-	-	32,06	-	-	-	32,06	-	-	-													-	NA
1	-	-	-	CH			-	-	-	-	32,47	-	-	-	32,47	-	-	-													-	NA
2	27,19	p	m	CH		18,76	+	+	+	29,06	27,06	30,85	+	29,06	27,06	30,85	+	M	1/2,	CH	+	16,35	15,29	-							+	PA
6	-	-	-	CH			-	-	-	26,18	24,46	29,98	+	26,18	24,46	29,98	+	p	M	CH	+	16,16	15,12	36,76							+	PD
11	-	-	-	CH			-	-	-	32,65	31,08	31,57	+	32,65	31,08	31,57	+	p	m	CH	+	15,89	14,69	38,33							+	PD
16	-	-	-	CH			-	-	-	31,82	30,6	31,6	+	31,82	30,60	31,60	+	M	m	CH	+	16,75	15,55	39,14							+	PD
18	d 29,33	p	-	CH		18,5	+	+	+	32,48	31	32,44	+	32,48	31,00	32,44	+	M	m	CH	+	15,63	14,38	44,26							+	PA
21	-	st	-	CH			-	-	-	31,24	29,64	31,94	+	31,24	29,64	31,94	+	M	m	CH	+	15,93	15,01	36,48							+	PD
22	-	-	-	CH			-	-	-	27,03	24,76	30,36	+	27,03	24,76	30,36	+	M	M	CH	+	16,28	15,27	34,57							+	PD
3	d 29,48	m	-	CH		20,01	+	+	+	24,48	22,84	29,69	+	24,48	22,84	29,69	+	p	M	CH	+	15,91	14,61	38,47							+	PA
4	26,72	m	-	CH		19,01	+	+	+	25,44	23,5	29,63	+	25,44	23,50	29,63	+	p	M	CH	+	16,49	15,16	37,04							+	PA
9	25,99	p	-	CH		19,44	+	+	+	25,8	24,67	30,25	+	25,80	24,67	30,25	+	M	M	CH	+	16,01	14,77	39,53							+	PA
10	25,10	+1/2	m	CH		19,5	+	+	+	27,34	25,17	30,49	+	27,34	25,17	30,49	+	1/2, m	m	CH	+	15,72	14,58	40,41							+	PA
13	22,93	+1/2	-	CH		19,99	+	+	+	23,29	21,44	30,07	+	23,29	21,44	30,07	+	M	M	CH	+	16,27	15,35	42,54							+	PA
17	24,59	p	m	CH		20,1	+	+	+	27,71	25,39	30,46	+	27,71	25,39	30,46	+	M	M	CH	+	15,98	14,69	37,56							+	PA
19	25,41	m	-	CH		18,2	+	+	+	24,81	22,75	30,53	+	24,81	22,75	30,53	+	M	1/2,	CH	+	15,94	15,03	36,32							+	PA
23	-	-	-	CH			-	-	-	25,28	23,3	29,75	+	25,28	23,30	29,75	+	M	M	CH	+	15,92	14,99	38,61							+	PD

♦ Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)