



CERTIFICATION

AOAC Research Institute *Performance Tested Methods*SM

Certificate No.
051702

The AOAC Research Institute hereby certifies the method known as:

Microbiologique Microfilm[®] Test System

manufactured for

Microbiologique, Inc.
8315 Lake City Way NE
Seattle, WA 98115 USA

This method has been evaluated and certified according to the policies and procedures of the AOAC *Performance Tested Methods*SM Program. This certificate indicates an AOAC Research Institute Certification Mark License Agreement has been executed which authorizes the manufacturer to display the AOAC Research Institute *Performance Tested Methods*SM certification mark on the above-mentioned method for the period below. Renewal may be granted by the Expiration Date under the rules stated in the licensing agreement.

A handwritten signature in black ink, appearing to read "Bradley A. Stawick", written over a light blue rectangular background.

Bradley A. Stawick, Senior Director
Signature for AOAC Research Institute

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METHOD NAME	CATALOG NUMBERS
Microbiologique Microfilm® Test System	M-1022 (TCC & ECC), M-1021 (APC), M-1020 (Y&M)
INDEPENDENT LABORATORY	
School of Public Health University of Washington 4225 Roosevelt Way NE Suite 100 Seattle, WA 98195 USA	
APPLICABILITY OF METHOD	REFERENCE METHODS
Target organism – Total aerobic bacteria, Total coliform/ <i>E. coli</i> , Yeasts and molds.	ISO 4833-1. 2013. Microbiology of the food chain – Horizontal method for the enumeration of microorganisms by the surface plating technique. (5) ISO 16649-2. 2001. Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of β -glucuronidase-positive <i>E. coli</i> , Part 2- Colony count technique at 44°C using 5-bromo 4-chloro-3-indolyl- β -D-glucuronide. (6) ISO 4832:2006, Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of coliforms – Colony count technique. (7) ISO 21527-1:2008 and Part 2:2008, Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of yeasts and molds. (8)
Matrixes – raw beef 2% fat, raw turkey 1% fat, ready-to-eat lunch meat, raw shrimp, raw pork, surimi, raw chicken 2% fat, spinach, lettuce, mung bean sprouts, peanut butter, almonds, pasteurized milk 2% fat, ice cream, wheat flour, bakery frosting/topping, uncooked pasta, black pepper, cumin, dry pet food, stainless steel (1 x 1 in. swab), polyethylene plastic (1 x 1 in. swab).	
Performance claims – Performance proved equivalent to that of the reference methods.	
ORIGINAL CERTIFICATION DATE	CERTIFICATION RENEWAL RECORD
May 09, 2017	Renewed through December 2026.
METHOD MODIFICATION RECORD	SUMMARY OF MODIFICATION
1. December 2017 Level 1	1. Editorial changes.
Under this AOAC <i>Performance Tested Methods</i> SM License Number, 051702 this method is distributed by: Microbiologique, Inc. 8315 Lake City Way NE Seattle, WA 98115 USA	Under this AOAC <i>Performance Tested Methods</i> SM License Number, 051702 this method is distributed as: Yeast & Mold: PB-051702-MF/YM APC Microfilm: PB-051702-MF/APC TCC/ECC Microfilm: PB-051702-MF/TCEC
PRINCIPLE OF THE METHOD (1)	
The Microbiologique Microfilm® System is applicable for enumeration of total aerobic bacteria (APC), total coliform/<i>E. coli</i> (TCEc) or yeast and mold (YMC) in food and environmental samples. For solid foods, the sample is first mixed with buffered peptone water or appropriate diluent, mixed well by hand massage or stomacher, and then one mL is inoculated onto each of the three Microfilms which have been pre-impregnated with different media. For food samples with high bacterial load, serial dilution may be performed prior to plating on the Microfilms. The inoculated Microfilms are then incubated at 36±1°C for 24 h (APC, and TCEc) or 26±1°C for 48 h (YMC) to allow for the formation of visible colonies. The colonies are counted and the count value is used to calculate the original concentration of colony forming units (cfu) expressed as cfu/g or cfu/surface swab sample. The System consists of 3 distinct indicator/selective media impregnated into separate support matrixes. Each of the indicator/selective media contains growth nutrients, indicator dyes, and selective reagents needed to support rapid and specific growth for each class of microorganisms being enumerated. To calculate the number of colony-forming units, colonies are counted as colored spots on the Microfilm. A brief description of the Microfilm is given below. - For Microfilm APC, the medium contains growth nutrients and indicators. Colonies that grow are pigmented, making them easily visible, thus facilitating the counting of colonies. - For Microfilm TCEc, the medium contains growth nutrients supportive for coliforms and selective agents that inhibit the growth of Gram-positive bacteria. Colonies of coliforms appear bluish green to green while <i>E. coli</i> colonies are dark blue-violet to violet. For Microfilm YMC, the medium contains growth nutrients and an anti-bacterial agent. Yeasts form small, raised blue, light blue, green, light green or colored colonies with a defined edge and a uniform color. Mold colonies are normally larger with a diffused edge and show light blue, green, brown, yellow, black or other pigmentation depending on the species.	
DISCUSSION OF THE VALIDATION STUDY (1)	
Results from both the Method Developer and independent validation studies indicate that the Microfilm Test System showed no significant differences in performance compared to the reference ISO Standard methods in all the food matrixes and environmental surfaces tested. In addition, results from the Method Developer's validation studies showed that the Microfilm™ Test System is robust, reproducible from lot to lot across all types of Microfilms and stable at the storage temperatures tested. Real-time stability data indicate that the Microfilm™ Test System is stable for 12 months at 2-25°C storage and for 6 weeks when exposed to a higher temperature (45°C).	

Table 7. Results from inclusivity testing of the Microfilm TCEc on coliform strains. (1)

No.	Organism	Source (Host) ^a	Color of colonies on Microfilm™ TCEc
1	<i>Citrobacter freundii</i>	ATCC 8090	Blue green
2	<i>Citrobacter freundii</i>	ATCC 43864	Blue green
3	<i>Citrobacter freundii</i>	MEI 8325 (Unknown)	Blue green
4	<i>Citrobacter freundii</i>	MEI 10187 (Unknown)	Blue green
5	<i>Citrobacter amalonaticus</i>	DSM 4593	Blue green
6	<i>Citrobacter farmer</i>	DSM 17655	Blue green
7	<i>Citrobacter koseri/ diversus</i>	MEI 2640 (Unknown)	Blue green
8	<i>Citrobacter koseri/diversus</i>	MEI 13191 (Beef)	Blue green
9	<i>Citrobacter youngae</i>	DSM 17578	Blue green
10	<i>Citrobacter braakii</i>	MEI S-1 (Sprout)	Blue green
11	<i>Citrobacter braakii</i>	MEI 12533-2 (Unknown)	Blue green
12	<i>Citrobacter werkmanii</i>	DSM 17579	Blue green
13	<i>Citrobacter sedlakii</i>	DSM 17674	Blue green
14	<i>Citrobacter gillenii</i>	DSM 16394	Blue green
15	<i>Citrobacter rodenticum</i>	DSM 16636	Blue green
16	<i>Enterobacter aerogenes</i>	MEI 30106 (Unknown)	Blue green
17	<i>Enterobacter aerogenes</i>	ATCC 13048	Blue green
18	<i>Enterobacter aerogenes</i>	MEI 82504 (Unknown)	Blue green
19	<i>Enterobacter cloacae</i>	ATCC 13047	Blue green
20	<i>Enterobacter cloacae</i>	ATCC 23355	Blue green
21	<i>Enterobacter cloacae</i>	MEI 29868 (Environ.)	Blue green
22	<i>Enterobacter cloacae</i>	MEI 9120 (Unknown)	Blue green
23	<i>Enterobacter sakazakii</i>	ATCC 29004	Blue green
24	<i>Enterobacter sakazakii</i>	ATCC 51329	Blue green
25	<i>Enterobacter sakazakii</i>	MEI 29851 (Food product)	Blue green
26	<i>Enterobacter sakazakii</i>	MEI 29852 (Food product)	Blue green
27	<i>Enterobacter sakazakii</i>	MEI 27583 (Ground beef)	Blue green
28	<i>Enterobacter intermedium</i>	MEI 10137 (Unknown)	Blue green
29	<i>Enterobacter intermedium</i>	MEI 10138 (Unknown)	Blue green
30	<i>Enterobacter agglomerans</i>	MEI 10610 (Unknown)	Blue green
31	<i>Enterobacter agglomerans</i>	MEI 20655 (Env. Contam.)	Blue green
32	<i>Enterobacter agglomerans</i>	MEI 15928 (Env. Contam.)	Blue green
33	<i>Enterobacter cancerogenus</i>	MEI 83821 (Sprout- S1)	Blue green
34	<i>Enterobacter cancerogenus</i>	MEI 83836 (Sprout- S2)	Blue green
35	<i>Klebsiella oxytoca</i>	MEI 10025 (Unknown)	Blue green
36	<i>Klebsiella oxytoca</i>	MEI 21611 (Soy base)	Blue green
37	<i>Klebsiella oxytoca</i>	MEI 29796 (Unknown)	Blue green
38	<i>Klebsiella oxytoca</i>	MEI 70309 (Yoghurt)	Blue green
39	<i>Klebsiella pneumoniae</i>	ATCC 13883	Blue green
40	<i>Klebsiella pneumoniae</i>	ATCC 10031	Blue green
41	<i>Klebsiella pneumoniae</i>	MEI 10022 (Unknown)	Blue green
42	<i>Klebsiella pneumoniae</i>	MEI 10023 (Unknown)	Blue green
43	<i>Klebsiella planticola</i>	MEI 31457 (Contaminant)	Blue green
44	<i>Klebsiella planticola</i>	MEI 22054-2 (Tank)	Blue green
45	<i>Klebsiella granulomatis</i>	MEI 6446 (Unknown)	Blue green
46	<i>Klebsiella terrigena</i>	MEI 93749	Blue green
47	<i>Klebsiella terrigena</i>	MEI 93749	Blue green
48	<i>Escherichia hermanii</i>	MEI 19694 (Unknown)	Blue green
49	<i>Escherichia fergusonii</i>	MEI 23429 (Beef)	Blue green
50	<i>Escherichia vulneris</i>	DSM 4564	Blue green

^aMEI: Molecular Epidemiology, Inc. Culture Collection, Seattle, WA; ATCC: American Type Culture Collection, Manassas, VA; DSM: Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH (German Collection of Microorganisms and Cell Cultures, Braunschweig, Germany)

Table 8. Results from inclusivity testing of Microfilm TCEc on *E. coli* strains. (1)

No.	Organism	Source (Host) ^a	Color of <i>E. coli</i> colonies TCEc Microfilm
1	<i>Escherichia coli</i>	ATCC BAA-176	Violet
2	<i>Escherichia coli</i>	ATCC BAA-177	Violet
3	<i>Escherichia coli</i>	ATCC BAA-178	Violet
4	<i>Escherichia coli</i>	ATCC BAA-182	Violet
5	<i>Escherichia coli</i>	ATCC BAA-183	Violet
6	<i>Escherichia coli</i>	ATCC BAA-1427	Violet
7	<i>Escherichia coli</i>	ATCC BAA-1428	Violet
8	<i>Escherichia coli</i>	ATCC BAA-1429	Violet
9	<i>Escherichia coli</i>	ATCC 11775	Violet
10	<i>Escherichia coli</i>	ATCC 11840	Violet
11	<i>Escherichia coli</i>	ATCC 25922	Violet
12	<i>Escherichia coli</i>	ATCC 43887	Violet
13	<i>Escherichia coli</i>	ATCC 8739	Violet
14	<i>Escherichia coli</i>	ATCC BAA-179	Blue Violet
15	<i>Escherichia coli</i>	ATCC BAA-180	Blue Violet
16	<i>Escherichia coli</i>	ATCC BAA-181	Blue Violet
17	<i>Escherichia coli</i>	ATCC BAA-184	Blue Violet
18	<i>Escherichia coli</i>	ATCC 23509	Violet
19	<i>Escherichia coli</i>	ATCC 25922	Violet
20	<i>Escherichia coli</i>	ATCC 700840	Blue Violet
21	<i>Escherichia coli</i>	MEI 109791 (Environmental sample)	Blue Violet
22	<i>Escherichia coli</i>	MEI 71259 (Human isolate)	Violet
23	<i>Escherichia coli</i>	MEI 71520 (Environmental surface)	Violet
24	<i>Escherichia coli</i>	MEI 71521 (Human isolate)	Violet
25	<i>Escherichia coli</i>	ATCC 8739	Violet
26	<i>Escherichia coli</i>	MEI 115832 (Food Powder)	Violet
27	<i>Escherichia coli</i>	MEI 115264 (Unknown)	Violet
28	<i>Escherichia coli</i>	MEI 75559 (Unknown)	Violet
29	<i>Escherichia coli</i>	MEI 75890 (Unknown)	Violet
30	<i>Escherichia coli</i>	MEI 79068 (Unknown)	Violet
31	<i>Escherichia coli</i>	MEI 79069 (Unknown)	Violet
32	<i>Escherichia coli</i>	MEI 112762 (Water)	Violet
33	<i>Escherichia coli</i>	MEI 110558 ((Botanical Powder)	Violet
34	<i>Escherichia coli</i>	MEI 90672-4B (Water tank)	Violet
35	<i>Escherichia coli</i>	MEI 90672-5A (Environ. Surface)	Violet
36	<i>Escherichia coli</i>	MEI 90672-6A (Environ. Surface)	Violet
37	<i>Escherichia coli</i>	MEI 90672-11B (Environ. Surface)	Violet
38	<i>Escherichia coli</i>	MEI 90672-29A (Environ. Surface)	Violet
39	<i>Escherichia coli</i>	MEI 90672-6C (Environ. Surface)	Violet
40	<i>Escherichia coli</i>	MEI 122555 (Well water)	Violet
41	<i>Escherichia coli</i>	MEI 122556 (Well water)	Violet
42	<i>Escherichia coli</i>	MEI 14153 (Water)	Violet
43	<i>Escherichia coli</i>	MEI 14154 (Soil)	Violet
44	<i>Escherichia coli</i>	MEI 19504 (Human)	Violet
45	<i>Escherichia coli</i>	MEI 19505 (Human)	Violet
46	<i>Escherichia coli</i>	MEI 105631 (Powder)	Violet
47	<i>Escherichia coli</i>	MEI 105595 (Mineral Supplement)	Violet
48	<i>Escherichia coli</i>	MEI 90672-1A (Screw-press cover)	Violet
49	<i>Escherichia coli</i>	MEI 90672-7A (Compactor catch tray)	Violet
50	<i>Escherichia coli</i>	MEI 90672-7A (Vat)	Violet
51	<i>Escherichia coli</i>	MEI 90672-7B (Vat)	Violet
52	<i>Escherichia coli</i>	MEI 90672-10A (Environ. sample)	Violet

^aMEI: Molecular Epidemiology, Inc. Culture Collection, Seattle, WA; ATCC: American Type Culture Collection, Manassas, VA

Table 9. Results from exclusivity testing of Microfilm TCeC. (1)

No.	Organism	Source	Growth on Microfilm TCeC
1	<i>Bacillus cereus</i>	ATCC 11778	No visible growth
2	<i>Bacillus megaterium</i>	ATCC 14581	No visible growth
3	<i>Bacillus subtilis</i>	ATCC 6633	No visible growth
4	<i>Corynebacterium xerosis</i>	ATCC 373	No visible growth
5	<i>Enterococcus casseliflavus</i>	MEI 16802 (Food contaminant)	No visible growth
6	<i>Enterococcus durans</i>	MEI 27621 (Vial)	No visible growth
7	<i>Enterococcus faecalis</i>	ATCC 19433	No visible growth
8	<i>Enterococcus mundtii</i>	MEI 18285 (Environ. sample)	No visible growth
9	<i>Lactobacillus acidophilus</i>	ATCC 4356	No visible growth
10	<i>Lactobacillus delbrueckii</i>	MEI 21124 (Food product)	No visible growth
11	<i>Leuconostoc mesenteroides</i>	MEI 20319 (Yogurt)	No visible growth
12	<i>Listeria grayi</i>	ATCC 25400	No visible growth
13	<i>Listeria monocytogenes</i>	ATCC 19115	No visible growth
14	<i>Micrococcus luteus</i>	ATCC 4698	No visible growth
15	<i>Morganella morganii</i>	ATCC 25830	No visible growth
16	<i>Proteus mirabilis</i>	ATCC 7002	No visible growth
17	<i>Proteus vulgaris</i>	ATCC 8427	No visible growth
18	<i>Pseudomonas aeruginosa</i>	ATCC 27853	No visible growth
19	<i>Pseudomonas fluorescens</i>	ATCC 27663	No visible growth
20	<i>Pseudomonas chloraphis</i>	MEI 9262	No visible growth
21	<i>Pseudomonas putida</i>	MEI 17345 (Env. Surface)	No visible growth
22	<i>Pseudomonas poeae</i>	MEI 3481-12 (Unknown)	No visible growth
23	<i>Salmonella enterica</i> subsp <i>enterica</i>	ATCC 6960	No visible growth
24	<i>Salmonella enterica</i> subsp <i>enterica</i> ser Enteritidis	ATCC 4931	No visible growth
25	<i>Salmonella enterica</i> subsp <i>enterica</i> ser Typhimurium	ATCC 14028	No visible growth
26	<i>Staphylococcus aureus</i> subsp <i>aureus</i>	ATCC 6538	No visible growth
27	<i>Staphylococcus epidermidis</i>	ATCC 12228	No visible growth
28	<i>Staphylococcus saprophyticus</i> subsp <i>saprophyticus</i>	ATCC 15305	No visible growth
29	<i>Streptococcus pneumoniae</i>	ATCC BAA-255	No visible growth
30	<i>Streptococcus pyogenes</i>	ATCC 49399	No visible growth

^aMEI: Molecular Epidemiology, Inc Culture Collection, Seattle, WA; ATCC: American Type Culture Collection, Manassas, VA

Table 10. Results from inclusivity study on Microfilm YMC. (1)

No.	Organism	MEI CC ID #	Source	Growth on Microfilm YMC
MOLDS				
1	<i>Acremonium hyalinulum</i>	31520	Environmental	Grayish-blue with defined center and diffused grayish edge
2	<i>Alternaria alternate</i>	41134	Whole fruit tissue	Greenish-gray, spreading, with diffused edge
3	<i>Alternaria tenuissima</i>	26781	Environmental	Blue, spreading with diffused edge
4	<i>Aspergillus aculeatus</i>	30462	Environmental	Blue, spreading with diffused edge
5	<i>Aspergillus auricomus</i>	25601	Environmental	Blue with diffused edge
6	<i>Aspergillus candidus</i>	49327	Finished product	Bluish green with center foci and diffused edge
7	<i>Aspergillus clavatus</i>	98252	Environmental	Blue with diffused edge
8	<i>Aspergillus flavus</i>	44965	Pistachio	Light blue, spreading with diffused edge
9	<i>Aspergillus niger^d</i>	23865	ATCC 16404	Blue with diffused edge and dark spores in the center
10	<i>Aspergillus nomius</i>	27605	Environmental	Blue with diffused edge
11	<i>Aspergillus parasiticus</i>	44984	Pistachio	Blue with convex center and diffused edge
12	<i>Aspergillus phoenicis</i>	31788	Surface	Blue with diffused edge
13	<i>Aspergillus ruber</i>	107055	Unknown	Bluish green with diffused edge ^a
14	<i>Aspergillus tamari</i>	44969	Pistachio	Spreading greenish-blue with dark center and diffused edge
15	<i>Aspergillus tubingiensis</i>	41137	Whole fruit tissue	Blue with diffused edge
16	<i>Aspergillus versicolor</i>	37438	Product	Blue with diffused edge
17	<i>Bipolaris australiensis</i>	86488	Surface	Spreading gray-blue with darker center and diffused edge
18	<i>Chaetomium globosum</i>	37181	Surface	Pale-blue with diffused edge
19	<i>Davidiella tassiana</i>	41072	Beef	Dark-brown with defined center and diffused edge
20	<i>Emericella rugulosa</i>	30636	Surface	Light gray-brown with diffused edge
21	<i>Eurotium chevalieri</i>	86012	Unknown	Bluish green with diffused edge ^b
22	<i>Fusarium incarnatum</i>	27466	Unknown	Blue with diffused edge
23	<i>Fusarium oxysporum</i>	98877	Basil	Spreading greenish-gray with diffused edge
24	<i>Fusarium verticillioides</i>	111085	Tank water	Bluish green with diffused edge ^b
25	<i>Galactomyces geotrichum</i>	99492	Cheese	Spreading, blue-green with diffused edge
26	<i>Geotrichum candidum</i>	34737	Product	Spreading, blue-green with diffused edge and defined center
27	<i>Metarhizium anisopliae</i>	33155	ATCC 200691	Spreading, blue with diffused edge and defined center
28	<i>Monascus ruber</i>	92679	Unknown	Spreading, blue-green with diffused edge and darker center
29	<i>Mucor circinelloides</i>	89563	Yogurt	Greenish blue with diffused edge and visible spores
30	<i>Mucor fragilis</i>	40060	Dry Wall Surface	Greenish blue with diffused edge
31	<i>Mucor plumbeus</i>	40064	Glass Door Surface	Blue with diffused edge and visible spores
32	<i>Mucor racemosus</i>	35566	Pork	Greenish blue with diffused edge
33	<i>Mucor ramosissimus</i>	22708	Environmental	Greenish blue with diffused edge and visible spores
34	<i>Paecilomyces lilacinus</i>	99680	Unknown	Blue with defined edge
35	<i>Paecilomyces variotii</i>	41073	Bulk product	Blue with diffused edge
36	<i>Penicillium camemberti</i>	49268	Dry apricot	Light blue convex with defined darker center
37	<i>Penicillium citrinum</i>	46645	Water	Blue convex with darker center and blurry halo
38	<i>Penicillium commune</i>	35565	Pork	Light blue convex with defined darker center
39	<i>Penicillium corylophilum</i>	41074	Product	Light blue convex with defined darker center
40	<i>Penicillium crustosum</i>	87299	Product	Light greenish blue convex with defined darker center
41	<i>Penicillium decaturense</i>	88788	Swab	Blue with blurry edge
42	<i>Penicillium dipodomys</i>	49329	Finished Product	Light blue convex with defined darker center
43	<i>Penicillium expansum</i>	47124	Apple	Blue with blurry edge
44	<i>Penicillium flavigenum</i>	49316	Dough	Light blue convex with defined darker center
45	<i>Penicillium glabrum</i>	45447	Almond	Blue with diffused edge and defined darker center
46	<i>Penicillium oxalicum</i>	39762	Surface swab	Blue with brownish center and diffused edge
47	<i>Penicillium purpurogenum</i>	41138	Whole fruit tissue	Small blue convex with diffused edge
48	<i>Rhizopus oryzae</i>	37599	Settling tank	Spreading gray colony
49	<i>Trichoderma citrinoviride</i>	45439	Almond	Blue with diffused edge
50	<i>Walleimia sebi</i>	105421	Unknown	Blue-green colonies ^a
YEASTS				

1	<i>Candida albicans</i>	26693	Unknown	Blue-green with defined edge
2	<i>Candida catenulate</i>	47661	Wine	Blue with defined edge
3	<i>Candida dubliniensis</i>	91702	Oral swab	Blue with defined edge
4	<i>Candida geochares</i>	28072	Unknown	Greenish convex with defined edge
5	<i>Candida glabrata</i>	20643	Unknown	Blue with defined edge
6	<i>Candida kefyr</i>	20646	Unknown	Blue-green with defined edge
7	<i>Candida krusei</i>	20533	Unknown	Blue with defined edge
8	<i>Candida lactis-condensi</i>	105408	Rum cake	Light blue with defined edge
9	<i>Candida lusitanae</i>	91282	Blueberry product	Blue-green convex with defined edge
10	<i>Candida membranifaciens</i>	86010	Unknown	Green-blue with defined edge
11	<i>Candida oleophila</i>	109867	Juice	Green-blue convex with defined edge
12	<i>Candida parapsilosis</i>	90167	Fruit product	Green convex with defined edge
13	<i>Candida railenensis</i>	109866	Juice	Blue-green convex with defined edge
14	<i>Candida rugose</i>	32748	Insect diet	Blue with defined edge
15	<i>Candida tropicalis</i>	93073	Yogurt with fruits	Blue-green with defined edge
16	<i>Candida zeylanoides</i>	37569	Turkey Breast	Blue with defined edge
17	<i>Cryptococcus albidus</i>	42292	ATCC 34140	Greenish blue convex with defined edge
18	<i>Cryptococcus carnescens</i>	92305	Fresh tissue	Blue convex with defined edge
19	<i>Cryptococcus flavus</i>	43606	Contaminant	Blue convex with defined edge
20	<i>Cryptococcus humicola</i>	20653	Unknown	Grayish green with defined edge
21	<i>Cryptococcus longus</i>	32047	Contaminant	Blue with defined edge
22	<i>Cryptococcus luteolus</i>	27934	Unknown	Blue with defined edge
23	<i>Cryptococcus rajasthanensis</i>	107930	Swab	Blue with defined edge
24	<i>Cryptococcus saitoi</i>	106039	Product	Green-blue convex with defined edge
25	<i>Cryptococcus victoriae</i>	35818	Apple	Blue-green colonies
26	<i>Debaryomyces hansenii</i>	35859	Ham	Blue-green convex with defined edge
27	<i>Hanseniaspora uvarum</i>	110944	Fresh Jalapeno	Blue with defined edge
28	<i>Hanseniaspora valbyensis</i>	44747	Product	Blue with defined edge
29	<i>Kluyveromyces sp.</i>	89505	Product	Blue with defined edge
30	<i>Lodderomyces elongisporus</i>	90116	Product	Light blue convex with defined edge
31	<i>Pichia fermentans</i>	44755	Product	Blue with defined edge
32	<i>Pichia guilliermondii</i>	49265	Dry Apricot	Light blue with defined edge
33	<i>Pichia membranifaciens</i>	86880	Product	Blue with defined edge
34	<i>Pichia misumaiensis</i>	35816	Apple	Greenish blue with defined edge
35	<i>Pichia nakasei</i>	109865	Juice	Grayish green with defined edge
36	<i>Pichia ofunaensis</i>	20979	Environmental	Light-blue with defined edge
37	<i>Pichia onychis</i>	107950	Deli	Light-blue with defined edge
38	<i>Rhodospiridium paludigenum</i>	100997	Unknown	Grayish green with defined edge
39	<i>Rhodotorula glutinis</i>	102442	Pre-sterilized sample	Grayish green convex with defined edge
40	<i>Rhodotorula mucilaginosa</i>	112550	Contaminant	Bluish green with defined edge
41	<i>Saccharomyces cerevisiae</i>	20700	ATCC 46328	Light blue convex with defined edge
42	<i>Saccharomyces exiguus</i>	37944	Yogurt	Bluish green convex with defined edge
43	<i>Saccharomyces kudriavzevii</i>	46623	Unknown	Bluish green convex with defined edge
44	<i>Sporidiobolus pararoseus</i>	33143	Outdoor air sample	Blue with defined edge
45	<i>Torulaspora delbrueckii</i>	38749	Yogurt product	Yellowish green gray convex with defined edge
46	<i>Trichosporon asahii</i>	34734	Unknown	Blue with defined edge
47	<i>Trichosporon domesticum</i>	34730	Product	Blue with defined edge
48	<i>Yarrowia lipolytica</i>	90529	Product (Fruit)	Greenish gray convex with defined edge
49	<i>Zygosaccharomyces bailie^d</i>	87367	ATCC 36947	Bluish green with diffused edge ^b
50	<i>Zygosaccharomyces rouxii</i>	87366	ATCC 4898	Bluish green with diffused edge ^b

^aNo visible growth at 48 hr, with colonies becoming visible at 60 hr and more pronounced and countable at 72 hr

^bFaint but discernible growth at 48 hr, with colonies becoming more pronounced and countable at 66 to 68 hr

^cFaint but discernible growth at 48 hr with colonies becoming more pronounced and countable at 72 hr

^dRenamed as *Aspergillus brasiliensis*

^eRenamed as *Zygosaccharomyces parabilis*

Table 11. Results from exclusivity study on Microfilm YMC. (1)

No.	Organism	Source	Growth on Microfilm YMC
1	<i>Bacillus cereus</i>	ATCC 11778	No visible growth
2	<i>Bacillus megaterium</i>	ATCC 14581	No visible growth
3	<i>Bacillus subtilis</i>	ATCC 6633	No visible growth
4	<i>Corynebacterium xerosis</i>	ATCC 373	No visible growth
5	<i>Enterococcus faecalis</i>	ATCC 19433	No visible growth
6	<i>Enterococcus mundtii</i>	MEI 18285 (Environmental)	No visible growth
7	<i>Escherichia coli</i>	ATCC 25922	No visible growth
8	<i>Escherichia coli</i>	ATCC 8739	No visible growth
9	<i>Lactobacillus acidophilus</i>	ATCC 4356	No visible growth
10	<i>Lactobacillus delbrueckii</i>	MEI 21124 (Food product)	No visible growth
11	<i>Leuconostoc mesenteroides</i>	MEI 20319 (Yogurt)	No visible growth
12	<i>Listeria grayi</i>	ATCC 25400	No visible growth
13	<i>Listeria monocytogenes</i>	ATCC 19115	No visible growth
14	<i>Micrococcus luteus</i>	ATCC 4698	No visible growth
15	<i>Morganella morganii</i>	ATCC 25830	No visible growth
16	<i>Proteus mirabilis</i>	ATCC 7002	No visible growth
17	<i>Proteus vulgaris</i>	ATCC 8427	No visible growth
18	<i>Pseudomonas aeruginosa</i>	ATCC 27853	No visible growth
19	<i>Pseudomonas fluorescens</i>	ATCC 27663	No visible growth
20	<i>Pseudomonas chloraphis</i>	MEI 9262	No visible growth
21	<i>Pseudomonas putida</i>	MEI 17345 (Environmental)	No visible growth
22	<i>Pseudomonas poae</i>	MEI 3481-12 (Unknown)	No visible growth
23	<i>Salmonella enterica</i> subsp <i>enterica</i>	ATCC 6960	No visible growth
24	<i>Salmonella enterica</i> subsp <i>enterica</i> ser Enteritidis	ATCC 4931	No visible growth
25	<i>Salmonella enterica</i> subsp <i>enterica</i> ser Typhimurium	ATCC 14028	No visible growth
26	<i>Staphylococcus aureus</i> subsp <i>aureus</i>	ATCC 6538	No visible growth
27	<i>Staphylococcus epidermidis</i>	ATCC 12228	No visible growth
28	<i>Staphylococcus saprophyticus</i> subsp <i>saprophyticus</i>	ATCC 15305	No visible growth
29	<i>Streptococcus pneumoniae</i>	ATCC BAA-255	No visible growth
30	<i>Streptococcus pyogenes</i>	ATCC 49399	No visible growth

Table A3: Summary of the Method Developer's Method Comparison Statistics between the Microfilm APC and ISO 4833-1 Aerobic Plate Counts (APC) in 20 food matrixes and two environmental surfaces. (1)

Matrix	Inoculum Level ^a	Rep # ^b	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference ^e
			Count	Log ₁₀	Log ₁₀ Mean	S _r ^c	RSD ^d	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	1.00 x 10 ²	2.0043	2.1121	0.0756	3.5788	9.00 x 10 ¹	1.9590	2.1625	0.1561	7.2172	-0.0504
		R2	1.60 x 10 ²	2.2068				2.30 x 10 ²	2.3636				
		R3	1.20 x 10 ²	2.0828				1.80 x 10 ²	2.2577				
		R4	1.30 x 10 ²	2.1173				1.20 x 10 ²	2.0828				
		R5	1.40 x 10 ²	2.1492				1.40 x 10 ²	2.1492				
	Low	R1	1.70 x 10 ²	2.2330	2.1296	0.3309	15.5373	2.40 x 10 ²	2.3820	2.1942	0.1976	9.0070	-0.0646
		R2	3.30 x 10 ²	2.5198				2.40 x 10 ²	2.3820				
		R3	6.00 x 10 ¹	1.7853				8.00 x 10 ¹	1.9085				
		R4	2.10 x 10 ²	2.3243				1.40 x 10 ²	2.1492				
		R5	6.00 x 10 ¹	1.7853				1.40 x 10 ²	2.1492				
	Medium	R1	2.44 x 10 ³	3.3869	3.3067	0.0542	1.6396	2.49 x 10 ³	3.3965	3.3121	0.0775	2.3387	-0.0054
		R2	1.95 x 10 ³	3.2913				2.15 x 10 ³	3.3336				
		R3	1.75 x 10 ³	3.2422				1.59 x 10 ³	3.2017				
		R4	1.93 x 10 ³	3.2852				1.85 x 10 ³	3.2685				
		R5	2.13 x 10 ³	3.3280				2.29 x 10 ³	3.3602				
	High	R1	3.40 x 10 ⁵	5.5315	5.3936	0.2020	3.7459	2.66 x 10 ⁵	5.4255	5.3185	0.1664	3.1294	0.0751
		R2	1.84 x 10 ⁵	5.2640				1.50 x 10 ⁵	5.1761				
		R3	1.53 x 10 ⁵	5.1839				1.42 x 10 ⁵	5.1523				
		R4	4.70 x 10 ⁵	5.6721				3.50 x 10 ⁵	5.5441				
		R5	2.07 x 10 ⁵	5.3165				1.97 x 10 ⁵	5.2945				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Black Pepper	Un-inoculated	R1	2.20 x 10 ²	2.3444	2.3518	0.1155	4.9100	2.80 x 10 ²	2.4487	2.3891	0.1388	5.8114	-0.0373
		R2	3.00 x 10 ²	2.4786				3.60 x 10 ²	2.5575				
		R3	2.70 x 10 ²	2.4330				2.80 x 10 ²	2.4487				
		R4	2.10 x 10 ²	2.3243				1.80 x 10 ²	2.2577				
		R5	1.50 x 10 ²	2.1790				1.70 x 10 ²	2.2330				
	Low	R1	2.20 x 10 ²	2.3444	2.4652	0.0902	3.6574	2.30 x 10 ²	2.3636	2.4419	0.0866	3.5472	0.0234
		R2	3.10 x 10 ²	2.4928				3.30 x 10 ²	2.5198				
		R3	2.70 x 10 ²	2.4330				2.80 x 10 ²	2.4487				
		R4	2.90 x 10 ²	2.4639				3.40 x 10 ²	2.5328				
		R5	3.90 x 10 ²	2.5922				2.20 x 10 ²	2.3444				
	Medium	R1	3.60 x 10 ³	3.5564	3.8366	0.2191	5.7105	4.00 x 10 ³	3.6022	3.8350	0.1869	4.8724	0.0016
		R2	1.05 x 10 ⁴	4.0193				7.90 x 10 ³	3.8977				
		R3	5.80 x 10 ³	3.7635				7.60 x 10 ³	3.8809				
		R4	5.60 x 10 ³	3.7483				5.10 x 10 ³	3.7077				
		R5	1.25 x 10 ⁴	4.0954				1.22 x 10 ⁴	4.0864				
	High	R1	8.10 x 10 ⁴	4.9085	5.0887	0.2971	5.8381	7.10 x 10 ⁴	4.8513	5.0633	0.1952	3.8556	0.0253
		R2	3.90 x 10 ⁵	5.5911				2.29 x 10 ⁵	5.3600				
		R3	6.82 x 10 ⁴	4.8337				8.50 x 10 ⁴	4.9294				
		R4	1.08 x 10 ⁵	5.0342				1.26 x 10 ⁵	5.1004				
		R5	1.19 x 10 ⁵	5.0759				1.19 x 10 ⁵	5.0756				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Cumin	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.50 x 10 ²	2.3997	2.3442	0.1323	5.6456	2.80 x 10 ²	2.4487	2.3689	0.1037	4.3785	-0.0247
		R2	1.50 x 10 ²	2.1790				1.70 x 10 ²	2.2330				
		R3	1.70 x 10 ²	2.2330				2.70 x 10 ²	2.4330				
		R4	3.10 x 10 ²	2.4928				1.90 x 10 ²	2.2810				
		R5	2.60 x 10 ²	2.4166				2.80 x 10 ²	2.4487				
	Medium	R1	7.80 x 10 ³	3.8922	3.8247	0.0390	1.0204	6.40 x 10 ³	3.8062	3.7763	0.0238	0.6298	0.0484
		R2	6.20 x 10 ³	3.7925				5.60 x 10 ³	3.7483				
		R3	6.40 x 10 ³	3.8062				6.10 x 10 ³	3.7854				
		R4	6.50 x 10 ³	3.8130				5.70 x 10 ³	3.7560				
		R5	6.60 x 10 ³	3.8196				6.10 x 10 ³	3.7854				
	High	R1	6.00 x 10 ⁵	5.7782	5.6839	0.0694	1.2215	6.20 x 10 ⁵	5.7924	5.6797	0.0733	1.2914	0.0042
		R2	4.60 x 10 ⁵	5.6628				4.40 x 10 ⁵	5.6435				
		R3	4.30 x 10 ⁵	5.6335				4.00 x 10 ⁵	5.6021				
		R4	5.40 x 10 ⁵	5.7324				5.10 x 10 ⁵	5.7076				
		R5	4.10 x 10 ⁵	5.6128				4.50 x 10 ⁵	5.6532				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Dry Pet Food	Un-inoculated	R1	2.50 x 10 ²	2.3997	2.2843	0.1054	4.6146	2.40 x 10 ²	2.3820	2.3730	0.1000	4.2138	-0.0887
		R2	1.80 x 10 ²	2.2577				2.70 x 10 ²	2.4330				
		R3	1.40 x 10 ²	2.1492				1.70 x 10 ²	2.2330				
		R4	2.40 x 10 ²	2.3820				2.10 x 10 ²	2.3243				
		R5	1.70 x 10 ²	2.2330				3.10 x 10 ²	2.4928				
	Low	R1	4.90 x 10 ²	2.6911	2.6369	0.0627	2.3797	4.40 x 10 ²	2.6444	2.6135	0.0857	3.2798	0.0234
		R2	3.70 x 10 ²	2.5694				3.20 x 10 ²	2.5065				
		R3	4.30 x 10 ²	2.6345				4.50 x 10 ²	2.6542				
		R4	5.10 x 10 ²	2.7084				5.20 x 10 ²	2.7168				
		R5	3.80 x 10 ²	2.5809				3.50 x 10 ²	2.5453				
	Medium	R1	9.20 x 10 ³	3.9638	3.9585	0.0505	1.2766	8.30 x 10 ³	3.9191	3.9510	0.0216	0.5456	0.0075
		R2	9.50 x 10 ³	3.9778				9.40 x 10 ³	3.9732				
		R3	1.03 x 10 ⁴	4.0117				9.30 x 10 ³	3.9685				
		R4	9.20 x 10 ³	3.9638				8.80 x 10 ³	3.9445				
		R5	7.50 x 10 ³	3.8751				8.90 x 10 ³	3.9494				
	High	R1	1.35 x 10 ⁶	6.1289	6.0457	0.2131	3.5248	1.32 x 10 ⁶	6.1206	5.9895	0.2340	3.9069	0.0563
		R2	1.57 x 10 ⁶	6.1967				1.15 x 10 ⁶	6.0590				
		R3	1.42 x 10 ⁶	6.1517				1.43 x 10 ⁶	6.1545				
		R4	4.70 x 10 ⁵	5.6721				3.80 x 10 ⁵	5.5798				
		R5	1.20 x 10 ⁶	6.0792				1.08 x 10 ⁶	6.0334				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground beef, 7% Fat	Un-inoculated	R1	8.30 x 10 ²	2.9196	3.1863	0.1604	5.0344	9.70 x 10 ²	2.9872	3.2920	0.1865	5.6639	-0.1057
		R2	1.59 x 10 ³	3.2017				1.81 x 10 ³	3.2577				
		R3	2.23 x 10 ³	3.3480				2.68 x 10 ³	3.4286				
		R4	1.60 x 10 ³	3.2044				2.80 x 10 ³	3.4473				
		R5	1.81 x 10 ³	3.2577				2.18 x 10 ³	3.3390				
	Low	R1	9.91 x 10 ²	2.9965	3.2915	0.3097	9.4100	1.14 x 10 ³	3.0573	3.3016	0.2825	8.5572	-0.0101
		R2	1.50 x 10 ³	3.1764				1.54 x 10 ³	3.1878				
		R3	4.60 x 10 ³	3.6629				5.00 x 10 ³	3.6991				
		R4	1.10 x 10 ³	3.0418				1.18 x 10 ³	3.0722				
		R5	3.80 x 10 ³	3.5799				3.10 x 10 ³	3.4915				
	Medium	R1	2.31 x 10 ⁴	4.3635	4.3418	0.0328	0.7557	1.95 x 10 ⁴	4.2890	4.2979	0.0194	0.4505	0.0439
		R2	2.40 x 10 ⁴	4.3802				1.94 x 10 ⁴	4.2870				
		R3	2.03 x 10 ⁴	4.3069				2.09 x 10 ⁴	4.3204				
		R4	2.24 x 10 ⁴	4.3496				1.89 x 10 ⁴	4.2767				
		R5	2.04 x 10 ⁴	4.3089				2.07 x 10 ⁴	4.3166				
	High	R1	3.40 x 10 ⁶	6.5315	6.5423	0.1131	1.7294	2.11 x 10 ⁶	6.3241	6.3835	0.0460	0.7204	0.1588
		R2	3.30 x 10 ⁶	6.5185				2.36 x 10 ⁶	6.3736				
		R3	2.40 x 10 ⁶	6.3802				2.36 x 10 ⁶	6.3736				
		R4	3.90 x 10 ⁶	6.5911				2.48 x 10 ⁶	6.3948				
		R5	4.90 x 10 ⁶	6.6902				2.83 x 10 ⁶	6.4514				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground chicken, 2% Fat	Un-inoculated	R1	1.86 x 10 ⁵	5.2704	5.2441	0.0852	1.6247	2.39 x 10 ⁵	5.3786	5.3590	0.1080	2.0158	-0.1149
		R2	1.80 x 10 ⁵	5.2553				1.91 x 10 ⁵	5.2810				
		R3	1.50 x 10 ⁵	5.1761				1.81 x 10 ⁵	5.2575				
		R4	1.42 x 10 ⁵	5.1517				2.22 x 10 ⁵	5.3464				
		R5	2.33 x 10 ⁵	5.3668				3.40 x 10 ⁵	5.5315				
	Low	R1	1.54 x 10 ⁵	5.1865	5.1608	0.0176	0.3406	2.16 x 10 ⁵	5.3352	5.2791	0.0467	0.8838	-0.1183
		R2	1.47 x 10 ⁵	5.1681				1.97 x 10 ⁵	5.2951				
		R3	1.39 x 10 ⁵	5.1433				1.74 x 10 ⁵	5.2396				
		R4	1.45 x 10 ⁵	5.1600				1.67 x 10 ⁵	5.2227				
		R5	1.40 x 10 ⁵	5.1461				2.01 x 10 ⁵	5.3030				
	Medium	R1	1.73 x 10 ⁵	5.2374	5.2371	0.0272	0.5193	2.33 x 10 ⁵	5.3668	5.4034	0.0468	0.8658	-0.1663
		R2	1.61 x 10 ⁵	5.2066				2.25 x 10 ⁵	5.3531				
		R3	1.88 x 10 ⁵	5.2746				2.52 x 10 ⁵	5.4011				
		R4	1.78 x 10 ⁵	5.2509				2.95 x 10 ⁵	5.4692				
		R5	1.65 x 10 ⁵	5.2163				2.67 x 10 ⁵	5.4270				
	High	R1	2.51 x 10 ⁶	6.3995	6.3784	0.0241	0.3773	2.42 x 10 ⁶	6.3835	6.3864	0.0265	0.4148	-0.0081
		R2	2.37 x 10 ⁶	6.3752				2.40 x 10 ⁶	6.3802				
		R3	2.48 x 10 ⁶	6.3948				2.65 x 10 ⁶	6.4225				
		R4	2.18 x 10 ⁶	6.3388				2.49 x 10 ⁶	6.3964				
		R5	2.42 x 10 ⁶	6.3835				2.24 x 10 ⁶	6.3495				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground pork, 20% Fat	Un-inoculated	R1	2.60 x 10 ⁵	5.4150	5.5100	0.1556	2.8241	5.30 x 10 ⁵	5.7243	5.7571	0.0815	1.4149	-0.2471
		R2	4.70 x 10 ⁵	5.6721				7.60 x 10 ⁵	5.8808				
		R3	4.40 x 10 ⁵	5.6435				6.20 x 10 ⁵	5.7924				
		R4	2.00 x 10 ⁵	5.3010				4.70 x 10 ⁵	5.6721				
		R5	3.30 x 10 ⁵	5.5185				5.20 x 10 ⁵	5.7160				
	Low	R1	4.30 x 10 ⁵	5.6335	5.5332	0.1956	3.5358	5.70 x 10 ⁵	5.7559	5.8001	0.0792	1.3654	-0.2669
		R2	1.60 x 10 ⁵	5.2041				5.40 x 10 ⁵	5.7324				
		R3	3.70 x 10 ⁵	5.5682				6.00 x 10 ⁵	5.7782				
		R4	3.50 x 10 ⁵	5.5441				6.30 x 10 ⁵	5.7993				
		R5	5.20 x 10 ⁵	5.7160				8.60 x 10 ⁵	5.9345				
	Medium	R1	2.33 x 10 ⁵	5.3668	5.3978	0.0731	1.3545	6.70 x 10 ⁵	5.8261	5.7965	0.0403	0.6954	-0.3987
		R2	2.57 x 10 ⁵	5.4104				6.80 x 10 ⁵	5.8325				
		R3	2.15 x 10 ⁵	5.3315				5.40 x 10 ⁵	5.7324				
		R4	2.30 x 10 ⁵	5.3617				6.40 x 10 ⁵	5.8062				
		R5	3.30 x 10 ⁵	5.5185				6.10 x 10 ⁵	5.7853				
	High	R1	3.00 x 10 ⁶	6.4771	6.4434	0.1448	2.2478	2.02 x 10 ⁶	6.3054	6.4370	0.0991	1.5394	0.0065
		R2	3.10 x 10 ⁶	6.4914				2.57 x 10 ⁶	6.4104				
		R3	2.10 x 10 ⁶	6.3222				2.66 x 10 ⁶	6.4255				
		R4	4.40 x 10 ⁶	6.6435				3.80 x 10 ⁶	6.5798				
		R5	1.92 x 10 ⁶	6.2829				2.91 x 10 ⁶	6.4638				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground turkey, 1% Fat	Un-inoculated	R1	5.20 x 10 ⁴	4.7160	4.8839	0.2054	4.2064	5.80 x 10 ⁴	4.7634	4.8928	0.1514	3.0943	-0.0088
		R2	1.12 x 10 ⁵	5.0485				1.06 x 10 ⁵	5.0253				
		R3	9.70 x 10 ⁴	4.9868				9.10 x 10 ⁴	4.9590				
		R4	4.10 x 10 ⁴	4.6128				5.00 x 10 ⁴	4.6990				
		R5	1.14 x 10 ⁵	5.0555				1.04 x 10 ⁵	5.0170				
	Low	R1	1.65 x 10 ⁵	5.2163	4.9023	0.2495	5.0890	2.05 x 10 ⁵	5.3108	4.9286	0.2838	5.7579	-0.0262
		R2	5.20 x 10 ⁴	4.7160				3.50 x 10 ⁴	4.5441				
		R3	1.06 x 10 ⁵	5.0253				1.01 x 10 ⁵	5.0043				
		R4	9.18 x 10 ⁴	4.9629				9.80 x 10 ⁴	4.9912				
		R5	3.90 x 10 ⁴	4.5911				6.20 x 10 ⁴	4.7924				
	Medium	R1	1.02 x 10 ⁵	5.0078	5.0115	0.2051	4.0924	8.60 x 10 ⁴	4.9345	4.9723	0.2519	5.0669	0.0391
		R2	2.19 x 10 ⁵	5.3406				2.27 x 10 ⁵	5.3565				
		R3	7.40 x 10 ⁴	4.8692				6.40 x 10 ⁴	4.8062				
		R4	6.50 x 10 ⁴	4.8129				5.10 x 10 ⁴	4.7076				
		R5	1.06 x 10 ⁵	5.0268				1.14 x 10 ⁵	5.0569				
	High	R1	2.45 x 10 ⁶	6.3884	6.4255	0.1138	1.7711	2.71 x 10 ⁶	6.4328	6.4178	0.0242	0.3769	0.0078
		R2	4.20 x 10 ⁶	6.6232				2.78 x 10 ⁶	6.4443				
		R3	2.14 x 10 ⁶	6.3297				2.67 x 10 ⁶	6.4270				
		R4	2.45 x 10 ⁶	6.3884				2.45 x 10 ⁶	6.3884				
		R5	2.50 x 10 ⁶	6.3979				2.49 x 10 ⁶	6.3964				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ice Cream	Un-inoculated	R1	1.00 x 10 ¹	1.0414	1.0036	0.6088	60.6671	2.00 x 10 ¹	1.3222	1.0016	0.5730	57.2048	0.0019
		R2	2.00 x 10 ¹	1.3222				2.00 x 10 ¹	1.3222				
		R3	<10	0.0000				<10	0.0000				
		R4	1.00 x 10 ¹	1.0414				1.00 x 10 ¹	1.0414				
		R5	4.00 x 10 ¹	1.6128				2.00 x 10 ¹	1.3222				
	Low	R1	3.20 x 10 ²	2.5065	2.5860	0.1047	4.0487	3.10 x 10 ²	2.4928	2.5273	0.0545	2.1578	0.0587
		R2	3.60 x 10 ²	2.5575				3.20 x 10 ²	2.5065				
		R3	5.60 x 10 ²	2.7490				4.20 x 10 ²	2.6243				
		R4	4.20 x 10 ²	2.6243				3.20 x 10 ²	2.5065				
		R5	3.10 x 10 ²	2.4928				3.20 x 10 ²	2.5065				
	Medium	R1	6.40 x 10 ³	3.8062	3.5730	0.1890	5.2906	5.70 x 10 ³	3.7560	3.4400	0.1796	5.2205	0.1331
		R2	3.10 x 10 ³	3.4915				2.15 x 10 ³	3.3317				
		R3	2.00 x 10 ³	3.3012				2.32 x 10 ³	3.3653				
		R4	4.50 x 10 ³	3.6533				2.16 x 10 ³	3.3347				
		R5	4.10 x 10 ³	3.6129				2.58 x 10 ³	3.4121				
	High	R1	3.20 x 10 ⁵	5.5052	5.5793	0.1491	2.6723	2.31 x 10 ⁵	5.3634	5.4390	0.1503	2.7628	0.1403
		R2	6.80 x 10 ⁵	5.8325				5.10 x 10 ⁵	5.7076				
		R3	2.90 x 10 ⁵	5.4624				2.37 x 10 ⁵	5.3752				
		R4	3.20 x 10 ⁵	5.5052				2.40 x 10 ⁵	5.3802				
		R5	3.90 x 10 ⁵	5.5911				2.34 x 10 ⁵	5.3685				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	8.00 x 10 ¹	1.9085	2.1181	0.1442	6.8070	1.00 x 10 ²	2.0043	2.1222	0.0949	4.4725	-0.0040
		R2	1.20 x 10 ²	2.0828				1.10 x 10 ²	2.0453				
		R3	1.30 x 10 ²	2.1173				1.40 x 10 ²	2.1492				
		R4	2.00 x 10 ²	2.3032				1.70 x 10 ²	2.2330				
		R5	1.50 x 10 ²	2.1790				1.50 x 10 ²	2.1790				
	Medium	R1	1.35 x 10 ⁴	4.1304	4.1236	0.0377	0.9134	1.17 x 10 ⁴	4.0682	4.1055	0.0343	0.8358	0.0181
		R2	1.19 x 10 ⁴	4.0759				1.28 x 10 ⁴	4.1072				
		R3	1.25 x 10 ⁴	4.0954				1.31 x 10 ⁴	4.1173				
		R4	1.41 x 10 ⁴	4.1490				1.20 x 10 ⁴	4.0792				
		R5	1.47 x 10 ⁴	4.1673				1.43 x 10 ⁴	4.1554				
	High	R1	1.12 x 10 ⁶	6.0492	6.0245	0.0304	0.5054	9.50 x 10 ⁵	5.9777	6.0005	0.0210	0.3501	0.0240
		R2	1.00 x 10 ⁶	6.0000				1.07 x 10 ⁶	6.0294				
		R3	9.70 x 10 ⁵	5.9868				1.01 x 10 ⁶	6.0043				
		R4	1.07 x 10 ⁶	6.0294				1.02 x 10 ⁶	6.0086				
		R5	1.14 x 10 ⁶	6.0569				9.60 x 10 ⁵	5.9823				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Mung bean sprouts	Un-inoculated	R1	4.80 x 10 ⁶	6.6812	6.5972	0.1109	1.6813	3.90 x 10 ⁶	6.5911	6.5759	0.0421	0.6408	0.0214
		R2	4.10 x 10 ⁶	6.6128				3.40 x 10 ⁶	6.5315				
		R3	2.55 x 10 ⁶	6.4073				3.40 x 10 ⁶	6.5315				
		R4	4.10 x 10 ⁶	6.6128				4.20 x 10 ⁶	6.6232				
		R5	4.70 x 10 ⁶	6.6721				4.00 x 10 ⁶	6.6021				
	Low	R1	2.14 x 10 ⁶	6.3297	6.6882	0.2493	3.7271	2.55 x 10 ⁶	6.4073	6.7014	0.2283	3.4070	-0.0132
		R2	5.60 x 10 ⁶	6.7482				5.90 x 10 ⁶	6.7709				
		R3	5.60 x 10 ⁶	6.7482				4.20 x 10 ⁶	6.6232				
		R4	1.03 x 10 ⁷	7.0128				1.08 x 10 ⁷	7.0334				
		R5	4.00 x 10 ⁶	6.6021				4.70 x 10 ⁶	6.6721				
	Medium	R1	8.30 x 10 ⁶	6.9191	6.8690	0.0533	0.7756	8.10 x 10 ⁶	6.9085	6.8937	0.0658	0.9550	-0.0247
		R2	7.40 x 10 ⁶	6.8692				8.60 x 10 ⁶	6.9345				
		R3	6.70 x 10 ⁶	6.8261				6.70 x 10 ⁶	6.8261				
		R4	8.40 x 10 ⁶	6.9243				9.40 x 10 ⁶	6.9731				
		R5	6.40 x 10 ⁶	6.8062				6.70 x 10 ⁶	6.8261				
	High	R1	7.50 x 10 ⁶	6.8751	6.9923	0.2023	2.8939	8.40 x 10 ⁶	6.9243	7.0185	0.2272	3.2366	-0.0262
		R2	7.10 x 10 ⁶	6.8513				5.90 x 10 ⁶	6.7709				
		R3	9.00 x 10 ⁶	6.9542				1.07 x 10 ⁷	7.0294				
		R4	2.22 x 10 ⁷	7.3464				2.43 x 10 ⁷	7.3856				
		R5	8.60 x 10 ⁶	6.9345				9.60 x 10 ⁶	6.9823				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Noodles, Uncooked	Un-inoculated	R1	<10	0.0000	0.4166	0.5704	136.9306	<10	0.0000	0.4166	0.5704	136.9306	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	1.00 x 10 ¹	1.0414				1.00 x 10 ¹	1.0414				
		R5	1.00 x 10 ¹	1.0414				1.00 x 10 ¹	1.0414				
	Low	R1	9.40 x 10 ²	2.9736	2.7826	0.1957	7.0317	8.70 x 10 ²	2.9400	2.7154	0.1801	6.6334	0.0672
		R2	3.20 x 10 ²	2.5065				2.90 x 10 ²	2.4639				
		R3	5.70 x 10 ²	2.7566				5.10 x 10 ²	2.7084				
		R4	9.27 x 10 ²	2.9677				6.60 x 10 ²	2.8202				
		R5	5.10 x 10 ²	2.7084				4.40 x 10 ²	2.6444				
	Medium	R1	8.70 x 10 ⁴	4.9395	4.7278	0.1710	3.6178	7.80 x 10 ⁴	4.8921	4.6626	0.1592	3.4150	0.0652
		R2	6.80 x 10 ⁴	4.8325				5.20 x 10 ⁴	4.7160				
		R3	3.80 x 10 ⁴	4.5798				3.30 x 10 ⁴	4.5185				
		R4	5.70 x 10 ⁴	4.7559				3.20 x 10 ⁴	4.5052				
		R5	3.40 x 10 ⁴	4.5315				4.80 x 10 ⁴	4.6813				
	High	R1	3.00 x 10 ⁶	6.4771	6.4252	0.1086	1.6901	2.13 x 10 ⁶	6.3278	6.3708	0.0689	1.0811	0.0544
		R2	2.43 x 10 ⁶	6.3851				2.22 x 10 ⁶	6.3460				
		R3	3.00 x 10 ⁶	6.4771				2.58 x 10 ⁶	6.4119				
		R4	1.80 x 10 ⁶	6.2553				1.99 x 10 ⁶	6.2991				
		R5	3.40 x 10 ⁶	6.5315				2.95 x 10 ⁶	6.4692				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Peanut Butter	Un-inoculated	R1	4.30 x 10 ²	2.6345	2.3469	0.2986	12.7231	4.10 x 10 ²	2.6138	2.3330	0.2931	12.5616	0.0139
		R2	1.00 x 10 ²	2.0043				1.20 x 10 ²	2.0828				
		R3	3.60 x 10 ²	2.5575				3.50 x 10 ²	2.5453				
		R4	3.10 x 10 ²	2.4928				2.90 x 10 ²	2.4639				
		R5	1.10 x 10 ²	2.0453				9.00 x 10 ¹	1.9590				
	Low	R1	4.60 x 10 ³	3.6629	3.6750	0.2144	5.8348	3.00 x 10 ³	3.4773	3.6184	0.1512	4.1783	0.0566
		R2	6.10 x 10 ³	3.7854				5.00 x 10 ³	3.6991				
		R3	4.40 x 10 ³	3.6436				4.30 x 10 ³	3.6336				
		R4	8.55 x 10 ³	3.9318				6.60 x 10 ³	3.8196				
		R5	2.25 x 10 ³	3.3515				2.90 x 10 ³	3.4625				
	Medium	R1	7.80 x 10 ⁴	4.8921	5.2214	0.3234	6.1939	6.10 x 10 ⁴	4.7853	5.1190	0.3052	5.9616	0.1024
		R2	9.00 x 10 ⁴	4.9542				8.10 x 10 ⁴	4.9085				
		R3	1.74 x 10 ⁵	5.2396				1.37 x 10 ⁵	5.1376				
		R4	5.00 x 10 ⁵	5.6990				3.80 x 10 ⁵	5.5798				
		R5	2.10 x 10 ⁵	5.3222				1.53 x 10 ⁵	5.1839				
	High	R1	5.10 x 10 ⁶	6.7076	6.5554	0.1664	2.5380	5.40 x 10 ⁶	6.7324	6.5392	0.1262	1.9293	0.0161
		R2	3.10 x 10 ⁶	6.4914				2.72 x 10 ⁶	6.4343				
		R3	2.10 x 10 ⁶	6.3222				2.91 x 10 ⁶	6.4638				
		R4	3.40 x 10 ⁶	6.5315				2.91 x 10 ⁶	6.4638				
		R5	5.30 x 10 ⁶	6.7243				4.00 x 10 ⁶	6.6021				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Romaine Lettuce	Un-inoculated	R1	2.07 x 10 ⁵	5.3165	5.5154	0.1997	3.6205	1.94 x 10 ⁵	5.2870	5.4553	0.1949	3.5723	0.0601
		R2	3.60 x 10 ⁵	5.5563				3.10 x 10 ⁵	5.4914				
		R3	4.60 x 10 ⁵	5.6628				3.80 x 10 ⁵	5.5798				
		R4	2.00 x 10 ⁵	5.3010				1.69 x 10 ⁵	5.2281				
		R5	5.50 x 10 ⁵	5.7404				4.90 x 10 ⁵	5.6902				
	Low	R1	5.10 x 10 ⁵	5.7076	5.6322	0.0597	1.0598	4.80 x 10 ⁵	5.6812	5.5724	0.0898	1.6114	0.0598
		R2	4.80 x 10 ⁵	5.6812				4.30 x 10 ⁵	5.6335				
		R3	3.70 x 10 ⁵	5.5682				3.20 x 10 ⁵	5.5052				
		R4	4.10 x 10 ⁵	5.6128				3.80 x 10 ⁵	5.5798				
		R5	3.90 x 10 ⁵	5.5911				2.90 x 10 ⁵	5.4624				
	Medium	R1	8.20 x 10 ⁵	5.9138	5.7902	0.2115	3.6519	5.60 x 10 ⁵	5.7482	5.6982	0.1147	2.0124	0.0921
		R2	9.30 x 10 ⁵	5.9685				6.40 x 10 ⁵	5.8062				
		R3	2.70 x 10 ⁵	5.4314				3.20 x 10 ⁵	5.5052				
		R4	7.00 x 10 ⁵	5.8451				5.40 x 10 ⁵	5.7324				
		R5	6.20 x 10 ⁵	5.7924				5.00 x 10 ⁵	5.6990				
	High	R1	1.95 x 10 ⁶	6.2910	6.3480	0.0493	0.7766	1.26 x 10 ⁶	6.1016	6.2866	0.1580	2.5135	0.0614
		R2	1.99 x 10 ⁶	6.2991				3.40 x 10 ⁶	6.5315				
		R3	2.50 x 10 ⁶	6.3979				1.63 x 10 ⁶	6.2122				
		R4	2.39 x 10 ⁶	6.3786				1.99 x 10 ⁶	6.2989				
		R5	2.36 x 10 ⁶	6.3736				1.95 x 10 ⁶	6.2890				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	5.20 x 10 ²	2.7168	2.6561	0.0661	2.4887	5.30 x 10 ²	2.7251	2.6223	0.0951	3.6249	0.0337
		R2	4.70 x 10 ²	2.6730				4.80 x 10 ²	2.6821				
		R3	4.90 x 10 ²	2.6911				4.50 x 10 ²	2.6542				
		R4	4.50 x 10 ²	2.6542				3.60 x 10 ²	2.5575				
		R5	3.50 x 10 ²	2.5453				3.10 x 10 ²	2.4928				
	Medium	R1	1.44 x 10 ⁴	4.1584	4.1333	0.0341	0.8259	1.18 x 10 ⁴	4.0719	4.1057	0.0448	1.0902	0.0276
		R2	1.34 x 10 ⁴	4.1260				1.18 x 10 ⁴	4.0719				
		R3	1.37 x 10 ⁴	4.1376				1.45 x 10 ⁴	4.1600				
		R4	1.46 x 10 ⁴	4.1655				1.41 x 10 ⁴	4.1490				
		R5	1.20 x 10 ⁴	4.0792				1.19 x 10 ⁴	4.0756				
	High	R1	4.30 x 10 ⁵	5.6335	5.6567	0.0657	1.1616	4.70 x 10 ⁵	5.6721	5.6433	0.0484	0.8585	0.0134
		R2	4.30 x 10 ⁵	5.6335				4.00 x 10 ⁵	5.6021				
		R3	5.90 x 10 ⁵	5.7709				5.10 x 10 ⁵	5.7076				
		R4	4.00 x 10 ⁵	5.6021				3.90 x 10 ⁵	5.5911				
		R5	4.40 x 10 ⁵	5.6435				4.40 x 10 ⁵	5.6435				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Shrimp	Un-inoculated	R1	8.82 x 10 ³	3.9454	3.8682	0.1160	2.9985	8.70 x 10 ³	3.9396	3.8624	0.0990	2.5623	0.0059
		R2	5.80 x 10 ³	3.7635				6.10 x 10 ³	3.7854				
		R3	6.40 x 10 ³	3.8062				6.50 x 10 ³	3.8130				
		R4	6.20 x 10 ³	3.7925				6.00 x 10 ³	3.7782				
		R5	1.08 x 10 ⁴	4.0335				9.90 x 10 ³	3.9957				
	Low	R1	8.60 x 10 ³	3.9345	3.9231	0.1123	2.8628	9.10 x 10 ³	3.9591	3.9158	0.1332	3.4024	0.0073
		R2	1.13 x 10 ⁴	4.0521				1.08 x 10 ⁴	4.0335				
		R3	7.40 x 10 ³	3.8693				8.20 x 10 ³	3.9139				
		R4	9.91 x 10 ³	3.9961				9.60 x 10 ³	3.9823				
		R5	5.80 x 10 ³	3.7635				4.90 x 10 ³	3.6903				
	Medium	R1	4.80 x 10 ⁴	4.6813	4.6641	0.0512	1.0987	5.00 x 10 ⁴	4.6990	4.6819	0.0363	0.7761	-0.0178
		R2	4.50 x 10 ⁴	4.6532				4.70 x 10 ⁴	4.6721				
		R3	4.40 x 10 ⁴	4.6435				5.20 x 10 ⁴	4.7160				
		R4	5.50 x 10 ⁴	4.7404				5.00 x 10 ⁴	4.6990				
		R5	4.00 x 10 ⁴	4.6021				4.20 x 10 ⁴	4.6233				
	High	R1	4.70 x 10 ⁶	6.6721	6.6320	0.0400	0.6026	4.90 x 10 ⁶	6.6902	6.6376	0.0456	0.6865	-0.0056
		R2	4.20 x 10 ⁶	6.6232				4.00 x 10 ⁶	6.6021				
		R3	3.80 x 10 ⁶	6.5798				4.20 x 10 ⁶	6.6232				
		R4	4.10 x 10 ⁶	6.6128				3.90 x 10 ⁶	6.5911				
		R5	4.70 x 10 ⁶	6.6721				4.80 x 10 ⁶	6.6812				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Spinach	Un-inoculated	R1	1.55 x 10 ⁶	6.1891	6.1939	0.0778	1.2560	2.14 x 10 ⁶	6.3297	6.2980	0.0351	0.5573	-0.1042
		R2	1.61 x 10 ⁶	6.2066				1.89 x 10 ⁶	6.2767				
		R3	1.16 x 10 ⁶	6.0658				1.87 x 10 ⁶	6.2718				
		R4	1.85 x 10 ⁶	6.2682				2.20 x 10 ⁶	6.3424				
		R5	1.74 x 10 ⁶	6.2396				1.86 x 10 ⁶	6.2695				
	Low	R1	3.80 x 10 ⁶	6.5798	6.1158	0.3476	5.6839	3.90 x 10 ⁶	6.5911	6.2275	0.3954	6.3500	-0.1117
		R2	6.40 x 10 ⁵	5.8062				6.60 x 10 ⁵	5.8195				
		R3	2.34 x 10 ⁶	6.3685				4.60 x 10 ⁶	6.6628				
		R4	6.30 x 10 ⁵	5.7993				7.20 x 10 ⁵	5.8573				
		R5	1.06 x 10 ⁶	6.0253				1.61 x 10 ⁶	6.2068				
	Medium	R1	4.20 x 10 ⁶	6.6232	6.6094	0.1048	1.5850	4.50 x 10 ⁶	6.6532	6.6300	0.1014	1.5295	-0.0206
		R2	4.50 x 10 ⁶	6.6532				4.70 x 10 ⁶	6.6721				
		R3	5.40 x 10 ⁶	6.7324				5.80 x 10 ⁶	6.7634				
		R4	3.90 x 10 ⁶	6.5911				3.60 x 10 ⁶	6.5563				
		R5	2.80 x 10 ⁶	6.4472				3.20 x 10 ⁶	6.5052				
	High	R1	4.80 x 10 ⁶	6.6812	6.7473	0.1599	2.3697	4.40 x 10 ⁶	6.6435	6.7464	0.1750	2.5947	0.0010
		R2	4.70 x 10 ⁶	6.6721				4.20 x 10 ⁶	6.6232				
		R3	8.50 x 10 ⁶	6.9294				8.60 x 10 ⁶	6.9345				
		R4	3.60 x 10 ⁶	6.5563				3.90 x 10 ⁶	6.5911				
		R5	7.90 x 10 ⁶	6.8976				8.70 x 10 ⁶	6.9395				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.00 x 10 ²	2.3032	2.2786	0.0513	2.2516	2.80 x 10 ²	2.4487	2.3874	0.0783	3.2798	-0.1087
		R2	1.80 x 10 ²	2.2577				2.50 x 10 ²	2.3997				
		R3	2.20 x 10 ²	2.3444				1.80 x 10 ²	2.2577				
		R4	1.90 x 10 ²	2.2810				2.40 x 10 ²	2.3820				
		R5	1.60 x 10 ²	2.2068				2.80 x 10 ²	2.4487				
	Medium	R1	1.25 x 10 ⁴	4.0954	4.0537	0.0309	0.7634	1.22 x 10 ⁴	4.0864	4.0631	0.0411	1.0121	-0.0094
		R2	1.19 x 10 ⁴	4.0759				1.30 x 10 ⁴	4.1140				
		R3	1.06 x 10 ⁴	4.0268				1.18 x 10 ⁴	4.0726				
		R4	1.11 x 10 ⁴	4.0450				1.06 x 10 ⁴	4.0253				
		R5	1.06 x 10 ⁴	4.0253				1.04 x 10 ⁴	4.0171				
	High	R1	1.07 x 10 ⁶	6.0294	6.1058	0.0483	0.7917	1.04 x 10 ⁶	6.0170	6.0382	0.0299	0.4953	0.0676
		R2	1.43 x 10 ⁶	6.1553				1.06 x 10 ⁶	6.0253				
		R3	1.36 x 10 ⁶	6.1335				1.05 x 10 ⁶	6.0212				
		R4	1.24 x 10 ⁶	6.0934				1.09 x 10 ⁶	6.0374				
		R5	1.31 x 10 ⁶	6.1173				1.23 x 10 ⁶	6.0899				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Top Frosting	Un-inoculated	R1	<10	0.0000	0.4727	0.6549	138.5321	<10	0.00	0.4166	0.5704	136.9306	0.0562
		R2	<10	0.0000				<10	0.00				
		R3	1.00 x 10 ¹	1.0414				1.00 x 10 ¹	1.04				
		R4	<10	0.0000				<10	0.00				
		R5	2.00 x 10 ¹	1.3222				1.00 x 10 ¹	1.04				
	Low	R1	4.70 x 10 ²	2.6730	2.7511	0.0521	1.8953	4.40 x 10 ²	2.64	2.7005	0.0690	2.5538	0.0506
		R2	6.50 x 10 ²	2.8136				6.40 x 10 ²	2.81				
		R3	5.50 x 10 ²	2.7412				4.60 x 10 ²	2.66				
		R4	6.00 x 10 ²	2.7789				5.40 x 10 ²	2.73				
		R5	5.60 x 10 ²	2.7490				4.50 x 10 ²	2.65				
	Medium	R1	5.00 x 10 ³	3.6991	3.7417	0.0614	1.6397	4.60 x 10 ³	3.66	3.6744	0.0393	1.0684	0.0673
		R2	4.60 x 10 ³	3.6629				4.20 x 10 ³	3.62				
		R3	5.80 x 10 ³	3.7635				4.70 x 10 ³	3.67				
		R4	6.60 x 10 ³	3.8196				5.40 x 10 ³	3.73				
		R5	5.80 x 10 ³	3.7635				4.80 x 10 ³	3.68				
	High	R1	5.00 x 10 ⁵	5.6990	5.6325	0.0571	1.0129	4.80 x 10 ⁵	5.68	5.5945	0.0583	1.0416	0.0380
		R2	4.70 x 10 ⁵	5.6721				4.00 x 10 ⁵	5.60				
		R3	3.70 x 10 ⁵	5.5682				3.30 x 10 ⁵	5.52				
		R4	3.80 x 10 ⁵	5.5798				3.90 x 10 ⁵	5.59				
		R5	4.40 x 10 ⁵	5.6435				3.80 x 10 ⁵	5.58				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Wheat Flour	Un-inoculated	R1	8.40 x 10 ³	3.9243	3.7553	0.1726	4.5972	6.70 x 10 ³	3.8261	3.7897	0.0562	1.4827	-0.0344
		R2	3.40 x 10 ³	3.5316				6.80 x 10 ³	3.8326				
		R3	7.50 x 10 ³	3.8751				5.00 x 10 ³	3.6991				
		R4	6.80 x 10 ³	3.8326				5.90 x 10 ³	3.7709				
		R5	4.10 x 10 ³	3.6129				6.60 x 10 ³	3.8196				
	Low	R1	6.50 x 10 ³	3.8130	3.7769	0.0566	1.4979	5.30 x 10 ³	3.7244	3.8395	0.1673	4.3586	-0.0626
		R2	5.90 x 10 ³	3.7709				4.70 x 10 ³	3.6722				
		R3	4.80 x 10 ³	3.6813				1.25 x 10 ⁴	4.0969				
		R4	6.30 x 10 ³	3.7994				7.90 x 10 ³	3.8977				
		R5	6.60 x 10 ³	3.8196				6.40 x 10 ³	3.8062				
	Medium	R1	1.02 x 10 ⁵	5.0078	4.8701	0.1960	4.0235	1.12 x 10 ⁵	5.0492	4.8492	0.1558	3.2135	0.0209
		R2	5.30 x 10 ⁴	4.7243				5.00 x 10 ⁴	4.6990				
		R3	4.00 x 10 ⁴	4.6021				4.90 x 10 ⁴	4.6902				
		R4	1.12 x 10 ⁵	5.0492				8.80 x 10 ⁴	4.9445				
		R5	9.27 x 10 ⁴	4.9672				7.30 x 10 ⁴	4.8633				
	High	R1	1.01 x 10 ⁵	5.0043	5.6794	0.3861	6.7986	6.50 x 10 ⁴	4.8129	5.5663	0.4406	7.9148	0.1132
		R2	5.70 x 10 ⁵	5.7559				5.30 x 10 ⁵	5.7243				
		R3	6.00 x 10 ⁵	5.7782				3.60 x 10 ⁵	5.5563				
		R4	8.40 x 10 ⁵	5.9243				7.10 x 10 ⁵	5.8513				
		R5	8.60 x 10 ⁵	5.9345				7.70 x 10 ⁵	5.8865				

Surface	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Plastic	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	6.60 x 10 ³	3.8196	3.8603	0.0576	1.49	6.00 x 10 ³	3.7782	3.8163	0.0276	0.7239	0.0440
		R2	6.30 x 10 ³	3.7994				6.50 x 10 ³	3.8130				
		R3	7.90 x 10 ³	3.8977				7.10 x 10 ³	3.8513				
		R4	7.00 x 10 ³	3.8452				6.40 x 10 ³	3.8062				
		R5	8.70 x 10 ³	3.9396				6.80 x 10 ³	3.8326				
	High	R1	9.27 x 10 ⁵	5.9672	5.9674	0.1571	2.63	8.90 x 10 ⁵	5.9494	5.8520	0.2172	3.7119	0.1154
		R2	1.01 x 10 ⁶	6.0039				7.20 x 10 ⁵	5.8573				
		R3	5.10 x 10 ⁵	5.7076				3.00 x 10 ⁵	5.4771				
		R4	1.35 x 10 ⁶	6.1289				1.04 x 10 ⁶	6.0170				
		R5	1.07 x 10 ⁶	6.0294				9.10 x 10 ⁵	5.9590				

Surface	Inoculum Level ^a	Rep # ^b	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference ^e
			Count	Log ₁₀	Log ₁₀ Mean	S _r ^c	RSD ^d	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	3.70 x 10 ³	3.5683	3.5938	0.0658	1.8298	3.50 x 10 ³	3.5442	3.5405	0.0912	2.5763	0.0533
		R2	3.80 x 10 ³	3.5799				4.60 x 10 ³	3.6629				
		R3	3.20 x 10 ³	3.5053				2.78 x 10 ³	3.4445				
		R4	4.70 x 10 ³	3.6722				3.90 x 10 ³	3.5912				
		R5	4.40 x 10 ³	3.6436				2.88 x 10 ³	3.4598				
	High	R1	4.50 x 10 ⁵	5.6532	5.4584	0.1119	2.0498	3.12 x 10 ⁵	5.4939	5.4356	0.0369	0.6782	0.0227
		R2	2.51 x 10 ⁵	5.3995				2.53 x 10 ⁵	5.4027				
		R3	2.80 x 10 ⁵	5.4472				2.71 x 10 ⁵	5.4328				
		R4	2.60 x 10 ⁵	5.4150				2.77 x 10 ⁵	5.4429				
		R5	2.38 x 10 ⁵	5.3769				2.55 x 10 ⁵	5.4058				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation = $\sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n}}$

^dRSD: Relative Standard Deviation = $\frac{SD}{Mean} * 100$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Table A4: Summary of the Independent Laboratory's Method Comparison Statistics between the Microfilm APC and ISO 4833-1 Aerobic Plate Counts (APC) in 4 food matrixes and stainless steel. (1)

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	4.00 x 10 ¹	1.6128	1.5614	0.3920	25.1040	5.00 x 10 ¹	1.7076	1.7793	0.1894	10.6466	-0.2179
		R2	2.00 x 10 ¹	1.3222				9.00 x 10 ¹	1.9590				
		R3	6.00 x 10 ¹	1.7853				<40	1.6128				
		R4	1.00 x 10 ¹	1.0414				<40	1.6128				
		R5	1.10 x 10 ²	2.0453				1.00 x 10 ²	2.0043				
	Low	R1	2.00 x 10 ¹	1.3222	1.9532	0.3600	18.4328	<40	1.6128	2.0150	0.2428	65.4715	-0.0617
		R2	1.20 x 10 ²	2.0828				1.00 x 10 ²	2.0043				
		R3	1.10 x 10 ²	2.0453				1.30 x 10 ²	2.1173				
		R4	1.20 x 10 ²	2.0828				1.20 x 10 ²	2.0828				
		R5	1.70 x 10 ²	2.2330				1.80 x 10 ²	2.2577				
	Medium	R1	9.10 x 10 ²	2.9595	2.7893	0.2236	13.9454	8.36 x 10 ²	2.9229	2.7777	0.2222	7.9984	0.0116
		R2	3.00 x 10 ²	2.4786				2.60 x 10 ²	2.4166				
		R3	4.40 x 10 ²	2.6444				5.30 x 10 ²	2.7251				
		R4	1.03 x 10 ³	3.0121				9.36 x 10 ²	2.9719				
		R5	7.10 x 10 ²	2.8519				7.10 x 10 ²	2.8519				
	High	R1	6.80 x 10 ⁴	4.8325	5.5240	0.4564	8.2615	5.50 x 10 ⁴	4.7404	5.5224	0.5320	9.6342	0.0017
		R2	2.15 x 10 ⁵	5.3315				1.67 x 10 ⁵	5.2234				
		R3	4.20 x 10 ⁵	5.6233				5.20 x 10 ⁵	5.7160				
		R4	8.30 x 10 ⁵	5.9191				9.00 x 10 ⁵	5.9542				
		R5	8.20 x 10 ⁵	5.9138				9.50 x 10 ⁵	5.9777				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.70 x 10 ²	2.4330	2.3296	0.1274	5.4689	1.70 x 10 ²	2.2330	2.1330	0.0624	2.9233	0.1965
		R2	3.00 x 10 ²	2.4786				1.20 x 10 ²	2.0828				
		R3	2.10 x 10 ²	2.3243				1.40 x 10 ²	2.1492				
		R4	1.50 x 10 ²	2.1790				1.20 x 10 ²	2.0828				
		R5	1.70 x 10 ²	2.2330				1.30 x 10 ²	2.1173				
	Medium	R1	1.53 x 10 ⁴	4.1839	4.1374	0.0390	0.9431	2.26 x 10 ⁴	4.3548	4.2600	0.0721	1.6922	-0.1226
		R2	1.38 x 10 ⁴	4.1405				1.54 x 10 ⁴	4.1865				
		R3	1.41 x 10 ⁴	4.1490				2.00 x 10 ⁴	4.3011				
		R4	1.37 x 10 ⁴	4.1376				1.55 x 10 ⁴	4.1916				
		R5	1.19 x 10 ⁴	4.0759				1.85 x 10 ⁴	4.2661				
	High	R1	9.60 x 10 ⁵	5.9823	6.0233	0.0362	0.6014	1.38 x 10 ⁶	6.1399	6.0727	0.0474	0.7810	-0.0494
		R2	9.80 x 10 ⁵	5.9912				1.05 x 10 ⁶	6.0212				
		R3	1.17 x 10 ⁶	6.0682				1.21 x 10 ⁶	6.0828				
		R4	1.07 x 10 ⁶	6.0294				1.08 x 10 ⁶	6.0334				
		R5	1.11 x 10 ⁶	6.0453				1.22 x 10 ⁶	6.0864				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	7.80 x 10 ²	2.8927	2.8329	0.0878	3.0987	5.30 x 10 ²	2.7251	2.7684	0.0426	1.5388	0.0645
		R2	7.73 x 10 ²	2.8886				6.10 x 10 ²	2.7860				
		R3	5.50 x 10 ²	2.7412				5.50 x 10 ²	2.7412				
		R4	5.40 x 10 ²	2.7332				6.80 x 10 ²	2.8331				
		R5	8.10 x 10 ²	2.9090				5.70 x 10 ²	2.7566				
	Medium	R1	1.33 x 10 ⁴	4.1230	4.2318	0.0724	1.7117	1.30 x 10 ⁴	4.1140	4.3611	0.4733	10.8527	-0.1293
		R2	2.04 x 10 ⁴	4.3089				1.47 x 10 ⁴	4.1682				
		R3	1.89 x 10 ⁴	4.2767				1.50 x 10 ⁴	4.1761				
		R4	1.59 x 10 ⁴	4.2017				1.61 x 10 ⁵	5.2066				
		R5	1.77 x 10 ⁴	4.2487				1.38 x 10 ⁴	4.1405				
	High	R1	8.10 x 10 ⁵	5.9085	5.7792	0.0801	1.3861	6.00 x 10 ⁵	5.7782	5.7439	0.1372	2.3890	0.0352
		R2	6.00 x 10 ⁵	5.7782				8.20 x 10 ⁵	5.9138				
		R3	5.60 x 10 ⁵	5.7482				5.50 x 10 ⁵	5.7404				
		R4	4.90 x 10 ⁵	5.6902				5.70 x 10 ⁵	5.7559				
		R5	5.90 x 10 ⁵	5.7709				3.40 x 10 ⁵	5.5315				

Matrix	Inoculum Level	Rep #	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.70 x 10 ²	2.2330	2.3402	0.1284	5.4882	2.00 x 10 ²	2.3032	2.3533	0.0852	3.6220	-0.0131
		R2	1.80 x 10 ²	2.2577				1.70 x 10 ²	2.2330				
		R3	1.80 x 10 ²	2.2577				2.80 x 10 ²	2.4487				
		R4	3.30 x 10 ²	2.5198				2.40 x 10 ²	2.3820				
		R5	2.70 x 10 ²	2.4330				2.50 x 10 ²	2.3997				
	Medium	R1	1.58 x 10 ⁴	4.1992	4.1467	0.0357	0.8604	1.28 x 10 ⁴	4.1072	4.1208	0.0216	0.5233	0.0258
		R2	1.36 x 10 ⁴	4.1347				1.28 x 10 ⁴	4.1079				
		R3	1.29 x 10 ⁴	4.1109				1.33 x 10 ⁴	4.1239				
		R4	1.33 x 10 ⁴	4.1230				1.44 x 10 ⁴	4.1573				
		R5	1.46 x 10 ⁴	4.1655				1.28 x 10 ⁴	4.1079				
	High	R1	1.73 x 10 ⁶	6.2380	6.1542	0.0726	1.1795	1.30 x 10 ⁶	6.1139	6.1282	0.0155	0.2536	0.0260
		R2	1.51 x 10 ⁶	6.1790				1.30 x 10 ⁶	6.1139				
		R3	1.29 x 10 ⁶	6.1106				1.40 x 10 ⁶	6.1461				
		R4	1.13 x 10 ⁶	6.0531				1.33 x 10 ⁶	6.1239				
		R5	1.55 x 10 ⁶	6.1903				1.39 x 10 ⁶	6.1430				

Surface	Inoculum Level ^a	Rep # ^b	Microfilm APC					ISO 4833-1					Mean Log ₁₀ Difference ^e
			Count	Log ₁₀	Log ₁₀ Mean	S _r ^c	RSD ^d	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	2.80 x 10 ³	3.4473	3.4318	0.0532	1.5514	3.30 x 10 ³	3.5186	3.8927	0.5292	13.5952	-0.4609
		R2	3.20 x 10 ³	3.5053				2.80 x 10 ³	3.4473				
		R3	2.39 x 10 ³	3.3787				2.81 x 10 ⁴	4.4486				
		R4	2.80 x 10 ³	3.4473				3.11 x 10 ⁴	4.4926				
		R5	2.40 x 10 ³	3.3804				3.60 x 10 ³	3.5564				
	High	R1	4.00 x 10 ⁵	5.6021	5.4896	0.1310	2.3868	4.00 x 10 ⁵	5.6021	6.2730	0.3755	5.9866	-0.7834
		R2	2.40 x 10 ⁵	5.3802				2.82 x 10 ⁶	6.4500				
		R3	2.80 x 10 ⁵	5.4472				2.92 x 10 ⁶	6.4651				
		R4	4.50 x 10 ⁵	5.6532				2.72 x 10 ⁶	6.4343				
		R5	2.32 x 10 ⁵	5.3651				2.59 x 10 ⁶	6.4135				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation =

^dRSD: Relative Standard Deviation = $\frac{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2}}{\text{Mean}} * 100$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Table A7: Summary of the Method Developer's Method Comparison Statistics between the Microfilm TCEc and ISO 4832 Total Coliform Counts (TCC) in 20 food matrixes and two environmental surfaces. (1)

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	3.00 x 10 ¹	1.4914	1.5538	0.1958	12.6029	2.50 x 10 ¹	1.4150	1.7029	0.2700	15.8566	-0.1491
		R2	7.00 x 10 ¹	1.8513				1.15 x 10 ²	2.0645				
		R3	3.00 x 10 ¹	1.4914				3.00 x 10 ¹	1.4914				
		R4	2.00 x 10 ¹	1.3222				7.50 x 10 ¹	1.8808				
		R5	4.00 x 10 ¹	1.6128				4.50 x 10 ¹	1.6628				
	Medium	R1	1.16 x 10 ³	3.0648	2.9792	0.0930	3.1224	1.22 x 10 ³	3.0867	2.9745	0.1411	4.7445	0.0046
		R2	8.20 x 10 ²	2.9143				8.35 x 10 ²	2.9222				
		R3	7.60 x 10 ²	2.8814				6.10 x 10 ²	2.7860				
		R4	8.80 x 10 ²	2.9450				8.65 x 10 ²	2.9375				
		R5	1.23 x 10 ³	3.0903				1.38 x 10 ³	3.1402				
	High	R1	1.35 x 10 ⁵	5.1289	4.9920	0.2552	5.1129	1.35 x 10 ⁵	5.1303	5.0562	0.2783	5.5048	-0.0642
		R2	6.55 x 10 ⁴	4.8159				7.35 x 10 ⁴	4.8663				
		R3	5.90 x 10 ⁴	4.7709				7.05 x 10 ⁴	4.8482				
		R4	2.37 x 10 ⁵	5.3752				3.25 x 10 ⁵	5.5119				
		R5	7.40 x 10 ⁴	4.8692				8.40 x 10 ⁴	4.9243				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Black Pepper	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.00 x 10 ²	2.0043	2.1862	0.1972	9.0190	1.80 x 10 ²	2.2577	2.0929	0.1236	5.9070	0.0933
		R2	2.10 x 10 ²	2.3243				1.00 x 10 ²	2.0043				
		R3	1.40 x 10 ²	2.1492				1.50 x 10 ²	2.1790				
		R4	2.80 x 10 ²	2.4487				9.00 x 10 ¹	1.9590				
		R5	1.00 x 10 ²	2.0043				1.15 x 10 ²	2.0645				
	Medium	R1	8.70 x 10 ²	2.9400	2.9340	0.0684	2.3320	8.65 x 10 ²	2.9375	2.9375	0.0515	1.7536	-0.0035
		R2	8.55 x 10 ²	2.9322				1.05 x 10 ³	3.0216				
		R3	7.90 x 10 ²	2.8982				7.85 x 10 ²	2.8954				
		R4	1.10 x 10 ³	3.0418				8.65 x 10 ²	2.9375				
		R5	7.20 x 10 ²	2.8579				7.85 x 10 ²	2.8954				
	High	R1	2.27 x 10 ⁴	4.3566	4.7431	0.3936	8.2978	1.55 x 10 ⁴	4.1904	4.6097	0.4515	9.7936	0.1334
		R2	1.87 x 10 ⁵	5.2725				1.40 x 10 ⁵	5.1461				
		R3	2.25 x 10 ⁴	4.3531				1.23 x 10 ⁴	4.0899				
		R4	6.40 x 10 ⁴	4.8062				6.25 x 10 ⁴	4.7959				
		R5	8.45 x 10 ⁴	4.9271				6.70 x 10 ⁴	4.8261				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Cumin	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	6.00 x 10 ¹	1.7853	1.5571	0.3577	22.9728	5.00 x 10 ⁰	0.7782	0.3639	0.5069	139.2985	1.1932
		R2	6.00 x 10 ¹	1.7853				1.00 x 10 ¹	1.0414				
		R3	1.00 x 10 ¹	1.0414				<10	0.0000				
		R4	7.00 x 10 ¹	1.8513				<10	0.0000				
		R5	2.00 x 10 ¹	1.3222				<10	0.0000				
	Medium	R1	4.70 x 10 ³	3.6722	3.6779	0.0602	1.6363	3.50 x 10 ³	3.5442	3.5533	0.1205	3.3904	0.1247
		R2	4.00 x 10 ³	3.6022				2.35 x 10 ³	3.3713				
		R3	4.70 x 10 ³	3.6722				4.65 x 10 ³	3.6675				
		R4	5.90 x 10 ³	3.7709				3.35 x 10 ³	3.5252				
		R5	4.70 x 10 ³	3.6722				4.55 x 10 ³	3.6581				
	High	R1	5.50 x 10 ⁵	5.7404	5.6205	0.1221	2.1729	2.75 x 10 ⁵	5.4393	5.4752	0.0454	0.8290	0.1453
		R2	4.00 x 10 ⁵	5.6021				3.50 x 10 ⁵	5.5441				
		R3	2.70 x 10 ⁵	5.4314				3.10 x 10 ⁵	5.4914				
		R4	4.10 x 10 ⁵	5.6128				2.95 x 10 ⁵	5.4698				
		R5	5.20 x 10 ⁵	5.7160				2.70 x 10 ⁵	5.4314				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Dry Pet Food	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	5.00 x 10 ¹	1.7076	2.0419	0.2215	10.8489	8.00 x 10 ¹	1.9085	2.0884	0.1441	6.8992	-0.0465
		R2	1.20 x 10 ²	2.0828				9.50 x 10 ¹	1.9823				
		R3	9.00 x 10 ¹	1.9590				1.45 x 10 ²	2.1644				
		R4	1.90 x 10 ²	2.2810				1.30 x 10 ²	2.1173				
		R5	1.50 x 10 ²	2.1790				1.85 x 10 ²	2.2695				
	Medium	R1	3.70 x 10 ³	3.5683	3.6143	0.0880	2.4352	5.45 x 10 ³	3.7365	3.6326	0.1265	3.4824	-0.0183
		R2	4.20 x 10 ³	3.6234				4.20 x 10 ³	3.6234				
		R3	5.20 x 10 ³	3.7161				4.05 x 10 ³	3.6076				
		R4	4.70 x 10 ³	3.6722				2.75 x 10 ³	3.4395				
		R5	3.10 x 10 ³	3.4915				5.70 x 10 ³	3.7560				
	High	R1	5.70 x 10 ⁵	5.7559	5.6602	0.2816	4.9754	5.50 x 10 ⁵	5.7404	5.5922	0.2641	4.7222	0.0680
		R2	6.40 x 10 ⁵	5.8062				6.05 x 10 ⁵	5.7818				
		R3	7.20 x 10 ⁵	5.8573				5.45 x 10 ⁵	5.7364				
		R4	1.46 x 10 ⁵	5.1654				1.40 x 10 ⁵	5.1461				
		R5	5.20 x 10 ⁵	5.7160				3.60 x 10 ⁵	5.5563				

Matrix	Inoculum Level	Rep #	Microfilm™ TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground beef, 7% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.80 x 10 ²	2.2577	2.2070	0.1049	4.7514	9.00 x 10 ¹	1.9590	2.0327	0.0719	3.5366	0.1743
		R2	2.30 x 10 ²	2.3636				9.00 x 10 ¹	1.9590				
		R3	1.30 x 10 ²	2.1173				1.30 x 10 ²	2.1173				
		R4	1.30 x 10 ²	2.1173				1.20 x 10 ²	2.0828				
		R5	1.50 x 10 ²	2.1790				1.10 x 10 ²	2.0453				
	Medium	R1	7.45 x 10 ³	3.8725	3.8504	0.0570	1.4813	6.20 x 10 ³	3.7925	3.8642	0.0645	1.6697	-0.0138
		R2	7.80 x 10 ³	3.8922				7.70 x 10 ³	3.8865				
		R3	7.80 x 10 ³	3.8922				9.15 x 10 ³	3.9615				
		R4	6.91 x 10 ³	3.8395				7.15 x 10 ³	3.8544				
		R5	5.70 x 10 ³	3.7560				6.70 x 10 ³	3.8261				
	High	R1	1.81 x 10 ⁶	6.2575	6.2126	0.0607	0.9766	1.30 x 10 ⁶	6.1139	6.0831	0.0660	1.0842	0.1294
		R2	1.70 x 10 ⁶	6.2304				1.40 x 10 ⁶	6.1461				
		R3	1.29 x 10 ⁶	6.1109				1.35 x 10 ⁶	6.1303				
		R4	1.61 x 10 ⁶	6.2066				1.06 x 10 ⁶	6.0253				
		R5	1.81 x 10 ⁶	6.2575				1.00 x 10 ⁶	6.0000				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground chicken, 2% Fat	Un-inoculated	R1	2.00 x 10 ¹	1.3222	1.6313	0.2966	18.1841	2.00 x 10 ¹	1.3222	1.5552	0.2373	15.2573	0.0761
		R2	3.00 x 10 ¹	1.4914				4.00 x 10 ¹	1.6128				
		R3	4.00 x 10 ¹	1.6128				2.50 x 10 ¹	1.4150				
		R4	4.00 x 10 ¹	1.6128				3.00 x 10 ¹	1.4914				
		R5	1.30 x 10 ²	2.1173				8.50 x 10 ¹	1.9345				
	Low	R1	2.90 x 10 ²	2.4639	2.3516	0.0674	2.8673	2.15 x 10 ²	2.3345	2.3115	0.0704	3.0440	0.0401
		R2	2.00 x 10 ²	2.3032				2.20 x 10 ²	2.3444				
		R3	2.30 x 10 ²	2.3636				2.45 x 10 ²	2.3909				
		R4	2.10 x 10 ²	2.3243				1.60 x 10 ²	2.2068				
		R5	2.00 x 10 ²	2.3032				1.90 x 10 ²	2.2810				
	Medium	R1	8.18 x 10 ³	3.9129	3.9446	0.0280	0.7111	6.90 x 10 ³	3.8389	3.8980	0.0391	1.0027	0.0466
		R2	8.30 x 10 ³	3.9191				8.86 x 10 ³	3.9477				
		R3	8.90 x 10 ³	3.9494				8.05 x 10 ³	3.9056				
		R4	9.20 x 10 ³	3.9638				7.80 x 10 ³	3.8922				
		R5	9.50 x 10 ³	3.9778				8.05 x 10 ³	3.9058				
	High	R1	1.35 x 10 ⁶	6.1289	6.1525	0.0186	0.3027	1.30 x 10 ⁶	6.1139	6.1286	0.0719	1.1730	0.0239
		R2	1.42 x 10 ⁶	6.1517				1.75 x 10 ⁶	6.2430				
		R3	1.38 x 10 ⁶	6.1405				1.15 x 10 ⁶	6.0607				
		R4	1.47 x 10 ⁶	6.1681				1.40 x 10 ⁶	6.1461				
		R5	1.49 x 10 ⁶	6.1735				1.20 x 10 ⁶	6.0792				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground pork, 20% Fat	Un-inoculated	R1	4.90 x 10 ²	2.6911	2.6632	0.0841	3.1574	1.05 x 10 ³	3.0216	2.9562	0.1585	5.3617	-0.2930
		R2	4.70 x 10 ²	2.6730				1.10 x 10 ³	3.0418				
		R3	5.50 x 10 ²	2.7412				7.00 x 10 ²	2.8457				
		R4	4.90 x 10 ²	2.6911				1.35 x 10 ³	3.1307				
		R5	3.30 x 10 ²	2.5198				5.50 x 10 ²	2.7412				
	Low	R1	6.60 x 10 ²	2.8202	2.7271	0.0939	3.4443	1.85 x 10 ³	3.2674	3.0779	0.1876	6.0941	-0.3508
		R2	4.90 x 10 ²	2.6911				5.80 x 10 ²	2.7642				
		R3	5.90 x 10 ²	2.7716				1.25 x 10 ³	3.0973				
		R4	3.80 x 10 ²	2.5809				1.30 x 10 ³	3.1143				
		R5	5.90 x 10 ²	2.7716				1.40 x 10 ³	3.1464				
	Medium	R1	1.64 x 10 ⁴	4.2139	4.2333	0.0377	0.8917	1.95 x 10 ⁴	4.2901	4.2159	0.0498	1.1822	0.0174
		R2	1.79 x 10 ⁴	4.2531				1.60 x 10 ⁴	4.2041				
		R3	1.81 x 10 ⁴	4.2575				1.65 x 10 ⁴	4.2175				
		R4	1.50 x 10 ⁴	4.1761				1.41 x 10 ⁴	4.1504				
		R5	1.85 x 10 ⁴	4.2661				1.65 x 10 ⁴	4.2175				
	High	R1	1.76 x 10 ⁶	6.2464	6.2345	0.0566	0.9074	1.80 x 10 ⁶	6.2553	6.2622	0.0545	0.8697	-0.0277
		R2	1.82 x 10 ⁶	6.2596				1.50 x 10 ⁶	6.1761				
		R3	1.69 x 10 ⁶	6.2281				1.85 x 10 ⁶	6.2672				
		R4	1.97 x 10 ⁶	6.2951				2.10 x 10 ⁶	6.3222				
		R5	1.39 x 10 ⁶	6.1433				1.95 x 10 ⁶	6.2900				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground turkey, 1% Fat	Un-inoculated	R1	3.00 x 10 ¹	1.4914	1.6429	0.3906	23.7774	5.00 x 10 ¹	1.7076	1.8648	0.2269	12.1696	-0.2219
		R2	6.00 x 10 ¹	1.7853				8.50 x 10 ¹	1.9345				
		R3	1.10 x 10 ²	2.0453				1.25 x 10 ²	2.1004				
		R4	1.00 x 10 ¹	1.0414				3.50 x 10 ¹	1.5563				
		R5	7.00 x 10 ¹	1.8513				1.05 x 10 ²	2.0253				
	Low	R1	1.40 x 10 ²	2.1492	2.1402	0.0987	4.6128	1.10 x 10 ²	2.0453	2.1277	0.0998	4.6917	0.0125
		R2	1.30 x 10 ²	2.1173				1.75 x 10 ²	2.2455				
		R3	1.90 x 10 ²	2.2810				1.45 x 10 ²	2.1644				
		R4	1.00 x 10 ²	2.0043				1.50 x 10 ²	2.1790				
		R5	1.40 x 10 ²	2.1492				1.00 x 10 ²	2.0043				
	Medium	R1	8.20 x 10 ³	3.9139	3.8969	0.0591	1.5154	7.80 x 10 ³	3.8922	3.8967	0.0326	0.8362	0.0002
		R2	9.10 x 10 ³	3.9591				7.75 x 10 ³	3.8894				
		R3	7.91 x 10 ³	3.8982				8.45 x 10 ³	3.9269				
		R4	6.30 x 10 ³	3.7994				7.05 x 10 ³	3.8483				
		R5	8.20 x 10 ³	3.9139				8.45 x 10 ³	3.9269				
	High	R1	1.45 x 10 ⁶	6.1600	6.1466	0.0441	0.7173	1.30 x 10 ⁶	6.1139	6.2314	0.1012	1.6239	-0.0848
		R2	1.45 x 10 ⁶	6.1600				2.05 x 10 ⁶	6.3118				
		R3	1.25 x 10 ⁶	6.0985				1.35 x 10 ⁶	6.1303				
		R4	1.28 x 10 ⁶	6.1078				1.90 x 10 ⁶	6.2788				
		R5	1.61 x 10 ⁶	6.2066				2.10 x 10 ⁶	6.3222				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ice Cream	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.30 x 10 ²	2.3636	2.3871	0.1622	6.7941	1.85 x 10 ²	2.2695	2.3366	0.0644	2.7561	0.0505
		R2	3.40 x 10 ²	2.5328				2.00 x 10 ²	2.3032				
		R3	3.50 x 10 ²	2.5453				2.65 x 10 ²	2.4249				
		R4	1.40 x 10 ²	2.1492				2.00 x 10 ²	2.3032				
		R5	2.20 x 10 ²	2.3444				2.40 x 10 ²	2.3820				
	Medium	R1	4.10 x 10 ³	3.6129	3.3570	0.1466	4.3684	3.85 x 10 ³	3.5856	3.3957	0.1131	3.3297	-0.0387
		R2	2.17 x 10 ³	3.3372				1.95 x 10 ³	3.2903				
		R3	2.04 x 10 ³	3.3091				2.20 x 10 ³	3.3426				
		R4	1.87 x 10 ³	3.2727				2.50 x 10 ³	3.3981				
		R5	1.79 x 10 ³	3.2533				2.30 x 10 ³	3.3619				
	High	R1	2.10 x 10 ⁵	5.3222	5.3697	0.0943	1.7569	1.95 x 10 ⁵	5.2900	5.4370	0.1497	2.7542	-0.0672
		R2	3.40 x 10 ⁵	5.5315				4.80 x 10 ⁵	5.6812				
		R3	2.14 x 10 ⁵	5.3297				2.85 x 10 ⁵	5.4548				
		R4	1.97 x 10 ⁵	5.2951				2.25 x 10 ⁵	5.3522				
		R5	2.35 x 10 ⁵	5.3702				2.55 x 10 ⁵	5.4065				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	4.00 x 10 ¹	1.6128	1.8272	0.2158	11.8132	1.05 x 10 ²	2.0253	1.9319	0.3068	15.8826	-0.1047
		R2	6.00 x 10 ¹	1.7853				8.50 x 10 ¹	1.9345				
		R3	5.00 x 10 ¹	1.7076				2.50 x 10 ¹	1.4150				
		R4	1.50 x 10 ²	2.1790				1.65 x 10 ²	2.2201				
		R5	7.00 x 10 ¹	1.8513				1.15 x 10 ²	2.0645				
	Medium	R1	6.30 x 10 ³	3.7994	3.8331	0.0599	1.5630	5.85 x 10 ³	3.7672	3.7894	0.0432	1.1391	0.0437
		R2	5.80 x 10 ³	3.7635				6.45 x 10 ³	3.8096				
		R3	7.60 x 10 ³	3.8809				6.75 x 10 ³	3.8294				
		R4	6.50 x 10 ³	3.8130				6.55 x 10 ³	3.8163				
		R5	8.10 x 10 ³	3.9085				5.30 x 10 ³	3.7244				
	High	R1	5.70 x 10 ⁵	5.7559	5.8069	0.0470	0.8101	4.80 x 10 ⁵	5.6812	5.7011	0.0575	1.0090	0.1058
		R2	6.90 x 10 ⁵	5.8388				4.75 x 10 ⁵	5.6767				
		R3	7.10 x 10 ⁵	5.8513				5.85 x 10 ⁵	5.7672				
		R4	5.70 x 10 ⁵	5.7559				4.25 x 10 ⁵	5.6284				
		R5	6.80 x 10 ⁵	5.8325				5.65 x 10 ⁵	5.7520				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Mung bean sprouts	Un-inoculated	R1	3.80 x 10 ⁶	6.5798	6.5215	0.0747	1.1455	3.20 x 10 ⁶	6.5052	6.4268	0.0828	1.2886	0.0946
		R2	3.20 x 10 ⁶	6.5052				3.10 x 10 ⁶	6.4914				
		R3	2.50 x 10 ⁶	6.3979				2.35 x 10 ⁶	6.3711				
		R4	3.60 x 10 ⁶	6.5563				2.85 x 10 ⁶	6.4548				
		R5	3.70 x 10 ⁶	6.5682				2.05 x 10 ⁶	6.3118				
	Low	R1	1.90 x 10 ⁶	6.2788	6.5622	0.1987	3.0278	1.50 x 10 ⁶	6.1761	6.4967	0.2375	3.6561	0.0654
		R2	4.10 x 10 ⁶	6.6128				3.05 x 10 ⁶	6.4843				
		R3	3.70 x 10 ⁶	6.5682				3.60 x 10 ⁶	6.5563				
		R4	6.80 x 10 ⁶	6.8325				6.85 x 10 ⁶	6.8357				
		R5	3.30 x 10 ⁶	6.5185				2.70 x 10 ⁶	6.4314				
	Medium	R1	7.70 x 10 ⁶	6.8865	6.7777	0.1094	1.6145	6.25 x 10 ⁶	6.7959	6.7475	0.0573	0.8488	0.0302
		R2	6.30 x 10 ⁶	6.7993				5.75 x 10 ⁶	6.7597				
		R3	4.10 x 10 ⁶	6.6128				4.80 x 10 ⁶	6.6812				
		R4	7.20 x 10 ⁶	6.8573				6.40 x 10 ⁶	6.8062				
		R5	5.40 x 10 ⁶	6.7324				4.95 x 10 ⁶	6.6946				
	High	R1	5.30 x 10 ⁶	6.7243	6.8857	0.2621	3.8061	5.50 x 10 ⁶	6.7404	6.8754	0.2630	3.8258	0.0103
		R2	5.10 x 10 ⁶	6.7076				5.00 x 10 ⁶	6.6990				
		R3	8.10 x 10 ⁶	6.9085				7.90 x 10 ⁶	6.8976				
		R4	2.15 x 10 ⁷	7.3324				2.11 x 10 ⁷	7.3243				
		R5	5.70 x 10 ⁶	6.7559				5.20 x 10 ⁶	6.7160				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Noodles Uncooked	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	3.40 x 10 ²	2.5328	2.5751	0.0957	3.7177	4.50 x 10 ²	2.6542	2.6429	0.0837	3.1653	-0.0679
		R2	4.20 x 10 ²	2.6243				4.85 x 10 ²	2.6866				
		R3	4.80 x 10 ²	2.6821				3.90 x 10 ²	2.5922				
		R4	4.00 x 10 ²	2.6031				3.40 x 10 ²	2.5328				
		R5	2.70 x 10 ²	2.4330				5.60 x 10 ²	2.7490				
	Medium	R1	3.30 x 10 ³	3.5186	3.3423	0.1011	3.0239	3.80 x 10 ³	3.5799	3.4302	0.0984	2.8684	-0.0879
		R2	1.84 x 10 ³	3.2642				2.30 x 10 ³	3.3619				
		R3	2.05 x 10 ³	3.3129				2.55 x 10 ³	3.4067				
		R4	1.96 x 10 ³	3.2933				2.15 x 10 ³	3.3326				
		R5	2.10 x 10 ³	3.3224				2.95 x 10 ³	3.4700				
	High	R1	1.80 x 10 ⁴	4.2553	4.2483	0.0370	0.8710	2.15 x 10 ⁴	4.3325	4.3121	0.0653	1.5142	-0.0638
		R2	1.67 x 10 ⁴	4.2235				2.30 x 10 ⁴	4.3617				
		R3	1.75 x 10 ⁴	4.2442				1.75 x 10 ⁴	4.2431				
		R4	1.63 x 10 ⁴	4.2115				1.75 x 10 ⁴	4.2431				
		R5	2.03 x 10 ⁴	4.3069				2.40 x 10 ⁴	4.3802				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Peanut Butter	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.25 x 10 ³	3.3533	3.2217	0.2186	6.7843	1.80 x 10 ³	3.2555	3.0702	0.3282	10.6896	0.1515
		R2	2.23 x 10 ³	3.3480				1.80 x 10 ³	3.2555				
		R3	1.36 x 10 ³	3.1350				8.50 x 10 ²	2.9299				
		R4	2.49 x 10 ³	3.3965				2.25 x 10 ³	3.3524				
		R5	7.50 x 10 ²	2.8756				3.60 x 10 ²	2.5575				
	Medium	R1	4.30 x 10 ⁴	4.6335	4.9740	0.3175	6.3825	4.30 x 10 ⁴	4.6335	4.9251	0.4050	8.2233	0.0488
		R2	5.20 x 10 ⁴	4.7160				3.70 x 10 ⁴	4.5682				
		R3	1.04 x 10 ⁵	5.0170				8.15 x 10 ⁴	4.9112				
		R4	2.70 x 10 ⁵	5.4314				3.90 x 10 ⁵	5.5911				
		R5	1.18 x 10 ⁵	5.0719				8.35 x 10 ⁴	4.9217				
	High	R1	3.50 x 10 ⁶	6.5441	6.2403	0.2011	3.2221	2.90 x 10 ⁶	6.4624	6.2187	0.1754	2.8202	0.0217
		R2	1.17 x 10 ⁶	6.0692				1.09 x 10 ⁶	6.0354				
		R3	1.25 x 10 ⁶	6.0953				1.16 x 10 ⁶	6.0626				
		R4	1.41 x 10 ⁶	6.1489				1.95 x 10 ⁶	6.2900				
		R5	2.21 x 10 ⁶	6.3442				1.75 x 10 ⁶	6.2430				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Romaine Lettuce	Un-inoculated	R1	6.00 x 10 ²	2.7789	2.8498	0.1855	6.5086	9.00 x 10 ²	2.9547	3.1313	0.1732	5.5325	-0.2815
		R2	3.60 x 10 ²	2.5575				1.35 x 10 ³	3.1307				
		R3	9.90 x 10 ²	2.9961				2.60 x 10 ³	3.4151				
		R4	8.40 x 10 ²	2.9248				1.10 x 10 ³	3.0418				
		R5	9.80 x 10 ²	2.9917				1.30 x 10 ³	3.1143				
	Low	R1	2.90 x 10 ³	3.4625	3.5232	0.2660	7.5511	2.85 x 10 ³	3.4550	3.5769	0.1985	5.5483	-0.0537
		R2	3.80 x 10 ³	3.5799				4.20 x 10 ³	3.6234				
		R3	1.32 x 10 ³	3.1203				2.10 x 10 ³	3.3224				
		R4	7.10 x 10 ³	3.8513				7.00 x 10 ³	3.8452				
		R5	4.00 x 10 ³	3.6022				4.35 x 10 ³	3.6386				
	Medium	R1	1.54 x 10 ⁴	4.1865	4.2348	0.0529	1.2500	1.37 x 10 ⁴	4.1376	4.2499	0.0849	1.9981	-0.0151
		R2	1.65 x 10 ⁴	4.2163				1.55 x 10 ⁴	4.1904				
		R3	1.99 x 10 ⁴	4.2991				2.20 x 10 ⁴	4.3424				
		R4	1.55 x 10 ⁴	4.1891				1.85 x 10 ⁴	4.2672				
		R5	1.92 x 10 ⁴	4.2829				2.05 x 10 ⁴	4.3118				
	High	R1	1.03 x 10 ⁶	6.0117	6.0722	0.0559	0.9198	1.55 x 10 ⁶	6.1903	6.1266	0.0871	1.4209	-0.0544
		R2	1.41 x 10 ⁶	6.1489				1.70 x 10 ⁶	6.2304				
		R3	1.18 x 10 ⁶	6.0719				1.15 x 10 ⁶	6.0607				
		R4	1.26 x 10 ⁶	6.1016				1.35 x 10 ⁶	6.1303				
		R5	1.06 x 10 ⁶	6.0268				1.05 x 10 ⁶	6.0212				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	4.10 x 10 ²	2.6138	2.5186	0.0641	2.5438	4.15 x 10 ²	2.6191	2.5562	0.0518	2.0272	-0.0376
		R2	2.80 x 10 ²	2.4487				3.55 x 10 ²	2.5514				
		R3	3.20 x 10 ²	2.5065				3.95 x 10 ²	2.5977				
		R4	3.50 x 10 ²	2.5453				3.25 x 10 ²	2.5132				
		R5	3.00 x 10 ²	2.4786				3.15 x 10 ²	2.4997				
	Medium	R1	9.50 x 10 ³	3.9778	3.9163	0.0723	1.8467	9.59 x 10 ³	3.9819	3.9162	0.0745	1.9025	0.0001
		R2	7.10 x 10 ³	3.8513				8.00 x 10 ³	3.9031				
		R3	1.01 x 10 ⁴	4.0040				8.25 x 10 ³	3.9165				
		R4	8.00 x 10 ³	3.9031				9.55 x 10 ³	3.9800				
		R5	7.00 x 10 ³	3.8452				6.30 x 10 ³	3.7994				
	High	R1	3.30 x 10 ⁵	5.5185	5.5088	0.1012	1.8365	4.20 x 10 ⁵	5.6233	5.5269	0.1137	2.0576	-0.0181
		R2	2.40 x 10 ⁵	5.3802				2.60 x 10 ⁵	5.4150				
		R3	4.60 x 10 ⁵	5.6628				4.70 x 10 ⁵	5.6721				
		R4	3.10 x 10 ⁵	5.4914				2.80 x 10 ⁵	5.4472				
		R5	3.10 x 10 ⁵	5.4914				3.00 x 10 ⁵	5.4771				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Shrimp	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.50 x 10 ²	2.1790	2.1649	0.0517	2.3893	1.05 x 10 ²	2.0253	2.0801	0.1398	6.7211	0.0848
		R2	1.60 x 10 ²	2.2068				9.50 x 10 ¹	1.9823				
		R3	1.60 x 10 ²	2.2068				1.00 x 10 ²	2.0043				
		R4	1.20 x 10 ²	2.0828				1.15 x 10 ²	2.0645				
		R5	1.40 x 10 ²	2.1492				2.10 x 10 ²	2.3243				
	Medium	R1	2.48 x 10 ⁴	4.3948	4.4477	0.0794	1.7863	3.35 x 10 ⁴	4.5251	4.4148	0.0866	1.9609	0.0329
		R2	3.80 x 10 ⁴	4.5798				2.60 x 10 ⁴	4.4150				
		R3	2.90 x 10 ⁴	4.4624				2.45 x 10 ⁴	4.3892				
		R4	2.44 x 10 ⁴	4.3868				1.95 x 10 ⁴	4.2901				
		R5	2.60 x 10 ⁴	4.4150				2.85 x 10 ⁴	4.4549				
	High	R1	1.85 x 10 ⁶	6.2661	6.2756	0.0346	0.5516	2.20 x 10 ⁶	6.3424	6.3164	0.0431	0.6819	-0.0408
		R2	1.72 x 10 ⁶	6.2351				1.95 x 10 ⁶	6.2900				
		R3	2.11 x 10 ⁶	6.3241				2.15 x 10 ⁶	6.3324				
		R4	1.97 x 10 ⁶	6.2951				2.30 x 10 ⁶	6.3617				
		R5	1.81 x 10 ⁶	6.2575				1.80 x 10 ⁶	6.2553				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Spinach	Un-inoculated	R1	1.00 x 10 ¹	1.0414	1.6084	0.3825	23.7784	1.50 x 10 ¹	1.2041	1.6546	0.2682	16.2072	-0.0462
		R2	3.00 x 10 ¹	1.4914				7.00 x 10 ¹	1.8513				
		R3	4.00 x 10 ¹	1.6128				6.50 x 10 ¹	1.8195				
		R4	1.10 x 10 ²	2.0453				6.00 x 10 ¹	1.7853				
		R5	7.00 x 10 ¹	1.8513				4.00 x 10 ¹	1.6128				
	Low	R1	1.00 x 10 ²	2.0043	1.8486	0.1762	9.5301	1.20 x 10 ²	2.0828	1.9739	0.1381	6.9960	-0.1253
		R2	9.00 x 10 ¹	1.9590				9.50 x 10 ¹	1.9823				
		R3	4.00 x 10 ¹	1.6128				7.00 x 10 ¹	1.8513				
		R4	9.00 x 10 ¹	1.9590				1.35 x 10 ²	2.1335				
		R5	5.00 x 10 ¹	1.7076				6.50 x 10 ¹	1.8195				
	Medium	R1	7.90 x 10 ³	3.8977	3.9583	0.0636	1.6065	8.91 x 10 ³	3.9499	3.9833	0.0425	1.0661	-0.0250
		R2	1.05 x 10 ⁴	4.0231				8.60 x 10 ³	3.9345				
		R3	7.70 x 10 ³	3.8865				1.02 x 10 ⁴	4.0065				
		R4	9.36 x 10 ³	3.9715				1.10 x 10 ⁴	4.0396				
		R5	1.03 x 10 ⁴	4.0129				9.68 x 10 ³	3.9860				
	High	R1	1.07 x 10 ⁶	6.0305	6.0615	0.0416	0.6867	1.20 x 10 ⁶	6.0792	6.1566	0.1009	1.6384	-0.0951
		R2	1.34 x 10 ⁶	6.1259				1.12 x 10 ⁶	6.0492				
		R3	1.05 x 10 ⁶	6.0193				2.00 x 10 ⁶	6.3010				
		R4	1.16 x 10 ⁶	6.0658				1.60 x 10 ⁶	6.2041				
		R5	1.16 x 10 ⁶	6.0658				1.41 x 10 ⁶	6.1492				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.90 x 10 ²	2.2810	2.2052	0.1837	8.3326	1.40 x 10 ²	2.1492	2.2241	0.0637	2.8648	-0.0189
		R2	2.50 x 10 ²	2.3997				2.05 x 10 ²	2.3139				
		R3	8.00 x 10 ¹	1.9085				1.50 x 10 ²	2.1790				
		R4	1.80 x 10 ²	2.2577				1.70 x 10 ²	2.2330				
		R5	1.50 x 10 ²	2.1790				1.75 x 10 ²	2.2455				
	Medium	R1	7.20 x 10 ³	3.8574	3.7729	0.1145	3.0341	8.65 x 10 ³	3.9371	3.8479	0.0761	1.9789	-0.0750
		R2	4.60 x 10 ³	3.6629				7.00 x 10 ³	3.8452				
		R3	8.27 x 10 ³	3.9177				6.45 x 10 ³	3.8096				
		R4	5.80 x 10 ³	3.7635				5.55 x 10 ³	3.7444				
		R5	4.60 x 10 ³	3.6629				8.00 x 10 ³	3.9031				
	High	R1	4.70 x 10 ⁵	5.6721	5.7547	0.0680	1.1817	6.70 x 10 ⁵	5.8261	5.8446	0.0230	0.3933	-0.0899
		R2	6.10 x 10 ⁵	5.7853				7.10 x 10 ⁵	5.8513				
		R3	6.90 x 10 ⁵	5.8388				7.45 x 10 ⁵	5.8722				
		R4	6.00 x 10 ⁵	5.7782				6.55 x 10 ⁵	5.8162				
		R5	5.00 x 10 ⁵	5.6990				7.20 x 10 ⁵	5.8573				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Top Frosting	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.40 x 10 ²	2.1492	2.5139	0.2111	8.3970	1.75 x 10 ²	2.2455	2.4255	0.1463	6.0319	0.0884
		R2	4.40 x 10 ²	2.6444				2.30 x 10 ²	2.3636				
		R3	3.60 x 10 ²	2.5575				2.45 x 10 ²	2.3909				
		R4	3.50 x 10 ²	2.5453				4.30 x 10 ²	2.6345				
		R5	4.70 x 10 ²	2.6730				3.10 x 10 ²	2.4928				
	Medium	R1	2.50 x 10 ³	3.3981	3.5635	0.1161	3.2579	4.00 x 10 ³	3.6022	3.5696	0.0707	1.9818	-0.0062
		R2	3.10 x 10 ³	3.4915				3.25 x 10 ³	3.5120				
		R3	4.00 x 10 ³	3.6022				4.15 x 10 ³	3.6182				
		R4	4.50 x 10 ³	3.6533				4.35 x 10 ³	3.6386				
		R5	4.70 x 10 ³	3.6722				3.00 x 10 ³	3.4773				
	High	R1	2.80 x 10 ⁵	5.4472	5.5152	0.0989	1.7924	3.40 x 10 ⁵	5.5315	5.4736	0.0747	1.3645	0.0416
		R2	3.50 x 10 ⁵	5.5441				3.35 x 10 ⁵	5.5250				
		R3	4.20 x 10 ⁵	5.6233				2.70 x 10 ⁵	5.4314				
		R4	3.80 x 10 ⁵	5.5798				3.30 x 10 ⁵	5.5185				
		R5	2.41 x 10 ⁵	5.3819				2.30 x 10 ⁵	5.3617				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Wheat Flour	Un-inoculated	R1	3.00 x 10 ¹	1.4914	1.5532	0.5372	34.5890	2.00 x 10 ¹	1.3222	1.6338	0.3682	22.5373	-0.0805
		R2	9.00 x 10 ¹	1.9590				8.50 x 10 ¹	1.9345				
		R3	1.00 x 10 ¹	1.0414				1.50 x 10 ¹	1.2041				
		R4	1.70 x 10 ²	2.2330				1.10 x 10 ²	2.0453				
		R5	1.00 x 10 ¹	1.0414				4.50 x 10 ¹	1.6628				
	Low	R1	4.10 x 10 ²	2.6138	2.5653	0.2217	8.6428	4.05 x 10 ²	2.6085	2.6389	0.2051	7.7716	-0.0736
		R2	6.50 x 10 ²	2.8136				1.00 x 10 ³	3.0004				
		R3	5.10 x 10 ²	2.7084				3.40 x 10 ²	2.5328				
		R4	1.80 x 10 ²	2.2577				3.35 x 10 ²	2.5263				
		R5	2.70 x 10 ²	2.4330				3.35 x 10 ²	2.5263				
	Medium	R1	6.10 x 10 ⁴	4.7853	4.7337	0.2022	4.2711	6.00 x 10 ⁴	4.7782	4.7464	0.1797	3.7853	-0.0127
		R2	3.20 x 10 ⁴	4.5052				4.25 x 10 ⁴	4.6284				
		R3	3.60 x 10 ⁴	4.5563				3.30 x 10 ⁴	4.5185				
		R4	9.90 x 10 ⁴	4.9956				9.64 x 10 ⁴	4.9839				
		R5	6.70 x 10 ⁴	4.8261				6.65 x 10 ⁴	4.8228				
	High	R1	5.80 x 10 ⁴	4.7634	5.4451	0.3899	7.1605	5.95 x 10 ⁴	4.7745	5.4379	0.3955	7.2724	0.0073
		R2	3.20 x 10 ⁵	5.5052				2.50 x 10 ⁵	5.3979				
		R3	3.70 x 10 ⁵	5.5682				3.85 x 10 ⁵	5.5855				
		R4	4.80 x 10 ⁵	5.6812				4.50 x 10 ⁵	5.6532				
		R5	5.10 x 10 ⁵	5.7076				6.00 x 10 ⁵	5.7782				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation

^dRSD: Relative Standard Deviation = $\frac{SD}{Mean} * 100$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Surface	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Plastic	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	4.70 x 10 ³	3.6722	3.7365	0.0964	2.5789	5.73 x 10 ³	3.7580	3.7388	0.0722	1.9308	-0.0023
		R2	5.30 x 10 ³	3.7244				5.45 x 10 ³	3.7365				
		R3	4.20 x 10 ³	3.6234				5.95 x 10 ³	3.7746				
		R4	6.30 x 10 ³	3.7994				4.15 x 10 ³	3.6182				
		R5	7.30 x 10 ³	3.8634				6.41 x 10 ³	3.8069				
	High	R1	7.30 x 10 ⁵	5.8633	5.8170	0.1566	2.6915	9.00 x 10 ⁵	5.9542	5.8690	0.1626	2.7708	-0.0520
		R2	6.50 x 10 ⁵	5.8129				7.85 x 10 ⁵	5.8949				
		R3	3.60 x 10 ⁵	5.5563				3.85 x 10 ⁵	5.5855				
		R4	9.36 x 10 ⁵	5.9714				9.80 x 10 ⁵	5.9912				
		R5	7.60 x 10 ⁵	5.8808				8.30 x 10 ⁵	5.9191				

Surface	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	1.70 x 10 ³	3.2307	3.3218	0.0570	1.7146	3.20 x 10 ³	3.5053	3.3533	0.0944	2.8152	-0.0315
		R2	2.40 x 10 ³	3.3804				2.10 x 10 ³	3.3224				
		R3	2.15 x 10 ³	3.3336				1.80 x 10 ³	3.2555				
		R4	2.05 x 10 ³	3.3110				2.05 x 10 ³	3.3120				
		R5	2.25 x 10 ³	3.3533				2.35 x 10 ³	3.3713				
	High	R1	2.31 x 10 ⁵	5.3634	5.3119	0.0420	0.7915	1.95 x 10 ⁵	5.2900	5.2509	0.0467	0.8902	0.0610
		R2	1.98 x 10 ⁵	5.2971				1.50 x 10 ⁵	5.1761				
		R3	1.78 x 10 ⁵	5.2509				1.95 x 10 ⁵	5.2900				
		R4	2.06 x 10 ⁵	5.3146				1.75 x 10 ⁵	5.2430				
		R5	2.15 x 10 ⁵	5.3334				1.80 x 10 ⁵	5.2553				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation = $\sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n}}$

^dRSD: Relative Standard Deviation = $\frac{SD}{Mean} * 100$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Table A8: Summary of the Independent Laboratory's Method Comparison Statistics between the Microfilm TCEc and ISO 4832 Total Coliform Counts (TCC) in 4 food matrixes and stainless steel (1)

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<40	1.6128	0.3226	0.7213	0.0000	-0.3226
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	<10	0.0000	1.2712	0.8383	65.9492	<40	1.6128	1.3173	0.7387	56.0786	-0.0462
		R2	6.00 x 10 ¹	1.7853				4.00 x 10 ¹	1.6128				
		R3	1.00 x 10 ¹	1.0414				4.00 x 10 ¹	1.6128				
		R4	2.00 x 10 ¹	1.3222				<100	0.0000				
		R5	1.60 x 10 ²	2.2068				5.50 x 10 ¹	1.7482				
	Medium	R1	5.30 x 10 ²	2.7251	2.3845	0.3022	12.6739	3.75 x 10 ²	2.5752	2.3775	0.2937	12.3518	0.0070
		R2	1.20 x 10 ²	2.0828				8.00 x 10 ¹	1.9085				
		R3	1.30 x 10 ²	2.1173				2.20 x 10 ²	2.3444				
		R4	4.70 x 10 ²	2.6730				4.65 x 10 ²	2.6684				
		R5	2.10 x 10 ²	2.3243				2.45 x 10 ²	2.3909				
	High	R1	2.22 x 10 ⁴	4.3460	5.2754	0.5840	11.0707	2.05 x 10 ⁴	4.3118	5.2976	0.6134	11.5784	-0.0221
		R2	1.13 x 10 ⁵	5.0531				1.30 x 10 ⁵	5.1124				
		R3	3.90 x 10 ⁵	5.5911				3.40 x 10 ⁵	5.5315				
		R4	4.60 x 10 ⁵	5.6628				5.20 x 10 ⁵	5.7160				
		R5	5.30 x 10 ⁵	5.7243				6.55 x 10 ⁵	5.8162				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	5.50 x 10 ²	2.7412	2.6141	0.1072	4.1022	4.80 x 10 ²	2.6821	2.5450	0.1190	4.6744	0.0692
		R2	4.50 x 10 ²	2.6542				4.00 x 10 ²	2.6031				
		R3	3.90 x 10 ²	2.5922				3.05 x 10 ²	2.4857				
		R4	2.80 x 10 ²	2.4487				2.35 x 10 ²	2.3729				
		R5	4.30 x 10 ²	2.6345				3.80 x 10 ²	2.5809				
	Medium	R1	8.82 x 10 ³	3.9454	3.9986	0.0331	0.8266	1.03 x 10 ⁴	4.0123	3.9733	0.0303	0.7618	0.0253
		R2	1.00 x 10 ⁴	4.0000				8.86 x 10 ³	3.9477				
		R3	1.05 x 10 ⁴	4.0212				9.91 x 10 ³	3.9961				
		R4	1.07 x 10 ⁴	4.0305				8.76 x 10 ³	3.9426				
		R5	9.90 x 10 ³	3.9957				9.29 x 10 ³	3.9679				
	High	R1	2.70 x 10 ⁵	5.4314	5.5163	0.0725	1.3146	3.50 x 10 ⁵	5.5441	5.5386	0.1040	1.8777	-0.0223
		R2	4.10 x 10 ⁵	5.6128				3.75 x 10 ⁵	5.5740				
		R3	3.60 x 10 ⁵	5.5563				3.80 x 10 ⁵	5.5798				
		R4	2.90 x 10 ⁵	5.4624				4.30 x 10 ⁵	5.6335				
		R5	3.30 x 10 ⁵	5.5185				2.30 x 10 ⁵	5.3617				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.00 x 10 ²	2.0043	1.9118	0.1853	9.6906	7.50 x 10 ¹	1.8808	2.0254	0.0953	4.7059	-0.1136
		R2	7.00 x 10 ¹	1.8513				1.20 x 10 ²	2.0828				
		R3	1.10 x 10 ²	2.0453				1.00 x 10 ²	2.0043				
		R4	1.10 x 10 ²	2.0453				1.35 x 10 ²	2.1335				
		R5	4.00 x 10 ¹	1.6128				1.05 x 10 ²	2.0253				
	Medium	R1	6.30 x 10 ³	3.7994	3.8398	0.0517	1.3459	6.80 x 10 ³	3.8326	3.8839	0.0473	1.2183	-0.0440
		R2	8.27 x 10 ³	3.9177				9.05 x 10 ³	3.9566				
		R3	6.20 x 10 ³	3.7925				7.95 x 10 ³	3.9004				
		R4	6.70 x 10 ³	3.8261				7.25 x 10 ³	3.8604				
		R5	7.30 x 10 ³	3.8634				7.40 x 10 ³	3.8693				
	High	R1	6.00 x 10 ⁵	5.7782	5.6972	0.0749	1.3148	4.60 x 10 ⁵	5.6628	5.6934	0.0186	0.3261	0.0038
		R2	4.50 x 10 ⁵	5.6532				4.95 x 10 ⁵	5.6946				
		R3	4.20 x 10 ⁵	5.6233				4.95 x 10 ⁵	5.6946				
		R4	4.50 x 10 ⁵	5.6532				5.15 x 10 ⁵	5.7118				
		R5	6.00 x 10 ⁵	5.7782				5.05 x 10 ⁵	5.7033				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.80 x 10 ²	2.2577	2.3567	0.0598	2.5363	1.60 x 10 ²	2.2068	2.2151	0.0516	2.3274	0.1416
		R2	2.20 x 10 ²	2.3444				1.65 x 10 ²	2.2201				
		R3	2.50 x 10 ²	2.3997				1.75 x 10 ²	2.2455				
		R4	2.50 x 10 ²	2.3997				1.85 x 10 ²	2.2695				
		R5	2.40 x 10 ²	2.3820				1.35 x 10 ²	2.1335				
	Medium	R1	8.60 x 10 ³	3.9345	3.8943	0.0521	1.3388	1.06 x 10 ⁴	4.0253	3.8682	0.1002	2.5892	0.0262
		R2	9.18 x 10 ³	3.9630				8.00 x 10 ³	3.9031				
		R3	7.10 x 10 ³	3.8513				5.95 x 10 ³	3.7746				
		R4	7.00 x 10 ³	3.8452				6.86 x 10 ³	3.8362				
		R5	7.55 x 10 ³	3.8777				6.33 x 10 ³	3.8017				
	High	R1	8.20 x 10 ⁵	5.9138	5.8630	0.0639	1.0898	7.55 x 10 ⁵	5.8779	5.8630	0.0309	0.5268	0.0000
		R2	6.50 x 10 ⁵	5.8129				7.40 x 10 ⁵	5.8692				
		R3	6.60 x 10 ⁵	5.8195				6.90 x 10 ⁵	5.8388				
		R4	6.60 x 10 ⁵	5.8195				8.00 x 10 ⁵	5.9031				
		R5	8.90 x 10 ⁵	5.9494				6.70 x 10 ⁵	5.8261				

Surface	Inoculum Level	Rep #	Microfilm TCeC (Total Coliform Count)					ISO 4832					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.3226	0.7213	0.0000	-0.3226
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<40	1.6128				
	Medium	R1	2.08 x 10 ³	3.3187	3.2620	0.0436	1.3378	2.15 x 10 ³	3.3326	3.2183	0.0893	2.7746	0.0437
		R2	1.68 x 10 ³	3.2260				1.85 x 10 ³	3.2674				
		R3	1.69 x 10 ³	3.2284				1.50 x 10 ³	3.1764				
		R4	1.73 x 10 ³	3.2376				1.65 x 10 ³	3.2177				
		R5	1.99 x 10 ³	3.2993				1.25 x 10 ³	3.0973				
	High	R1	2.25 x 10 ⁵	5.3531	5.2561	0.0685	1.3033	2.20 x 10 ⁵	5.3424	5.2437	0.0696	1.3281	0.0125
		R2	1.89 x 10 ⁵	5.2767				1.90 x 10 ⁵	5.2788				
		R3	1.86 x 10 ⁵	5.2704				1.45 x 10 ⁵	5.1614				
		R4	1.53 x 10 ⁵	5.1839				1.70 x 10 ⁵	5.2305				
		R5	1.57 x 10 ⁵	5.1967				1.60 x 10 ⁵	5.2054				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation =

^dRSD: Relative Standard Deviation = $\frac{SD}{Mean} \times 100$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Table A11: Summary of the Method Developer's Method Comparison Statistics between the Microfilm TCEc and ISO 16649-2 *E. coli* Counts (ECC) in 20 food matrixes and two environmental surfaces (1)

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	3.00 x 10 ¹	1.4914	1.4818	0.1036	6.9886	1.50 x 10 ¹	1.2041	1.4044	0.2120	15.0965	0.0774
		R2	4.00 x 10 ¹	1.6128				5.00 x 10 ¹	1.7076				
		R3	3.00 x 10 ¹	1.4914				1.50 x 10 ¹	1.2041				
		R4	2.00 x 10 ¹	1.3222				3.00 x 10 ¹	1.4914				
		R5	3.00 x 10 ¹	1.4914				2.50 x 10 ¹	1.4150				
	Medium	R1	1.13 x 10 ³	3.0535	2.9572	0.0811	2.7433	7.75 x 10 ²	2.8899	2.8089	0.1572	5.5966	0.1482
		R2	7.90 x 10 ²	2.8982				4.30 x 10 ²	2.6345				
		R3	7.50 x 10 ²	2.8756				4.55 x 10 ²	2.6590				
		R4	8.40 x 10 ²	2.9248				7.25 x 10 ²	2.8609				
		R5	1.08 x 10 ³	3.0338				1.00 x 10 ³	3.0004				
	High	R1	1.29 x 10 ⁵	5.1106	4.9659	0.2622	5.2798	1.14 x 10 ⁵	5.0555	4.9435	0.2193	4.4363	0.0224
		R2	6.00 x 10 ⁴	4.7782				6.00 x 10 ⁴	4.7782				
		R3	5.30 x 10 ⁴	4.7243				6.55 x 10 ⁴	4.8162				
		R4	2.25 x 10 ⁵	5.3531				1.90 x 10 ⁵	5.2788				
		R5	7.30 x 10 ⁴	4.8633				6.15 x 10 ⁴	4.7889				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Black Pepper	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	9.00 x 10 ¹	1.9590	2.0404	0.2486	12.1845	4.50 x 10 ¹	1.6628	1.6333	0.2900	17.7548	0.4072
		R2	1.40 x 10 ²	2.1492				2.50 x 10 ¹	1.4150				
		R3	1.00 x 10 ²	2.0043				3.50 x 10 ¹	1.5563				
		R4	2.40 x 10 ²	2.3820				1.30 x 10 ²	2.1173				
		R5	5.00 x 10 ¹	1.7076				2.50 x 10 ¹	1.4150				
	Medium	R1	6.20 x 10 ²	2.7931	2.8071	0.0728	2.5941	3.90 x 10 ²	2.5922	2.5540	0.2863	11.2081	0.2531
		R2	6.40 x 10 ²	2.8069				3.15 x 10 ²	2.4997				
		R3	5.70 x 10 ²	2.7566				5.35 x 10 ²	2.7292				
		R4	8.50 x 10 ²	2.9299				7.05 x 10 ²	2.8488				
		R5	5.60 x 10 ²	2.7490				1.25 x 10 ²	2.1004				
	High	R1	7.73 x 10 ³	3.8881	4.2670	0.4827	11.3123	4.70 x 10 ³	3.6722	4.0873	0.5058	12.3746	0.1796
		R2	8.64 x 10 ⁴	4.9363				5.85 x 10 ⁴	4.7672				
		R3	5.30 x 10 ³	3.7244				3.25 x 10 ³	3.5120				
		R4	3.00 x 10 ⁴	4.4771				2.05 x 10 ⁴	4.3118				
		R5	2.04 x 10 ⁴	4.3089				1.49 x 10 ⁴	4.1735				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Cumin	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	5.00 x 10 ¹	1.7076	1.5416	0.3468	22.4990	<10	0.0000	0.0000	0.0000	NA	1.5416
		R2	6.00 x 10 ¹	1.7853				<10	0.0000				
		R3	1.00 x 10 ¹	1.0414				<10	0.0000				
		R4	7.00 x 10 ¹	1.8513				<10	0.0000				
		R5	2.00 x 10 ¹	1.3222				<10	0.0000				
	Medium	R1	2.28 x 10 ³	3.3585	3.3792	0.0253	0.7478	1.90 x 10 ³	3.2790	3.3208	0.0743	2.2382	0.0583
		R2	2.47 x 10 ³	3.3934				2.35 x 10 ³	3.3713				
		R3	2.47 x 10 ³	3.3934				2.60 x 10 ³	3.4151				
		R4	2.54 x 10 ³	3.4044				1.69 x 10 ³	3.2269				
		R5	2.22 x 10 ³	3.3462				2.05 x 10 ³	3.3120				
	High	R1	2.32 x 10 ⁵	5.3651	5.2549	0.0671	1.2773	1.81 x 10 ⁵	5.2577	5.1860	0.0438	0.8443	0.0689
		R2	1.79 x 10 ⁵	5.2531				1.56 x 10 ⁵	5.1917				
		R3	1.54 x 10 ⁵	5.1865				1.40 x 10 ⁵	5.1446				
		R4	1.77 x 10 ⁵	5.2486				1.50 x 10 ⁵	5.1761				
		R5	1.66 x 10 ⁵	5.2211				1.45 x 10 ⁵	5.1599				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Dry Pet Food	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.00 x 10 ¹	1.0414	1.6949	0.4297	25.3516	1.50 x 10 ¹	1.2041	1.6926	0.3031	17.9056	0.0024
		R2	7.00 x 10 ¹	1.8513				4.50 x 10 ¹	1.6628				
		R3	3.00 x 10 ¹	1.4914				6.00 x 10 ¹	1.7853				
		R4	1.10 x 10 ²	2.0453				1.05 x 10 ²	2.0253				
		R5	1.10 x 10 ²	2.0453				6.00 x 10 ¹	1.7853				
	Medium	R1	2.40 x 10 ³	3.3804	3.4221	0.1367	3.9948	2.60 x 10 ³	3.4151	3.3263	0.0954	2.8688	0.0958
		R2	2.90 x 10 ³	3.4625				1.95 x 10 ³	3.2903				
		R3	3.40 x 10 ³	3.5316				1.95 x 10 ³	3.2903				
		R4	3.40 x 10 ³	3.5316				1.60 x 10 ³	3.2044				
		R5	1.60 x 10 ³	3.2044				2.70 x 10 ³	3.4315				
	High	R1	8.82 x 10 ⁴	4.9454	4.7567	0.3036	6.3827	4.65 x 10 ⁴	4.6675	4.5916	0.3718	8.0974	0.1651
		R2	1.13 x 10 ⁵	5.0520				1.04 x 10 ⁵	5.0174				
		R3	6.80 x 10 ⁴	4.8325				5.90 x 10 ⁴	4.7709				
		R4	1.87 x 10 ⁴	4.2725				1.06 x 10 ⁴	4.0253				
		R5	4.80 x 10 ⁴	4.6813				3.00 x 10 ⁴	4.4771				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground beef, 7% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.20 x 10 ²	2.0828	1.8455	0.2476	13.4174	7.50 x 10 ¹	1.8808	1.8532	0.0678	3.6605	-0.0077
		R2	1.20 x 10 ²	2.0828				7.00 x 10 ¹	1.8513				
		R3	6.00 x 10 ¹	1.7853				5.50 x 10 ¹	1.7482				
		R4	6.00 x 10 ¹	1.7853				8.50 x 10 ¹	1.9345				
		R5	3.00 x 10 ¹	1.4914				7.00 x 10 ¹	1.8513				
	Medium	R1	5.10 x 10 ³	3.7077	3.5200	0.1581	4.4928	4.00 x 10 ³	3.6022	3.6166	0.0543	1.5016	-0.0965
		R2	3.00 x 10 ³	3.4773				4.55 x 10 ³	3.6581				
		R3	3.60 x 10 ³	3.5564				4.65 x 10 ³	3.6675				
		R4	3.80 x 10 ³	3.5799				4.20 x 10 ³	3.6234				
		R5	1.90 x 10 ³	3.2790				3.40 x 10 ³	3.5316				
	High	R1	1.10 x 10 ⁶	6.0414	5.9360	0.1038	1.7483	5.65 x 10 ⁵	5.7520	5.6845	0.0659	1.1601	0.2515
		R2	8.00 x 10 ⁵	5.9031				5.45 x 10 ⁵	5.7364				
		R3	6.00 x 10 ⁵	5.7782				3.90 x 10 ⁵	5.5911				
		R4	8.80 x 10 ⁵	5.9445				4.45 x 10 ⁵	5.6484				
		R5	1.03 x 10 ⁶	6.0128				4.95 x 10 ⁵	5.6946				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground chicken, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	8.00 x 10 ¹	1.9085	1.9222	0.0903	4.6964	5.00 x 10 ¹	1.7076	1.8423	0.0994	5.3930	0.0799
		R2	6.00 x 10 ¹	1.7853				9.00 x 10 ¹	1.9590				
		R3	1.00 x 10 ²	2.0043				6.00 x 10 ¹	1.7853				
		R4	1.00 x 10 ²	2.0043				7.00 x 10 ¹	1.8513				
		R5	8.00 x 10 ¹	1.9085				8.00 x 10 ¹	1.9085				
	Medium	R1	3.40 x 10 ³	3.5316	3.5994	0.0854	2.3721	1.01 x 10 ³	3.0063	3.4389	0.2452	7.1296	0.1605
		R2	3.90 x 10 ³	3.5912				3.65 x 10 ³	3.5624				
		R3	3.40 x 10 ³	3.5316				3.00 x 10 ³	3.4773				
		R4	5.50 x 10 ³	3.7404				3.75 x 10 ³	3.5741				
		R5	4.00 x 10 ³	3.6022				3.75 x 10 ³	3.5741				
	High	R1	5.20 x 10 ⁵	5.7160	5.8054	0.0807	1.3899	5.85 x 10 ⁵	5.7672	5.6912	0.1318	2.3166	0.1142
		R2	5.90 x 10 ⁵	5.7709				5.55 x 10 ⁵	5.7443				
		R3	6.00 x 10 ⁵	5.7782				6.45 x 10 ⁵	5.8096				
		R4	8.50 x 10 ⁵	5.9294				4.55 x 10 ⁵	5.6580				
		R5	6.80 x 10 ⁵	5.8325				3.00 x 10 ⁵	5.4771				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground pork, 20% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	9.00 x 10 ¹	1.9590	1.9200	0.1020	5.3125	7.00 x 10 ¹	1.8513	1.9247	0.0717	3.7228	-0.0047
		R2	9.00 x 10 ¹	1.9590				8.50 x 10 ¹	1.9345				
		R3	1.10 x 10 ²	2.0453				7.00 x 10 ¹	1.8513				
		R4	7.00 x 10 ¹	1.8513				1.00 x 10 ²	2.0043				
		R5	6.00 x 10 ¹	1.7853				9.50 x 10 ¹	1.9823				
	Medium	R1	6.70 x 10 ³	3.8261	3.8273	0.0832	2.1741	4.40 x 10 ³	3.6436	3.7409	0.0834	2.2292	0.0864
		R2	8.27 x 10 ³	3.9177				5.15 x 10 ³	3.7119				
		R3	7.60 x 10 ³	3.8809				6.00 x 10 ³	3.7782				
		R4	5.00 x 10 ³	3.6991				5.10 x 10 ³	3.7077				
		R5	6.50 x 10 ³	3.8130				7.30 x 10 ³	3.8634				
	High	R1	6.90 x 10 ⁵	5.8388	5.8398	0.0555	0.9509	5.35 x 10 ⁵	5.7284	5.7809	0.0803	1.3886	0.0589
		R2	8.10 x 10 ⁵	5.9085				6.20 x 10 ⁵	5.7924				
		R3	6.10 x 10 ⁵	5.7853				6.70 x 10 ⁵	5.8261				
		R4	7.60 x 10 ⁵	5.8808				7.60 x 10 ⁵	5.8808				
		R5	6.10 x 10 ⁵	5.7853				4.75 x 10 ⁵	5.6767				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground turkey, 1% Fat	Un-inoculated	R1	2.00 x 10 ¹	1.3222	1.3580	0.2153	15.8579	1.00 x 10 ¹	1.0414	1.1301	0.1284	11.3661	0.2279
		R2	3.00 x 10 ¹	1.4914				1.00 x 10 ¹	1.0414				
		R3	4.00 x 10 ¹	1.6128				2.00 x 10 ¹	1.3222				
		R4	1.00 x 10 ¹	1.0414				1.00 x 10 ¹	1.0414				
		R5	2.00 x 10 ¹	1.3222				1.50 x 10 ¹	1.2041				
	Low	R1	9.00 x 10 ¹	1.9590	1.9077	0.1169	6.1277	4.00 x 10 ¹	1.6128	1.6345	0.1738	10.6316	0.2732
		R2	1.00 x 10 ²	2.0043				2.50 x 10 ¹	1.4150				
		R3	9.00 x 10 ¹	1.9590				3.50 x 10 ¹	1.5563				
		R4	5.00 x 10 ¹	1.7076				5.00 x 10 ¹	1.7076				
		R5	8.00 x 10 ¹	1.9085				7.50 x 10 ¹	1.8808				
	Medium	R1	4.80 x 10 ³	3.6813	3.6494	0.1046	2.8649	2.35 x 10 ³	3.3713	3.4494	0.1047	3.0353	0.2000
		R2	5.90 x 10 ³	3.7709				3.80 x 10 ³	3.5799				
		R3	4.10 x 10 ³	3.6129				3.40 x 10 ³	3.5316				
		R4	3.10 x 10 ³	3.4915				2.15 x 10 ³	3.3326				
		R5	4.90 x 10 ³	3.6903				2.70 x 10 ³	3.4315				
	High	R1	6.80 x 10 ⁵	5.8325	5.7742	0.0720	1.2474	4.50 x 10 ⁵	5.6532	5.6599	0.0450	0.7945	0.1143
		R2	6.55 x 10 ⁵	5.8159				5.35 x 10 ⁵	5.7284				
		R3	4.70 x 10 ⁵	5.6721				4.35 x 10 ⁵	5.6385				
		R4	5.30 x 10 ⁵	5.7243				4.05 x 10 ⁵	5.6075				
		R5	6.70 x 10 ⁵	5.8261				4.70 x 10 ⁵	5.6721				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ice Cream	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	4.00 x 10 ¹	1.6128	1.9515	0.2096	10.7394	5.00 x 10 ¹	1.7076	1.9022	0.1901	9.9951	0.0493
		R2	1.00 x 10 ²	2.0043				7.00 x 10 ¹	1.8513				
		R3	1.40 x 10 ²	2.1492				1.65 x 10 ²	2.2201				
		R4	8.00 x 10 ¹	1.9085				7.00 x 10 ¹	1.8513				
		R5	1.20 x 10 ²	2.0828				7.50 x 10 ¹	1.8808				
	Medium	R1	1.47 x 10 ³	3.1684	2.9352	0.1442	4.9128	1.46 x 10 ³	3.1647	2.9579	0.1209	4.0865	-0.0227
		R2	9.40 x 10 ²	2.9736				9.10 x 10 ²	2.9595				
		R3	6.60 x 10 ²	2.8202				7.85 x 10 ²	2.8954				
		R4	7.70 x 10 ²	2.8871				7.25 x 10 ²	2.8609				
		R5	6.70 x 10 ²	2.8267				8.10 x 10 ²	2.9090				
	High	R1	1.04 x 10 ⁵	5.0170	5.0184	0.1087	2.1668	6.90 x 10 ⁴	4.8389	4.9037	0.1295	2.6412	0.1147
		R2	1.60 x 10 ⁵	5.2041				1.34 x 10 ⁵	5.1259				
		R3	8.90 x 10 ⁴	4.9494				6.85 x 10 ⁴	4.8357				
		R4	8.60 x 10 ⁴	4.9345				8.10 x 10 ⁴	4.9085				
		R5	9.70 x 10 ⁴	4.9868				6.45 x 10 ⁴	4.8096				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	3.00 x 10 ¹	1.4914	1.7015	0.2266	13.3155	6.50 x 10 ¹	1.8195	1.6415	0.1090	6.6380	0.0599
		R2	4.00 x 10 ¹	1.6128				3.50 x 10 ¹	1.5563				
		R3	5.00 x 10 ¹	1.7076				3.50 x 10 ¹	1.5563				
		R4	1.20 x 10 ²	2.0828				4.50 x 10 ¹	1.6628				
		R5	4.00 x 10 ¹	1.6128				4.00 x 10 ¹	1.6128				
	Medium	R1	3.60 x 10 ³	3.5564	3.5482	0.1078	3.0394	1.11 x 10 ³	3.0471	3.2623	0.1651	5.0608	0.2859
		R2	2.80 x 10 ³	3.4473				1.70 x 10 ³	3.2307				
		R3	4.70 x 10 ³	3.6722				3.05 x 10 ³	3.4844				
		R4	2.70 x 10 ³	3.4315				1.57 x 10 ³	3.1969				
		R5	4.30 x 10 ³	3.6336				2.25 x 10 ³	3.3524				
	High	R1	3.50 x 10 ⁵	5.5441	5.5783	0.0631	1.1304	1.63 x 10 ⁵	5.2115	5.2710	0.0846	1.6041	0.3073
		R2	3.50 x 10 ⁵	5.5441				1.56 x 10 ⁵	5.1917				
		R3	4.70 x 10 ⁵	5.6721				1.70 x 10 ⁵	5.2293				
		R4	3.30 x 10 ⁵	5.5185				2.20 x 10 ⁵	5.3424				
		R5	4.10 x 10 ⁵	5.6128				2.40 x 10 ⁵	5.3802				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Mung bean sprouts	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	8.00 x 10 ¹	1.9085	1.9130	0.0793	4.1471	6.00 x 10 ¹	1.7853	1.8065	0.0825	4.5680	0.1065
		R2	1.10 x 10 ²	2.0453				8.50 x 10 ¹	1.9345				
		R3	7.00 x 10 ¹	1.8513				5.00 x 10 ¹	1.7076				
		R4	8.00 x 10 ¹	1.9085				6.50 x 10 ¹	1.8195				
		R5	7.00 x 10 ¹	1.8513				6.00 x 10 ¹	1.7853				
	Medium	R1	8.27 x 10 ³	3.9177	3.9495	0.0275	0.6966	5.30 x 10 ³	3.7244	3.8043	0.0468	1.2298	0.1451
		R2	9.40 x 10 ³	3.9732				6.65 x 10 ³	3.8229				
		R3	8.40 x 10 ³	3.9243				6.40 x 10 ³	3.8062				
		R4	9.00 x 10 ³	3.9543				6.65 x 10 ³	3.8229				
		R5	9.50 x 10 ³	3.9778				7.00 x 10 ³	3.8452				
	High	R1	7.30 x 10 ⁵	5.8633	5.9525	0.1026	1.7231	7.20 x 10 ⁵	5.8573	5.8731	0.0870	1.4813	0.0794
		R2	7.00 x 10 ⁵	5.8451				8.60 x 10 ⁵	5.9345				
		R3	9.45 x 10 ⁵	5.9756				5.40 x 10 ⁵	5.7324				
		R4	9.55 x 10 ⁵	5.9798				7.75 x 10 ⁵	5.8893				
		R5	1.25 x 10 ⁶	6.0985				8.95 x 10 ⁵	5.9518				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Noodles Uncooked	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.40 x 10 ²	2.3820	2.3859	0.0615	2.5767	2.00 x 10 ²	2.3032	2.3657	0.0623	2.6326	0.0201
		R2	2.70 x 10 ²	2.4330				2.55 x 10 ²	2.4082				
		R3	2.60 x 10 ²	2.4166				2.60 x 10 ²	2.4166				
		R4	2.60 x 10 ²	2.4166				1.95 x 10 ²	2.2923				
		R5	1.90 x 10 ²	2.2810				2.55 x 10 ²	2.4082				
	Medium	R1	1.81 x 10 ³	3.2577	3.1931	0.0755	2.3647	2.03 x 10 ³	3.3066	3.1835	0.0954	2.9982	0.0096
		R2	1.31 x 10 ³	3.1173				1.21 x 10 ³	3.0813				
		R3	1.43 x 10 ³	3.1548				1.34 x 10 ³	3.1258				
		R4	1.40 x 10 ³	3.1464				1.39 x 10 ³	3.1433				
		R5	1.95 x 10 ³	3.2892				1.82 x 10 ³	3.2603				
	High	R1	1.29 x 10 ⁴	4.1109	4.0778	0.0476	1.1668	1.16 x 10 ⁴	4.0626	4.0258	0.0826	2.0511	0.0521
		R2	1.12 x 10 ⁴	4.0486				8.20 x 10 ³	3.9139				
		R3	1.23 x 10 ⁴	4.0890				1.27 x 10 ⁴	4.1038				
		R4	1.03 x 10 ⁴	4.0117				9.20 x 10 ³	3.9638				
		R5	1.35 x 10 ⁴	4.1289				1.22 x 10 ⁴	4.0846				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Peanut Butter	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	6.10 x 10 ²	2.7860	2.6767	0.2094	7.8243	4.55 x 10 ²	2.6590	2.5425	0.1777	6.9906	0.1342
		R2	6.30 x 10 ²	2.8000				4.30 x 10 ²	2.6345				
		R3	4.40 x 10 ²	2.6444				3.55 x 10 ²	2.5514				
		R4	6.73 x 10 ²	2.8285				4.30 x 10 ²	2.6345				
		R5	2.10 x 10 ²	2.3243				1.70 x 10 ²	2.2330				
	Medium	R1	1.48 x 10 ⁴	4.1708	4.5683	0.4020	8.7998	8.15 x 10 ³	3.9112	4.3765	0.5209	11.9031	0.1918
		R2	1.72 x 10 ⁴	4.2351				9.50 x 10 ³	3.9778				
		R3	3.30 x 10 ⁴	4.5185				1.32 x 10 ⁴	4.1190				
		R4	1.40 x 10 ⁵	5.1461				1.06 x 10 ⁵	5.0233				
		R5	5.90 x 10 ⁴	4.7709				7.10 x 10 ⁴	4.8513				
	High	R1	1.05 x 10 ⁶	6.0231	5.8622	0.1190	2.0303	5.65 x 10 ⁵	5.7520	5.6967	0.0721	1.2661	0.1655
		R2	6.10 x 10 ⁵	5.7853				4.45 x 10 ⁵	5.6484				
		R3	5.50 x 10 ⁵	5.7404				4.20 x 10 ⁵	5.6233				
		R4	6.50 x 10 ⁵	5.8129				4.65 x 10 ⁵	5.6675				
		R5	8.90 x 10 ⁵	5.9494				6.20 x 10 ⁵	5.7924				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Romaine Lettuce	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.10 x 10 ²	2.0453	1.6359	0.2705	16.5330	5.50 x 10 ¹	1.7482	1.7283	0.0665	3.8498	-0.0924
		R2	5.00 x 10 ¹	1.7076				4.50 x 10 ¹	1.6628				
		R3	2.00 x 10 ¹	1.3222				4.50 x 10 ¹	1.6628				
		R4	4.00 x 10 ¹	1.6128				6.50 x 10 ¹	1.8195				
		R5	3.00 x 10 ¹	1.4914				5.50 x 10 ¹	1.7482				
	Medium	R1	6.90 x 10 ³	3.8389	3.8264	0.0510	1.3332	5.00 x 10 ³	3.6991	3.6217	0.0890	2.4581	0.2047
		R2	7.30 x 10 ³	3.8634				4.20 x 10 ³	3.6234				
		R3	7.50 x 10 ³	3.8751				4.60 x 10 ³	3.6629				
		R4	5.60 x 10 ³	3.7483				4.50 x 10 ³	3.6533				
		R5	6.40 x 10 ³	3.8062				2.95 x 10 ³	3.4700				
	High	R1	6.00 x 10 ⁵	5.7782	5.7818	0.0276	0.4770	4.15 x 10 ⁵	5.6180	5.5883	0.1106	1.9786	0.1935
		R2	5.80 x 10 ⁵	5.7634				3.65 x 10 ⁵	5.5623				
		R3	6.40 x 10 ⁵	5.8062				5.70 x 10 ⁵	5.7559				
		R4	6.50 x 10 ⁵	5.8129				3.55 x 10 ⁵	5.5502				
		R5	5.60 x 10 ⁵	5.7482				2.85 x 10 ⁵	5.4548				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	3.50 x 10 ²	2.5453	2.4249	0.0937	3.8659	1.95 x 10 ²	2.2923	2.2685	0.1305	5.7511	0.1565
		R2	2.00 x 10 ²	2.3032				1.55 x 10 ²	2.1931				
		R3	2.90 x 10 ²	2.4639				3.05 x 10 ²	2.4857				
		R4	2.80 x 10 ²	2.4487				1.60 x 10 ²	2.2068				
		R5	2.30 x 10 ²	2.3636				1.45 x 10 ²	2.1644				
	Medium	R1	4.80 x 10 ³	3.6813	3.6528	0.0674	1.8459	3.15 x 10 ³	3.4984	3.4500	0.1325	3.8398	0.2029
		R2	4.00 x 10 ³	3.6022				3.05 x 10 ³	3.4844				
		R3	5.70 x 10 ³	3.7560				3.65 x 10 ³	3.5624				
		R4	4.30 x 10 ³	3.6336				3.05 x 10 ³	3.4844				
		R5	3.90 x 10 ³	3.5912				1.66 x 10 ³	3.2201				
	High	R1	2.40 x 10 ⁵	5.3802	5.3931	0.0830	1.5382	3.45 x 10 ⁵	5.5378	5.3309	0.1894	3.5530	0.0623
		R2	2.03 x 10 ⁵	5.3069				2.21 x 10 ⁵	5.3444				
		R3	3.40 x 10 ⁵	5.5315				2.55 x 10 ⁵	5.4065				
		R4	2.38 x 10 ⁵	5.3769				1.06 x 10 ⁵	5.0233				
		R5	2.35 x 10 ⁵	5.3702				2.20 x 10 ⁵	5.3424				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Shrimp	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.00 x 10 ²	2.0043	1.9359	0.1291	6.6710	7.00 x 10 ¹	1.8513	1.7918	0.1334	7.4470	0.1441
		R2	1.00 x 10 ²	2.0043				7.00 x 10 ¹	1.8513				
		R3	9.00 x 10 ¹	1.9590				6.50 x 10 ¹	1.8195				
		R4	5.00 x 10 ¹	1.7076				3.50 x 10 ¹	1.5563				
		R5	1.00 x 10 ²	2.0043				7.50 x 10 ¹	1.8808				
	Medium	R1	9.60 x 10 ³	3.9823	4.0158	0.0315	0.7835	5.15 x 10 ³	3.7119	3.8514	0.1008	2.6176	0.1644
		R2	1.05 x 10 ⁴	4.0231				8.50 x 10 ³	3.9295				
		R3	1.01 x 10 ⁴	4.0040				7.95 x 10 ³	3.9004				
		R4	1.01 x 10 ⁴	4.0040				6.00 x 10 ³	3.7782				
		R5	1.16 x 10 ⁴	4.0659				8.65 x 10 ³	3.9371				
	High	R1	6.90 x 10 ⁵	5.8388	5.8332	0.0587	1.0055	4.60 x 10 ⁵	5.6628	5.6810	0.0776	1.3664	0.1523
		R2	5.50 x 10 ⁵	5.7404				3.95 x 10 ⁵	5.5966				
		R3	7.30 x 10 ⁵	5.8633				5.35 x 10 ⁵	5.7284				
		R4	7.90 x 10 ⁵	5.8976				6.15 x 10 ⁵	5.7889				
		R5	6.70 x 10 ⁵	5.8261				4.25 x 10 ⁵	5.6284				

Matrix	Inoculum Level	Rep #	Microfilm TCeC (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Spinach	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	9.00 x 10 ¹	1.9590	1.7497	0.2568	14.6789	6.50 x 10 ¹	1.8195	1.5486	0.2987	19.2865	0.2012
		R2	8.00 x 10 ¹	1.9085				4.50 x 10 ¹	1.6628				
		R3	2.00 x 10 ¹	1.3222				1.00 x 10 ¹	1.0414				
		R4	7.00 x 10 ¹	1.8513				4.50 x 10 ¹	1.6628				
		R5	5.00 x 10 ¹	1.7076				3.50 x 10 ¹	1.5563				
	Medium	R1	6.40 x 10 ³	3.8062	3.8105	0.0940	2.4662	5.05 x 10 ³	3.7034	3.7715	0.0643	1.7051	0.0391
		R2	7.70 x 10 ³	3.8865				5.60 x 10 ³	3.7483				
		R3	4.60 x 10 ³	3.6629				5.35 x 10 ³	3.7284				
		R4	6.30 x 10 ³	3.7994				6.65 x 10 ³	3.8229				
		R5	7.90 x 10 ³	3.8977				7.15 x 10 ³	3.8544				
	High	R1	8.64 x 10 ⁵	5.9363	5.9532	0.0578	0.9717	8.70 x 10 ⁵	5.9395	5.8624	0.0544	0.9276	0.0909
		R2	1.09 x 10 ⁶	6.0374				7.70 x 10 ⁵	5.8865				
		R3	7.64 x 10 ⁵	5.8829				6.30 x 10 ⁵	5.7993				
		R4	8.55 x 10 ⁵	5.9317				7.25 x 10 ⁵	5.8603				
		R5	9.50 x 10 ⁵	5.9777				6.70 x 10 ⁵	5.8261				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.80 x 10 ²	2.2577	2.1777	0.1844	8.4679	9.00 x 10 ¹	1.9590	1.8345	0.1384	7.5430	0.3433
		R2	2.40 x 10 ²	2.3820				8.00 x 10 ¹	1.9085				
		R3	8.00 x 10 ¹	1.9085				8.50 x 10 ¹	1.9345				
		R4	1.80 x 10 ²	2.2577				4.50 x 10 ¹	1.6628				
		R5	1.20 x 10 ²	2.0828				5.00 x 10 ¹	1.7076				
	Medium	R1	6.40 x 10 ³	3.8062	3.7212	0.1180	3.1703	1.74 x 10 ³	3.2395	3.3969	0.1402	4.1282	0.3243
		R2	4.20 x 10 ³	3.6234				1.85 x 10 ³	3.2674				
		R3	7.40 x 10 ³	3.8693				3.25 x 10 ³	3.5120				
		R4	5.20 x 10 ³	3.7161				3.55 x 10 ³	3.5504				
		R5	3.90 x 10 ³	3.5912				2.60 x 10 ³	3.4151				
	High	R1	4.00 x 10 ⁵	5.6021	5.6837	0.0716	1.2601	1.57 x 10 ⁵	5.1945	5.3080	0.0704	1.3257	0.3757
		R2	5.20 x 10 ⁵	5.7160				2.00 x 10 ⁵	5.3010				
		R3	6.00 x 10 ⁵	5.7782				2.30 x 10 ⁵	5.3617				
		R4	5.00 x 10 ⁵	5.6990				2.05 x 10 ⁵	5.3118				
		R5	4.20 x 10 ⁵	5.6233				2.35 x 10 ⁵	5.3711				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Top Frosting	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	7.00 x 10 ¹	1.8513	2.0032	0.2095	10.4568	6.50 x 10 ¹	1.8195	1.8972	0.1102	5.8067	0.1061
		R2	9.00 x 10 ¹	1.9590				7.00 x 10 ¹	1.8513				
		R3	6.00 x 10 ¹	1.7853				6.00 x 10 ¹	1.7853				
		R4	1.30 x 10 ²	2.1173				1.05 x 10 ²	2.0253				
		R5	2.00 x 10 ²	2.3032				1.00 x 10 ²	2.0043				
	Medium	R1	9.80 x 10 ²	2.9917	3.0423	0.0779	2.5608	5.65 x 10 ²	2.7528	2.7987	0.0670	2.3930	0.2437
		R2	9.00 x 10 ²	2.9547				5.15 x 10 ²	2.7126				
		R3	1.17 x 10 ³	3.0696				6.70 x 10 ²	2.8267				
		R4	1.09 x 10 ³	3.0382				7.65 x 10 ²	2.8842				
		R5	1.44 x 10 ³	3.1576				6.55 x 10 ²	2.8169				
	High	R1	1.02 x 10 ⁵	5.0086	5.0223	0.0477	0.9507	5.15 x 10 ⁴	4.7118	4.8429	0.0929	1.9189	0.1794
		R2	1.02 x 10 ⁵	5.0078				7.35 x 10 ⁴	4.8663				
		R3	1.24 x 10 ⁵	5.0934				7.65 x 10 ⁴	4.8837				
		R4	1.09 x 10 ⁵	5.0378				9.05 x 10 ⁴	4.9567				
		R5	9.20 x 10 ⁴	4.9638				6.25 x 10 ⁴	4.7959				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Wheat Flour	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.20 x 10 ²	2.0828	2.0065	0.2240	11.1625	1.10 x 10 ²	2.0453	1.6769	0.4753	28.3414	0.3296
		R2	2.10 x 10 ²	2.3243				1.65 x 10 ²	2.2201				
		R3	9.00 x 10 ¹	1.9590				4.50 x 10 ¹	1.6628				
		R4	5.00 x 10 ¹	1.7076				1.00 x 10 ¹	1.0414				
		R5	9.00 x 10 ¹	1.9590				2.50 x 10 ¹	1.4150				
	Medium	R1	1.33 x 10 ⁴	4.1230	3.9957	0.1688	4.2248	7.05 x 10 ³	3.8483	3.8236	0.2570	6.7213	0.1721
		R2	6.80 x 10 ³	3.8326				3.60 x 10 ³	3.5564				
		R3	6.40 x 10 ³	3.8062				3.75 x 10 ³	3.5741				
		R4	1.51 x 10 ⁴	4.1787				1.37 x 10 ⁴	4.1368				
		R5	1.09 x 10 ⁴	4.0378				1.01 x 10 ⁴	4.0022				
	High	R1	2.10 x 10 ⁴	4.3222	4.8903	0.3223	6.5911	1.42 x 10 ⁴	4.1518	4.6555	0.2874	6.1731	0.2348
		R2	9.64 x 10 ⁴	4.9839				5.45 x 10 ⁴	4.7364				
		R3	1.01 x 10 ⁵	5.0039				5.40 x 10 ⁴	4.7324				
		R4	1.04 x 10 ⁵	5.0155				6.05 x 10 ⁴	4.7818				
		R5	1.34 x 10 ⁵	5.1259				7.50 x 10 ⁴	4.8751				

Surface	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Plastic	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	3.00 x 10 ³	3.4773	3.5736	0.0957	2.6784	1.73 x 10 ³	3.2376	3.3321	0.1050	3.1523	0.2416
		R2	3.30 x 10 ³	3.5186				2.05 x 10 ³	3.3120				
		R3	3.30 x 10 ³	3.5186				1.72 x 10 ³	3.2353				
		R4	4.70 x 10 ³	3.6722				3.00 x 10 ³	3.4773				
		R5	4.80 x 10 ³	3.6813				2.50 x 10 ³	3.3981				
	High	R1	3.70 x 10 ⁵	5.5682	5.5528	0.1970	3.5480	1.83 x 10 ⁵	5.2625	5.3819	0.2238	4.1583	0.1709
		R2	4.30 x 10 ⁵	5.6335				2.35 x 10 ⁵	5.3711				
		R3	1.70 x 10 ⁵	5.2305				1.22 x 10 ⁵	5.0864				
		R4	5.80 x 10 ⁵	5.7634				4.55 x 10 ⁵	5.6580				
		R5	3.70 x 10 ⁵	5.5682				3.40 x 10 ⁵	5.5315				

Surface	Inoculum Level	Rep #	Microfilm TCEc (E. coli Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	1.91 x 10 ³	3.2810	3.2092	0.0461	1.4363	9.05 x 10 ²	2.9571	2.9418	0.0436	1.4814	0.2674
		R2	1.68 x 10 ³	3.2260				7.35 x 10 ²	2.8669				
		R3	1.48 x 10 ³	3.1711				8.75 x 10 ²	2.9425				
		R4	1.48 x 10 ³	3.1711				9.30 x 10 ²	2.9689				
		R5	1.57 x 10 ³	3.1969				9.40 x 10 ²	2.9736				
	High	R1	1.63 x 10 ⁵	5.2115	5.1750	0.0457	0.8821	7.10 x 10 ⁴	4.8513	4.8596	0.1153	2.3722	0.3154
		R2	1.45 x 10 ⁵	5.1600				4.90 x 10 ⁴	4.6902				
		R3	1.27 x 10 ⁵	5.1047				7.75 x 10 ⁴	4.8893				
		R4	1.52 x 10 ⁵	5.1813				7.15 x 10 ⁴	4.8543				
		R5	1.65 x 10 ⁵	5.2175				1.03 x 10 ⁵	5.0128				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation =

^dRSD: Relative Standard Deviation = $\frac{SD}{\text{Mean}} \times 100$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Table A12: Summary of the Independent Laboratory's Method Comparison Statistics between the Microfilm TCEc and ISO 16649-2 *E. coli* Counts (ECC) in 4 food matrixes and stainless steel (1)

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	<10	0.0000	1.2441	0.8107	65.1657	5.00 x 10 ⁰	0.7782	0.8587	0.7014	81.6762	0.3854
		R2	5.00 x 10 ¹	1.7076				5.00 x 10 ⁰	0.7782				
		R3	1.00 x 10 ¹	1.0414				5.00 x 10 ⁰	0.7782				
		R4	2.00 x 10 ¹	1.3222				<10	0.0000				
		R5	1.40 x 10 ²	2.1492				9.00 x 10 ¹	1.9590				
	Medium	R1	5.20 x 10 ²	2.7168	2.3640	0.2998	12.6817	2.10 x 10 ²	2.3243	2.2020	0.2907	13.2027	0.1620
		R2	1.20 x 10 ²	2.0828				5.00 x 10 ¹	1.7076				
		R3	1.20 x 10 ²	2.0828				1.50 x 10 ²	2.1790				
		R4	4.30 x 10 ²	2.6345				2.50 x 10 ²	2.3997				
		R5	2.00 x 10 ²	2.3032				2.50 x 10 ²	2.3997				
	High	R1	2.18 x 10 ⁴	4.3388	5.2292	0.5529	10.5737	1.64 x 10 ⁴	4.2149	5.0760	0.5638	11.1071	0.1532
		R2	1.09 x 10 ⁵	5.0374				6.50 x 10 ⁴	4.8129				
		R3	3.60 x 10 ⁵	5.5563				1.95 x 10 ⁵	5.2900				
		R4	3.80 x 10 ⁵	5.5798				3.25 x 10 ⁵	5.5119				
		R5	4.30 x 10 ⁵	5.6335				3.55 x 10 ⁵	5.5502				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.00 x 10 ²	2.0043	1.7111	0.2673	15.6231	5.50 x 10 ¹	1.7482	1.7925	0.0877	4.8937	-0.0814
		R2	2.00 x 10 ¹	1.3222				7.50 x 10 ¹	1.8808				
		R3	8.00 x 10 ¹	1.9085				4.50 x 10 ¹	1.6628				
		R4	5.00 x 10 ¹	1.7076				7.00 x 10 ¹	1.8513				
		R5	4.00 x 10 ¹	1.6128				6.50 x 10 ¹	1.8195				
	Medium	R1	2.25 x 10 ³	3.3533	3.5296	0.1008	2.8546	2.40 x 10 ³	3.3804	3.3876	0.0756	2.2324	0.1419
		R2	3.80 x 10 ³	3.5799				2.95 x 10 ³	3.4700				
		R3	3.50 x 10 ³	3.5442				2.20 x 10 ³	3.3426				
		R4	4.00 x 10 ³	3.6022				2.85 x 10 ³	3.4550				
		R5	3.70 x 10 ³	3.5683				1.95 x 10 ³	3.2903				
	High	R1	3.30 x 10 ⁵	5.5185	5.4277	0.0880	1.6214	3.20 x 10 ⁵	5.5052	5.2753	0.1802	3.4165	0.1524
		R2	2.40 x 10 ⁵	5.3802				1.35 x 10 ⁵	5.1303				
		R3	2.00 x 10 ⁵	5.3010				1.20 x 10 ⁵	5.0792				
		R4	3.10 x 10 ⁵	5.4914				1.80 x 10 ⁵	5.2553				
		R5	2.80 x 10 ⁵	5.4472				2.55 x 10 ⁵	5.4065				

Matrix	Inoculum Level	Rep #	Microfilm TCeC (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	4.20 x 10 ²	2.6243	2.5285	0.0678	2.6811	2.95 x 10 ²	2.4713	2.2329	0.2346	10.5070	0.2956
		R2	3.40 x 10 ²	2.5328				1.90 x 10 ²	2.2810				
		R3	2.90 x 10 ²	2.4639				1.60 x 10 ²	2.2068				
		R4	3.60 x 10 ²	2.5575				7.00 x 10 ¹	1.8513				
		R5	2.90 x 10 ²	2.4639				2.25 x 10 ²	2.3541				
	Medium	R1	5.00 x 10 ³	3.6991	3.6950	0.0249	0.6736	2.30 x 10 ³	3.3619	3.5806	0.1655	4.6216	0.1144
		R2	4.70 x 10 ³	3.6722				6.30 x 10 ³	3.7994				
		R3	5.00 x 10 ³	3.6991				3.05 x 10 ³	3.4844				
		R4	4.70 x 10 ³	3.6722				4.25 x 10 ³	3.6285				
		R5	5.40 x 10 ³	3.7325				4.25 x 10 ³	3.6285				
	High	R1	2.30 x 10 ⁵	5.3617	5.4023	0.0521	0.9651	5.00 x 10 ⁵	5.6990	5.3193	0.2232	4.1968	0.0831
		R2	2.80 x 10 ⁵	5.4472				1.50 x 10 ⁵	5.1761				
		R3	2.90 x 10 ⁵	5.4624				1.60 x 10 ⁵	5.2041				
		R4	2.50 x 10 ⁵	5.3979				1.50 x 10 ⁵	5.1748				
		R5	2.20 x 10 ⁵	5.3424				2.20 x 10 ⁵	5.3424				

Matrix	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.80 x 10 ²	2.2577	2.3304	0.0478	2.0502	6.50 x 10 ¹	1.8195	1.9427	0.1593	8.2012	0.3877
		R2	2.10 x 10 ²	2.3243				8.00 x 10 ¹	1.9085				
		R3	2.30 x 10 ²	2.3636				6.50 x 10 ¹	1.8195				
		R4	2.10 x 10 ²	2.3243				1.60 x 10 ²	2.2068				
		R5	2.40 x 10 ²	2.3820				9.00 x 10 ¹	1.9590				
	Medium	R1	6.70 x 10 ³	3.8261	3.8019	0.0415	1.0928	3.35 x 10 ³	3.5252	3.5175	0.0355	1.0103	0.2845
		R2	7.20 x 10 ³	3.8574				3.20 x 10 ³	3.5053				
		R3	5.60 x 10 ³	3.7483				3.70 x 10 ³	3.5683				
		R4	6.10 x 10 ³	3.7854				3.30 x 10 ³	3.5186				
		R5	6.20 x 10 ³	3.7925				2.95 x 10 ³	3.4700				
	High	R1	6.00 x 10 ⁵	5.7782	5.7373	0.0704	1.2272	1.90 x 10 ⁵	5.2788	5.2448	0.0488	0.9298	0.4925
		R2	5.20 x 10 ⁵	5.7160				2.00 x 10 ⁵	5.3010				
		R3	4.70 x 10 ⁵	5.6721				1.55 x 10 ⁵	5.1916				
		R4	4.80 x 10 ⁵	5.6812				1.58 x 10 ⁵	5.1973				
		R5	6.90 x 10 ⁵	5.8388				1.80 x 10 ⁵	5.2553				

Surface	Inoculum Level	Rep #	Microfilm TCEc (<i>E. coli</i> Count)					ISO 16649-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	1.74 x 10 ³	3.2399	3.1743	0.0581	1.8298	5.76 x 10 ²	2.7613	2.9297	0.1460	4.9817	0.2445
		R2	1.35 x 10 ³	3.1292				1.08 x 10 ³	3.0318				
		R3	1.34 x 10 ³	3.1262				6.75 x 10 ²	2.8299				
		R4	1.38 x 10 ³	3.1408				8.05 x 10 ²	2.9063				
		R5	1.72 x 10 ³	3.2353				1.32 x 10 ³	3.1193				
	High	R1	2.02 x 10 ⁵	5.3050	5.2023	0.0919	1.7657	1.24 x 10 ⁵	5.0917	4.9556	0.1123	2.2671	0.2467
		R2	1.78 x 10 ⁵	5.2509				9.65 x 10 ⁴	4.9845				
		R3	1.74 x 10 ⁵	5.2396				1.05 x 10 ⁵	5.0212				
		R4	1.37 x 10 ⁵	5.1367				6.75 x 10 ⁴	4.8293				
		R5	1.20 x 10 ⁵	5.0792				7.10 x 10 ⁴	4.8513				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation =

^dRSD: Relative Standard Deviation = $\frac{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2}}{\bar{X}} * 100$

^e Mean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Table A15: Summary of the Method Developer's Method Comparison Statistics between the Microfilm YMC and ISO 21527-1/-2 Yeast Count in 20 food matrixes and two environmental surfaces (1)

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	5.00 x 10 ¹	1.7076	1.0563	0.6576	62.2506	6.00 x 10 ¹	1.7853	1.5068	0.1982	13.1562	-0.4504
		R2	1.00 x 10 ¹	1.0414				2.00 x 10 ¹	1.3222				
		R3	3.00 x 10 ¹	1.4914				4.00 x 10 ¹	1.6128				
		R4	1.00 x 10 ¹	1.0414				3.00 x 10 ¹	1.4914				
		R5	0.00 x 10 ⁰	0.0000				2.00 x 10 ¹	1.3222				
	Medium	R1	2.36 x 10 ³	3.3738	3.3698	0.0667	1.9789	3.10 x 10 ³	3.4915	3.2758	0.1978	6.0383	0.0941
		R2	2.55 x 10 ³	3.4059				1.50 x 10 ³	3.1764				
		R3	1.82 x 10 ³	3.2599				1.00 x 10 ³	3.0004				
		R4	2.36 x 10 ³	3.3738				1.90 x 10 ³	3.2790				
		R5	2.73 x 10 ³	3.4359				2.70 x 10 ³	3.4315				
	High	R1	4.82 x 10 ⁴	4.6829	4.6068	0.0755	1.6397	4.30 x 10 ⁴	4.6335	4.5327	0.1107	2.4419	0.0740
		R2	3.82 x 10 ⁴	4.5819				2.80 x 10 ⁴	4.4472				
		R3	3.09 x 10 ⁴	4.4901				2.60 x 10 ⁴	4.4150				
		R4	4.18 x 10 ⁴	4.6214				4.60 x 10 ⁴	4.6628				
		R5	4.55 x 10 ⁴	4.6576				3.20 x 10 ⁴	4.5052				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Black Pepper	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.09 x 10 ²	2.0418	2.1399	0.0646	3.0202	8.00 x 10 ¹	1.9085	2.0805	0.1337	6.4268	0.0594
		R2	1.27 x 10 ²	2.1081				1.00 x 10 ²	2.0043				
		R3	1.45 x 10 ²	2.1657				1.40 x 10 ²	2.1492				
		R4	1.55 x 10 ²	2.1919				1.80 x 10 ²	2.2577				
		R5	1.55 x 10 ²	2.1919				1.20 x 10 ²	2.0828				
	Medium	R1	7.73 x 10 ³	3.8881	3.8300	0.0537	1.4017	5.60 x 10 ³	3.7483	3.7270	0.0771	2.0690	0.1030
		R2	7.00 x 10 ³	3.8452				4.30 x 10 ³	3.6336				
		R3	6.36 x 10 ³	3.8038				4.70 x 10 ³	3.6722				
		R4	7.27 x 10 ³	3.8618				5.60 x 10 ³	3.7483				
		R5	5.64 x 10 ³	3.7511				6.80 x 10 ³	3.8326				
	High	R1	5.27 x 10 ⁴	4.7220	4.6732	0.0386	0.8266	3.00 x 10 ⁴	4.4771	4.5124	0.0821	1.8199	0.1608
		R2	4.73 x 10 ⁴	4.6746				2.50 x 10 ⁴	4.3980				
		R3	4.27 x 10 ⁴	4.6307				4.00 x 10 ⁴	4.6021				
		R4	5.00 x 10 ⁴	4.6990				3.80 x 10 ⁴	4.5798				
		R5	4.36 x 10 ⁴	4.6399				3.20 x 10 ⁴	4.5052				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Cumin	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.00 x 10 ²	2.0043	2.1283	0.1003	4.7125	1.50 x 10 ²	2.1790	2.1858	0.1305	5.9722	-0.0575
		R2	1.27 x 10 ²	2.1081				1.70 x 10 ²	2.2330				
		R3	1.36 x 10 ²	2.1379				1.00 x 10 ²	2.0043				
		R4	1.91 x 10 ²	2.2831				2.30 x 10 ²	2.3636				
		R5	1.27 x 10 ²	2.1081				1.40 x 10 ²	2.1492				
	Medium	R1	1.01 x 10 ⁴	4.0040	3.9509	0.0617	1.5615	7.70 x 10 ³	3.8865	3.9191	0.0479	1.2230	0.0317
		R2	7.18 x 10 ³	3.8563				7.45 x 10 ³	3.8725				
		R3	8.64 x 10 ³	3.9364				8.45 x 10 ³	3.9271				
		R4	1.02 x 10 ⁴	4.0079				8.20 x 10 ³	3.9139				
		R5	8.91 x 10 ³	3.9499				9.90 x 10 ³	3.9957				
	High	R1	6.09 x 10 ⁴	4.7847	4.7476	0.0737	1.5527	5.10 x 10 ⁴	4.7076	4.6876	0.0537	1.1461	0.0600
		R2	5.27 x 10 ⁴	4.7220				5.20 x 10 ⁴	4.7160				
		R3	4.27 x 10 ⁴	4.6307				4.70 x 10 ⁴	4.6721				
		R4	6.55 x 10 ⁴	4.8159				5.50 x 10 ⁴	4.7404				
		R5	6.09 x 10 ⁴	4.7847				4.00 x 10 ⁴	4.6021				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Dry Pet Food	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.00 x 10 ²	2.0043	2.0246	0.0446	2.2035	8.00 x 10 ¹	1.9085	1.9662	0.1106	5.6267	0.0585
		R2	9.00 x 10 ¹	1.9590				8.00 x 10 ¹	1.9085				
		R3	1.18 x 10 ²	2.0762				1.10 x 10 ²	2.0453				
		R4	1.09 x 10 ²	2.0418				7.00 x 10 ¹	1.8513				
		R5	1.09 x 10 ²	2.0418				1.30 x 10 ²	2.1173				
	Medium	R1	4.91 x 10 ³	3.6911	3.7132	0.0548	1.4761	7.50 x 10 ³	3.8751	3.7465	0.0920	2.4546	-0.0334
		R2	5.00 x 10 ³	3.6991				4.60 x 10 ³	3.6629				
		R3	4.73 x 10 ³	3.6747				5.70 x 10 ³	3.7560				
		R4	6.45 x 10 ³	3.8099				6.10 x 10 ³	3.7854				
		R5	4.91 x 10 ³	3.6911				4.50 x 10 ³	3.6533				
	High	R1	6.00 x 10 ⁴	4.7782	4.6073	0.1331	2.8892	4.50 x 10 ⁴	4.6532	4.5863	0.1038	2.2642	0.0210
		R2	2.64 x 10 ⁴	4.4210				2.60 x 10 ⁴	4.4150				
		R3	4.18 x 10 ⁴	4.6214				4.00 x 10 ⁴	4.6021				
		R4	4.64 x 10 ⁴	4.6662				3.80 x 10 ⁴	4.5798				
		R5	3.55 x 10 ⁴	4.5497				4.80 x 10 ⁴	4.6813				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground beef, 7% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	7.27 x 10 ¹	1.8676	2.1130	0.1472	6.9684	1.10 x 10 ²	2.0453	2.0428	0.1111	5.4394	0.0702
		R2	1.27 x 10 ²	2.1081				7.00 x 10 ¹	1.8513				
		R3	1.45 x 10 ²	2.1657				1.30 x 10 ²	2.1173				
		R4	1.80 x 10 ²	2.2577				1.20 x 10 ²	2.0828				
		R5	1.45 x 10 ²	2.1657				1.30 x 10 ²	2.1173				
	Medium	R1	9.64 x 10 ³	3.9840	4.0119	0.0482	1.2025	1.04 x 10 ⁴	4.0156	4.0320	0.0234	0.5795	-0.0201
		R2	9.27 x 10 ³	3.9673				1.08 x 10 ⁴	4.0342				
		R3	9.55 x 10 ³	3.9798				1.01 x 10 ⁴	4.0044				
		R4	1.15 x 10 ⁴	4.0590				1.16 x 10 ⁴	4.0645				
		R5	1.17 x 10 ⁴	4.0692				1.10 x 10 ⁴	4.0414				
	High	R1	7.55 x 10 ⁵	5.8777	5.9509	0.0601	1.0094	8.09 x 10 ⁵	5.9080	5.9231	0.0088	0.1488	0.0278
		R2	1.10 x 10 ⁶	6.0414				8.40 x 10 ⁵	5.9243				
		R3	9.00 x 10 ⁵	5.9542				8.50 x 10 ⁵	5.9294				
		R4	9.09 x 10 ⁵	5.9586				8.50 x 10 ⁵	5.9294				
		R5	8.36 x 10 ⁵	5.9224				8.40 x 10 ⁵	5.9243				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground chicken, 2% Fat	Un-inoculated	R1	2.00 x 10 ¹	1.3222	1.5736	0.1464	9.3041	6.00 x 10 ¹	1.7853	1.9241	0.1315	6.8323	-0.3504
		R2	5.00 x 10 ¹	1.7076				1.10 x 10 ²	2.0453				
		R3	4.00 x 10 ¹	1.6128				6.00 x 10 ¹	1.7853				
		R4	4.00 x 10 ¹	1.6128				1.10 x 10 ²	2.0453				
		R5	4.00 x 10 ¹	1.6128				9.00 x 10 ¹	1.9590				
	Low	R1	1.30 x 10 ²	2.1173	2.1422	0.1161	5.4186	1.70 x 10 ²	2.2330	2.2667	0.1748	7.7126	-0.1244
		R2	2.10 x 10 ²	2.3243				3.70 x 10 ²	2.5694				
		R3	1.50 x 10 ²	2.1790				1.60 x 10 ²	2.2068				
		R4	1.10 x 10 ²	2.0453				1.30 x 10 ²	2.1173				
		R5	1.10 x 10 ²	2.0453				1.60 x 10 ²	2.2068				
	Medium	R1	9.00 x 10 ³	3.9543	3.7522	0.2705	7.2080	7.00 x 10 ³	3.8452	3.8162	0.1494	3.9147	-0.0640
		R2	5.00 x 10 ³	3.6991				5.00 x 10 ³	3.6991				
		R3	8.00 x 10 ³	3.9031				4.30 x 10 ³	3.6336				
		R4	2.00 x 10 ³	3.3012				1.00 x 10 ⁴	4.0000				
		R5	8.00 x 10 ³	3.9031				8.00 x 10 ³	3.9031				
	High	R1	3.64 x 10 ⁵	5.5607	5.5730	0.0720	1.2926	3.20 x 10 ⁵	5.5052	5.4371	0.0882	1.6213	0.1358
		R2	3.45 x 10 ⁵	5.5384				2.30 x 10 ⁵	5.3617				
		R3	4.36 x 10 ⁵	5.6398				3.20 x 10 ⁵	5.5052				
		R4	3.00 x 10 ⁵	5.4771				3.10 x 10 ⁵	5.4914				
		R5	4.45 x 10 ⁵	5.6488				2.10 x 10 ⁵	5.3222				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground pork, 20% Fat	Un-inoculated	R1	8.36 x 10 ²	2.9229	2.2234	0.5287	23.7791	8.36 x 10 ²	2.9229	2.2693	0.4539	20.0000	-0.0459
		R2	2.27 x 10 ²	2.3585				1.90 x 10 ²	2.2810				
		R3	6.00 x 10 ¹	1.7853				8.00 x 10 ¹	1.9085				
		R4	4.00 x 10 ¹	1.6128				6.00 x 10 ¹	1.7853				
		R5	2.73 x 10 ²	2.4373				2.80 x 10 ²	2.4487				
	Low	R1	2.36 x 10 ²	2.3754	2.8138	0.4593	16.3246	2.00 x 10 ²	2.3032	2.7798	0.4551	16.3709	0.0340
		R2	2.73 x 10 ²	2.4373				2.50 x 10 ²	2.3997				
		R3	4.91 x 10 ²	2.6919				5.20 x 10 ²	2.7168				
		R4	2.82 x 10 ³	3.4501				2.30 x 10 ³	3.3619				
		R5	1.30 x 10 ³	3.1143				1.31 x 10 ³	3.1173				
	Medium	R1	6.45 x 10 ³	3.8099	3.7227	0.0768	2.0628	3.50 x 10 ³	3.5442	3.5979	0.0834	2.3185	0.1249
		R2	6.00 x 10 ³	3.7782				3.20 x 10 ³	3.5053				
		R3	5.18 x 10 ³	3.7146				4.90 x 10 ³	3.6903				
		R4	4.09 x 10 ³	3.6119				3.70 x 10 ³	3.5683				
		R5	5.00 x 10 ³	3.6991				4.80 x 10 ³	3.6813				
	High	R1	5.91 x 10 ⁵	5.7715	5.8143	0.0421	0.7243	3.90 x 10 ⁵	5.5911	5.7076	0.0866	1.5174	0.1067
		R2	7.64 x 10 ⁵	5.8829				6.30 x 10 ⁵	5.7993				
		R3	6.18 x 10 ⁵	5.7911				4.50 x 10 ⁵	5.6532				
		R4	6.45 x 10 ⁵	5.8099				5.20 x 10 ⁵	5.7160				
		R5	6.55 x 10 ⁵	5.8159				6.00 x 10 ⁵	5.7782				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ground turkey, 1% Fat	Un-inoculated	R1	1.00 x 10 ¹	1.0414	0.2083	0.4657	223.6068	<10	0.0000	0.2083	0.4657	223.6068	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				1.00 x 10 ¹	1.0414				
	Low	R1	6.00 x 10 ¹	1.7853	1.7961	0.0595	3.3119	5.00 x 10 ¹	1.7076	1.7789	0.0822	4.6230	0.0173
		R2	5.00 x 10 ¹	1.7076				6.00 x 10 ¹	1.7853				
		R3	7.00 x 10 ¹	1.8513				6.00 x 10 ¹	1.7853				
		R4	6.00 x 10 ¹	1.7853				5.00 x 10 ¹	1.7076				
		R5	7.00 x 10 ¹	1.8513				8.00 x 10 ¹	1.9085				
	Medium	R1	5.18 x 10 ³	3.7146	3.7773	0.0496	1.3120	3.80 x 10 ³	3.5799	3.6944	0.0830	2.2458	0.0829
		R2	6.18 x 10 ³	3.7912				4.90 x 10 ³	3.6903				
		R3	5.45 x 10 ³	3.7368				5.10 x 10 ³	3.7077				
		R4	6.73 x 10 ³	3.8279				6.50 x 10 ³	3.8130				
		R5	6.55 x 10 ³	3.8160				4.80 x 10 ³	3.6813				
	High	R1	3.82 x 10 ⁵	5.5819	5.5009	0.2093	3.8039	2.70 x 10 ⁵	5.4314	5.4348	0.1513	2.7844	0.0661
		R2	3.36 x 10 ⁵	5.5268				3.20 x 10 ⁵	5.5052				
		R3	1.36 x 10 ⁵	5.1347				1.50 x 10 ⁵	5.1761				
		R4	4.36 x 10 ⁵	5.6398				3.20 x 10 ⁵	5.5052				
		R5	4.18 x 10 ⁵	5.6214				3.60 x 10 ⁵	5.5563				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Ice Cream	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.09 x 10 ²	2.0418	2.1719	0.1015	4.6720	9.00 x 10 ¹	1.9590	2.1138	0.1802	8.5271	0.0581
		R2	2.09 x 10 ²	2.3224				8.00 x 10 ¹	1.9085				
		R3	1.55 x 10 ²	2.1919				1.90 x 10 ²	2.2810				
		R4	1.36 x 10 ²	2.1379				1.30 x 10 ²	2.1173				
		R5	1.45 x 10 ²	2.1657				2.00 x 10 ²	2.3032				
	Medium	R1	1.64 x 10 ⁴	4.2139	4.2010	0.0599	1.4250	5.00 x 10 ³	3.6991	4.0324	0.2009	4.9819	0.1685
		R2	1.82 x 10 ⁴	4.2597				1.10 x 10 ⁴	4.0414				
		R3	1.55 x 10 ⁴	4.1891				1.60 x 10 ⁴	4.2041				
		R4	1.27 x 10 ⁴	4.1048				1.10 x 10 ⁴	4.0414				
		R5	1.73 x 10 ⁴	4.2374				1.50 x 10 ⁴	4.1761				
	High	R1	2.64 x 10 ⁵	5.4210	5.4353	0.0825	1.5173	2.60 x 10 ⁵	5.4150	5.4175	0.0666	1.2301	0.0178
		R2	3.18 x 10 ⁵	5.5027				3.00 x 10 ⁵	5.4771				
		R3	3.36 x 10 ⁵	5.5268				3.10 x 10 ⁵	5.4914				
		R4	2.55 x 10 ⁵	5.4058				2.20 x 10 ⁵	5.3424				
		R5	2.09 x 10 ⁵	5.3203				2.30 x 10 ⁵	5.3617				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.18 x 10 ²	2.0762	2.0715	0.1378	6.6516	1.40 x 10 ²	2.1492	2.0831	0.0872	4.1838	-0.0116
		R2	1.82 x 10 ²	2.2620				1.10 x 10 ²	2.0453				
		R3	9.09 x 10 ¹	1.9634				9.00 x 10 ¹	1.9590				
		R4	8.18 x 10 ¹	1.9181				1.20 x 10 ²	2.0828				
		R5	1.36 x 10 ²	2.1379				1.50 x 10 ²	2.1790				
	Medium	R1	1.05 x 10 ⁴	4.0231	4.0141	0.0583	1.4530	6.60 x 10 ³	3.8196	3.8614	0.0597	1.5463	0.1527
		R2	1.03 x 10 ⁴	4.0117				7.80 x 10 ³	3.8922				
		R3	8.27 x 10 ³	3.9177				8.30 x 10 ³	3.9191				
		R4	1.12 x 10 ⁴	4.0486				6.00 x 10 ³	3.7782				
		R5	1.17 x 10 ⁴	4.0692				7.90 x 10 ³	3.8977				
	High	R1	2.00 x 10 ⁵	5.3010	5.3780	0.0496	0.9219	2.70 x 10 ⁵	5.4314	5.2542	0.1280	2.4361	0.1238
		R2	2.50 x 10 ⁵	5.3979				2.00 x 10 ⁵	5.3010				
		R3	2.30 x 10 ⁵	5.3617				1.90 x 10 ⁵	5.2788				
		R4	2.70 x 10 ⁵	5.4314				1.30 x 10 ⁵	5.1139				
		R5	2.50 x 10 ⁵	5.3979				1.40 x 10 ⁵	5.1461				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Mung bean sprouts	Un-inoculated	R1	3.18 x 10 ⁴	4.5027	4.4818	0.0924	2.0624	3.80 x 10 ⁴	4.5798	4.4741	0.1255	2.8051	0.0077
		R2	4.27 x 10 ⁴	4.6307				2.50 x 10 ⁴	4.3980				
		R3	2.82 x 10 ⁴	4.4500				2.10 x 10 ⁴	4.3222				
		R4	2.73 x 10 ⁴	4.4357				2.80 x 10 ⁴	4.4472				
		R5	2.45 x 10 ⁴	4.3900				4.20 x 10 ⁴	4.6233				
	Low	R1	2.09 x 10 ⁴	4.3204	4.3954	0.0875	1.9911	2.10 x 10 ⁴	4.3222	4.3855	0.0757	1.7253	0.0099
		R2	2.73 x 10 ⁴	4.4357				3.20 x 10 ⁴	4.5052				
		R3	3.36 x 10 ⁴	4.5268				2.60 x 10 ⁴	4.4150				
		R4	2.09 x 10 ⁴	4.3204				2.20 x 10 ⁴	4.3424				
		R5	2.36 x 10 ⁴	4.3736				2.20 x 10 ⁴	4.3424				
	Medium	R1	4.18 x 10 ⁴	4.6214	4.6465	0.0235	0.5065	2.70 x 10 ⁴	4.4314	4.4647	0.0283	0.6350	0.1819
		R2	4.82 x 10 ⁴	4.6829				2.90 x 10 ⁴	4.4624				
		R3	4.27 x 10 ⁴	4.6307				3.00 x 10 ⁴	4.4771				
		R4	4.45 x 10 ⁴	4.6488				3.20 x 10 ⁴	4.5052				
		R5	4.45 x 10 ⁴	4.6488				2.80 x 10 ⁴	4.4472				
	High	R1	8.64 x 10 ⁵	5.9363	5.9541	0.0449	0.7547	7.70 x 10 ⁵	5.8865	5.9153	0.1069	1.8068	0.0388
		R2	9.36 x 10 ⁵	5.9714				9.27 x 10 ⁵	5.9672				
		R3	8.82 x 10 ⁵	5.9454				9.90 x 10 ⁵	5.9956				
		R4	7.91 x 10 ⁵	5.8981				9.70 x 10 ⁵	5.9868				
		R5	1.05 x 10 ⁶	6.0193				5.50 x 10 ⁵	5.7404				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Noodles Uncooked	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.00 x 10 ¹	1.3222	1.3242	0.2020	15.2575	2.00 x 10 ¹	1.3222	1.1876	0.2089	17.5891	0.1366
		R2	2.00 x 10 ¹	1.3222				1.00 x 10 ¹	1.0414				
		R3	2.00 x 10 ¹	1.3222				1.00 x 10 ¹	1.0414				
		R4	4.00 x 10 ¹	1.6128				3.00 x 10 ¹	1.4914				
		R5	1.00 x 10 ¹	1.0414				1.00 x 10 ¹	1.0414				
	Medium	R1	1.55 x 10 ³	3.1893	3.3240	0.1094	3.2903	1.00 x 10 ³	3.0004	3.2270	0.1300	4.0278	0.0970
		R2	2.09 x 10 ³	3.3205				1.80 x 10 ³	3.2555				
		R3	1.91 x 10 ³	3.2811				2.10 x 10 ³	3.3224				
		R4	2.18 x 10 ³	3.3390				1.80 x 10 ³	3.2555				
		R5	3.09 x 10 ³	3.4902				2.00 x 10 ³	3.3012				
	High	R1	1.45 x 10 ⁴	4.1628	4.0838	0.1550	3.7950	2.20 x 10 ⁴	4.3424	4.0643	0.2140	5.2642	0.0195
		R2	1.36 x 10 ⁴	4.1347				1.00 x 10 ⁴	4.0000				
		R3	1.82 x 10 ⁴	4.2597				1.70 x 10 ⁴	4.2305				
		R4	7.27 x 10 ³	3.8618				7.00 x 10 ³	3.8452				
		R5	1.00 x 10 ⁴	4.0000				8.00 x 10 ³	3.9031				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Peanut Butter	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.09 x 10 ²	2.0418	2.2069	0.1053	4.7696	1.60 x 10 ²	2.2068	2.1624	0.0735	3.3989	0.0445
		R2	1.82 x 10 ²	2.2620				1.70 x 10 ²	2.2330				
		R3	1.82 x 10 ²	2.2620				1.20 x 10 ²	2.0828				
		R4	1.45 x 10 ²	2.1657				1.20 x 10 ²	2.0828				
		R5	2.00 x 10 ²	2.3032				1.60 x 10 ²	2.2068				
	Medium	R1	1.13 x 10 ⁴	4.0521	4.0644	0.0282	0.6950	1.19 x 10 ⁴	4.0759	4.0732	0.0400	0.9811	-0.0087
		R2	1.27 x 10 ⁴	4.1048				1.02 x 10 ⁴	4.0079				
		R3	1.09 x 10 ⁴	4.0378				1.22 x 10 ⁴	4.0857				
		R4	1.21 x 10 ⁴	4.0825				1.31 x 10 ⁴	4.1170				
		R5	1.11 x 10 ⁴	4.0450				1.20 x 10 ⁴	4.0792				
	High	R1	2.18 x 10 ⁵	5.3388	5.3754	0.1098	2.0429	2.10 x 10 ⁵	5.3222	5.3456	0.0947	1.7712	0.0298
		R2	2.27 x 10 ⁵	5.3565				2.10 x 10 ⁵	5.3222				
		R3	1.73 x 10 ⁵	5.2374				3.10 x 10 ⁵	5.4914				
		R4	3.45 x 10 ⁵	5.5384				1.70 x 10 ⁵	5.2305				
		R5	2.55 x 10 ⁵	5.4058				2.30 x 10 ⁵	5.3617				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Romaine Lettuce	Un-inoculated	R1	4.91 x 10 ²	2.6919	2.7800	0.1145	4.1172	3.60 x 10 ²	2.5575	2.5485	0.2602	10.2084	0.2315
		R2	5.55 x 10 ²	2.7447				3.00 x 10 ²	2.4786				
		R3	9.36 x 10 ²	2.9719				5.80 x 10 ²	2.7642				
		R4	6.18 x 10 ²	2.7918				6.20 x 10 ²	2.7931				
		R5	5.00 x 10 ²	2.6998				1.40 x 10 ²	2.1492				
	Low	R1	1.35 x 10 ³	3.1321	3.0007	0.0844	2.8124	1.35 x 10 ³	3.1321	2.9399	0.1968	6.6946	0.0608
		R2	9.36 x 10 ²	2.9719				1.47 x 10 ³	3.1684				
		R3	1.05 x 10 ³	3.0197				7.20 x 10 ²	2.8579				
		R4	9.45 x 10 ²	2.9761				6.30 x 10 ²	2.8000				
		R5	8.00 x 10 ²	2.9036				5.50 x 10 ²	2.7412				
	Medium	R1	1.30 x 10 ⁴	4.1140	4.0584	0.0466	1.1492	6.50 x 10 ³	3.8130	3.8538	0.0725	1.8804	0.2046
		R2	9.91 x 10 ³	3.9961				8.20 x 10 ³	3.9139				
		R3	1.23 x 10 ⁴	4.0890				6.90 x 10 ³	3.8389				
		R4	1.15 x 10 ⁴	4.0624				8.70 x 10 ³	3.9396				
		R5	1.07 x 10 ⁴	4.0305				5.80 x 10 ³	3.7635				
	High	R1	2.18 x 10 ⁵	5.3388	5.3292	0.1596	2.9952	2.10 x 10 ⁵	5.3222	5.1774	0.1038	2.0045	0.1518
		R2	1.55 x 10 ⁵	5.1891				1.20 x 10 ⁵	5.0792				
		R3	3.55 x 10 ⁵	5.5497				1.20 x 10 ⁵	5.0792				
		R4	2.55 x 10 ⁵	5.4058				1.50 x 10 ⁵	5.1761				
		R5	1.45 x 10 ⁵	5.1627				1.70 x 10 ⁵	5.2305				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	9.00 x 10 ¹	1.9590	1.9844	0.1599	8.0594	8.00 x 10 ¹	1.9085	1.8902	0.1430	7.5642	0.0942
		R2	1.00 x 10 ²	2.0043				5.00 x 10 ¹	1.7076				
		R3	6.36 x 10 ¹	1.8105				6.00 x 10 ¹	1.7853				
		R4	8.00 x 10 ¹	1.9085				1.00 x 10 ²	2.0043				
		R5	1.73 x 10 ²	2.2399				1.10 x 10 ²	2.0453				
	Medium	R1	9.36 x 10 ³	3.9715	3.9958	0.0908	2.2733	5.60 x 10 ³	3.7483	3.8585	0.1077	2.7911	0.1373
		R2	1.42 x 10 ⁴	4.1518				8.90 x 10 ³	3.9494				
		R3	9.45 x 10 ³	3.9757				5.90 x 10 ³	3.7709				
		R4	8.18 x 10 ³	3.9129				6.80 x 10 ³	3.8326				
		R5	9.27 x 10 ³	3.9673				9.80 x 10 ³	3.9913				
	High	R1	2.00 x 10 ⁵	5.3010	5.2729	0.0376	0.7126	1.60 x 10 ⁵	5.2041	5.1659	0.0910	1.7609	0.1069
		R2	1.80 x 10 ⁵	5.2553				2.00 x 10 ⁵	5.3010				
		R3	2.10 x 10 ⁵	5.3222				1.40 x 10 ⁵	5.1461				
		R4	1.80 x 10 ⁵	5.2553				1.16 x 10 ⁵	5.0645				
		R5	1.70 x 10 ⁵	5.2305				1.30 x 10 ⁵	5.1139				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Shrimp	Un-inoculated	R1	6.00 x 10 ¹	1.7853	1.8465	0.2784	15.0791	9.00 x 10 ¹	1.9590	1.8962	0.3617	19.0749	-0.0497
		R2	1.82 x 10 ²	2.2620				2.00 x 10 ²	2.3032				
		R3	6.00 x 10 ¹	1.7853				7.00 x 10 ¹	1.8513				
		R4	8.00 x 10 ¹	1.9085				1.10 x 10 ²	2.0453				
		R5	3.00 x 10 ¹	1.4914				2.00 x 10 ¹	1.3222				
	Low	R1	2.09 x 10 ²	2.3224	2.2498	0.0611	2.7161	1.70 x 10 ²	2.2330	2.1888	0.1203	5.4950	0.0611
		R2	2.00 x 10 ²	2.3032				1.40 x 10 ²	2.1492				
		R3	1.73 x 10 ²	2.2399				2.10 x 10 ²	2.3243				
		R4	1.55 x 10 ²	2.1919				1.70 x 10 ²	2.2330				
		R5	1.55 x 10 ²	2.1919				1.00 x 10 ²	2.0043				
	Medium	R1	9.09 x 10 ³	3.9587	4.1388	0.1420	3.4314	9.00 x 10 ³	3.9543	4.0446	0.1487	3.6774	0.0941
		R2	2.09 x 10 ⁴	4.3204				1.30 x 10 ⁴	4.1140				
		R3	1.27 x 10 ⁴	4.1048				7.00 x 10 ³	3.8452				
		R4	1.73 x 10 ⁴	4.2374				1.70 x 10 ⁴	4.2305				
		R5	1.18 x 10 ⁴	4.0726				1.20 x 10 ⁴	4.0792				
	High	R1	7.45 x 10 ⁵	5.8724	5.8749	0.0278	0.4740	8.09 x 10 ⁵	5.9080	5.8767	0.0816	1.3882	-0.0018
		R2	7.91 x 10 ⁵	5.8981				9.36 x 10 ⁵	5.9714				
		R3	8.00 x 10 ⁵	5.9031				7.40 x 10 ⁵	5.8692				
		R4	6.82 x 10 ⁵	5.8337				7.70 x 10 ⁵	5.8865				
		R5	7.36 x 10 ⁵	5.8671				5.60 x 10 ⁵	5.7482				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Spinach	Un-inoculated	R1	4.64 x 10 ²	2.6671	2.7497	0.1500	5.4539	4.70 x 10 ²	2.6730	2.7284	0.1793	6.5701	0.0213
		R2	6.91 x 10 ²	2.8400				4.90 x 10 ²	2.6911				
		R3	6.00 x 10 ²	2.7789				6.40 x 10 ²	2.8069				
		R4	3.45 x 10 ²	2.5396				3.10 x 10 ²	2.4928				
		R5	8.36 x 10 ²	2.9229				9.50 x 10 ²	2.9782				
	Low	R1	4.45 x 10 ²	2.6498	2.8035	0.2073	7.3944	3.50 x 10 ²	2.5453	2.7922	0.2570	9.2059	0.0113
		R2	7.00 x 10 ²	2.8457				7.40 x 10 ²	2.8698				
		R3	1.39 x 10 ³	3.1436				1.50 x 10 ³	3.1764				
		R4	5.45 x 10 ²	2.7376				3.70 x 10 ²	2.5694				
		R5	4.36 x 10 ²	2.6408				6.30 x 10 ²	2.8000				
	Medium	R1	5.45 x 10 ³	3.7368	3.6819	0.0542	1.4729	3.60 x 10 ³	3.5564	3.6020	0.0702	1.9492	0.0799
		R2	4.09 x 10 ³	3.6119				3.20 x 10 ³	3.5053				
		R3	5.45 x 10 ³	3.7368				4.30 x 10 ³	3.6336				
		R4	4.55 x 10 ³	3.6577				4.80 x 10 ³	3.6813				
		R5	4.64 x 10 ³	3.6663				4.30 x 10 ³	3.6336				
	High	R1	6.55 x 10 ⁴	4.8159	4.9318	0.0716	1.4521	5.10 x 10 ⁴	4.7076	4.7356	0.0825	1.7411	0.1962
		R2	9.09 x 10 ⁴	4.9586				4.30 x 10 ⁴	4.6335				
		R3	1.01 x 10 ⁵	5.0039				5.80 x 10 ⁴	4.7634				
		R4	9.18 x 10 ⁴	4.9629				5.20 x 10 ⁴	4.7160				
		R5	8.27 x 10 ⁴	4.9177				7.20 x 10 ⁴	4.8573				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	9.09 x 10 ¹	1.9634	1.9209	0.0641	3.3392	7.00 x 10 ¹	1.8513	1.9456	0.1228	6.3108	-0.0247
		R2	7.00 x 10 ¹	1.8513				1.00 x 10 ²	2.0043				
		R3	8.18 x 10 ¹	1.9181				1.20 x 10 ²	2.0828				
		R4	1.00 x 10 ²	2.0043				1.00 x 10 ²	2.0043				
		R5	7.27 x 10 ¹	1.8676				6.00 x 10 ¹	1.7853				
	Medium	R1	7.00 x 10 ³	3.8452	3.8549	0.0167	0.4328	6.00 x 10 ³	3.7782	3.7721	0.0191	0.5061	0.0829
		R2	6.82 x 10 ³	3.8337				5.60 x 10 ³	3.7483				
		R3	7.18 x 10 ³	3.8563				6.20 x 10 ³	3.7925				
		R4	7.27 x 10 ³	3.8618				5.70 x 10 ³	3.7560				
		R5	7.55 x 10 ³	3.8777				6.10 x 10 ³	3.7854				
	High	R1	7.09 x 10 ⁴	4.8507	4.9015	0.0709	1.4460	6.70 x 10 ⁴	4.8261	4.7584	0.1217	2.5569	0.1432
		R2	9.18 x 10 ⁴	4.9629				5.90 x 10 ⁴	4.7709				
		R3	6.36 x 10 ⁴	4.8037				3.60 x 10 ⁴	4.5563				
		R4	9.09 x 10 ⁴	4.9586				7.50 x 10 ⁴	4.8751				
		R5	8.55 x 10 ⁴	4.9317				5.80 x 10 ⁴	4.7634				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Top Frosting	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.00 x 10 ²	2.3032	2.1775	0.1510	6.9357	1.40 x 10 ²	2.1492	2.0932	0.1759	8.4027	0.0843
		R2	1.55 x 10 ²	2.1919				1.70 x 10 ²	2.2330				
		R3	1.80 x 10 ²	2.2577				6.00 x 10 ¹	1.7853				
		R4	8.18 x 10 ¹	1.9181				1.40 x 10 ²	2.1492				
		R5	1.64 x 10 ²	2.2165				1.40 x 10 ²	2.1492				
	Medium	R1	7.91 x 10 ³	3.8982	3.8193	0.0661	1.7309	4.70 x 10 ³	3.6722	3.7293	0.1099	2.9474	0.0900
		R2	6.64 x 10 ³	3.8220				7.40 x 10 ³	3.8693				
		R3	6.73 x 10 ³	3.8279				6.40 x 10 ³	3.8062				
		R4	5.18 x 10 ³	3.7146				3.90 x 10 ³	3.5912				
		R5	6.82 x 10 ³	3.8337				5.10 x 10 ³	3.7077				
	High	R1	2.73 x 10 ⁵	5.4357	5.3423	0.1198	2.2424	2.10 x 10 ⁵	5.3222	5.2811	0.0851	1.6106	0.0612
		R2	1.40 x 10 ⁵	5.1461				1.70 x 10 ⁵	5.2305				
		R3	2.36 x 10 ⁵	5.3736				2.50 x 10 ⁵	5.3979				
		R4	2.73 x 10 ⁵	5.4357				1.50 x 10 ⁵	5.1761				
		R5	2.09 x 10 ⁵	5.3203				1.90 x 10 ⁵	5.2788				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Wheat Flour	Un-inoculated	R1	1.00 x 10 ¹	1.0414	0.8882	0.8669	97.5965	2.00 x 10 ¹	1.3222	1.1074	0.6849	61.8459	-0.2192
		R2	8.00 x 10 ¹	1.9085				7.00 x 10 ¹	1.8513				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				1.00 x 10 ¹	1.0414				
		R5	3.00 x 10 ¹	1.4914				2.00 x 10 ¹	1.3222				
	Low	R1	8.00 x 10 ¹	1.9085	1.6274	0.2256	13.8596	6.00 x 10 ¹	1.7853	1.6332	0.1474	9.0268	-0.0058
		R2	2.00 x 10 ¹	1.3222				3.00 x 10 ¹	1.4914				
		R3	5.00 x 10 ¹	1.7076				6.00 x 10 ¹	1.7853				
		R4	3.00 x 10 ¹	1.4914				3.00 x 10 ¹	1.4914				
		R5	5.00 x 10 ¹	1.7076				4.00 x 10 ¹	1.6128				
	Medium	R1	4.91 x 10 ³	3.6911	3.5101	0.2935	8.3631	2.30 x 10 ³	3.3619	3.2515	0.2830	8.7022	0.2586
		R2	1.50 x 10 ³	3.1764				8.00 x 10 ²	2.9036				
		R3	1.60 x 10 ³	3.2044				1.00 x 10 ³	3.0004				
		R4	5.91 x 10 ³	3.7716				3.50 x 10 ³	3.5442				
		R5	5.09 x 10 ³	3.7069				2.80 x 10 ³	3.4473				
	High	R1	5.27 x 10 ⁵	5.7220	5.6569	0.1621	2.8652	4.60 x 10 ⁵	5.6628	5.4955	0.1514	2.7557	0.1614
		R2	6.36 x 10 ⁵	5.8037				4.00 x 10 ⁵	5.6021				
		R3	6.09 x 10 ⁵	5.7847				2.00 x 10 ⁵	5.3010				
		R4	3.45 x 10 ⁵	5.5384				3.40 x 10 ⁵	5.5315				
		R5	2.73 x 10 ⁵	5.4357				2.40 x 10 ⁵	5.3802				

Surface	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Plastic	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	1.45 x 10 ³	3.1630	3.1400	0.0684	2.1773	1.70 x 10 ³	3.2307	3.0630	0.1154	3.7664	0.0770
		R2	1.60 x 10 ³	3.2044				9.00 x 10 ²	2.9547				
		R3	1.09 x 10 ³	3.0382				1.30 x 10 ³	3.1143				
		R4	1.55 x 10 ³	3.1893				1.14 x 10 ³	3.0559				
		R5	1.27 x 10 ³	3.1051				9.10 x 10 ²	2.9595				
	High	R1	5.91 x 10 ⁴	4.7715	4.8916	0.0846	1.7304	4.10 x 10 ⁴	4.6128	4.7414	0.0776	1.6368	0.1503
		R2	7.27 x 10 ⁴	4.8617				6.00 x 10 ⁴	4.7782				
		R3	8.73 x 10 ⁴	4.9409				5.60 x 10 ⁴	4.7482				
		R4	9.91 x 10 ⁴	4.9960				6.60 x 10 ⁴	4.8196				
		R5	7.73 x 10 ⁴	4.8880				5.60 x 10 ⁴	4.7482				

Surface	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	NA	<10	0.0000	0.0000	0.0000	NA	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	4.82 x 10 ²	2.6838	2.5701	0.1596	6.2110	3.30 x 10 ²	2.5198	2.3917	0.1286	5.3766	0.1785
		R2	2.55 x 10 ²	2.4075				1.80 x 10 ²	2.2577				
		R3	2.55 x 10 ²	2.4075				2.60 x 10 ²	2.4166				
		R4	5.73 x 10 ²	2.7587				3.20 x 10 ²	2.5065				
		R5	3.91 x 10 ²	2.5932				1.80 x 10 ²	2.2577				
	High	R1	4.73 x 10 ⁴	4.6746	4.5683	0.0751	1.6430	2.30 x 10 ⁴	4.3617	4.3806	0.0850	1.9396	0.1876
		R2	3.64 x 10 ⁴	4.5607				2.60 x 10 ⁴	4.4150				
		R3	4.00 x 10 ⁴	4.6021				3.20 x 10 ⁴	4.5052				
		R4	3.36 x 10 ⁴	4.5268				1.90 x 10 ⁴	4.2788				
		R5	3.00 x 10 ⁴	4.4771				2.20 x 10 ⁴	4.3424				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation =

^dRSD: Relative Standard Deviation = $\frac{SD}{\text{Mean}} \times 100$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

Table A16: Summary of the Independent Laboratory's Method Comparison Statistics between the Microfilm YMC and ISO 21527-1/-2 Yeast Counts in 4 food matrixes and stainless steel (1)

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Almond	Un-inoculated	R1	<10	0.0000	0.2008	0.4490	223.6068	<10	0.0000	0.0000	0.0000	0.0000	0.2008
		R2	9.09 x 10 ⁰	1.0039				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	2.00 x 10 ¹	1.3222	1.0412	0.5824	55.9372	<40	1.6128	1.6128	0.0000	0.0000	-0.5716
		R2	2.00 x 10 ¹	1.3222				<40	1.6128				
		R3	1.80 x 10 ¹	1.2788				<40	1.6128				
		R4	<10	0.0000				<40	1.6128				
		R5	1.82 x 10 ¹	1.2829				<40	1.6128				
	Medium	R1	5.49 x 10 ²	2.7404	2.9049	0.1580	5.4376	4.70 x 10 ²	2.6730	2.8722	0.1521	5.2956	0.0327
		R2	1.10 x 10 ³	3.0418				8.60 x 10 ²	2.9350				
		R3	5.59 x 10 ²	2.7478				5.70 x 10 ²	2.7566				
		R4	8.29 x 10 ²	2.9190				9.00 x 10 ²	2.9547				
		R5	1.19 x 10 ³	3.0756				1.10 x 10 ³	3.0418				
	High	R1	6.94 x 10 ³	3.8412	3.8575	0.4132	10.7117	3.70 x 10 ³	3.5683	3.9521	0.2212	5.5978	-0.0946
		R2	1.18 x 10 ⁴	4.0726				9.00 x 10 ³	3.9543				
		R3	9.55 x 10 ³	3.9800				1.20 x 10 ⁴	4.0792				
		R4	1.45 x 10 ³	3.1630				1.20 x 10 ⁴	4.0792				
		R5	1.70 x 10 ⁴	4.2305				1.20 x 10 ⁴	4.0792				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Milk, 2% Fat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.36 x 10 ²	2.1379	2.0835	0.1014	4.8671	1.50 x 10 ²	2.1790	2.0791	0.1921	9.2407	0.0044
		R2	1.50 x 10 ²	2.1790				2.00 x 10 ²	2.3032				
		R3	8.11 x 10 ¹	1.9142				1.10 x 10 ²	2.0453				
		R4	1.26 x 10 ²	2.1038				1.20 x 10 ²	2.0828				
		R5	1.20 x 10 ²	2.0828				6.00 x 10 ¹	1.7853				
	Medium	R1	1.11 x 10 ⁴	4.0446	4.0428	0.0245	0.6055	1.80 x 10 ⁴	4.2553	4.0067	0.2213	5.5235	0.0361
		R2	1.04 x 10 ⁴	4.0154				8.00 x 10 ³	3.9031				
		R3	1.14 x 10 ⁴	4.0551				5.00 x 10 ³	3.6991				
		R4	1.19 x 10 ⁴	4.0759				1.00 x 10 ⁴	4.0000				
		R5	1.05 x 10 ⁴	4.0229				1.50 x 10 ⁴	4.1761				
	High	R1	2.50 x 10 ⁵	5.3979	5.4035	0.0385	0.7126	2.00 x 10 ⁵	5.3010	5.2522	0.0583	1.1093	0.1513
		R2	2.80 x 10 ⁵	5.4472				2.00 x 10 ⁵	5.3010				
		R3	2.60 x 10 ⁵	5.4150				1.50 x 10 ⁵	5.1761				
		R4	2.60 x 10 ⁵	5.4150				1.90 x 10 ⁵	5.2788				
		R5	2.20 x 10 ⁵	5.3424				1.60 x 10 ⁵	5.2041				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
RTE Lunch Meat	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Low	R1	1.90 x 10 ²	2.2810	2.1984	0.0642	2.9226	1.10 x 10 ²	2.0453	1.9978	0.1708	8.5490	0.2005
		R2	1.44 x 10 ²	2.1618				5.00 x 10 ¹	1.7076				
		R3	1.55 x 10 ²	2.1919				1.20 x 10 ²	2.0828				
		R4	1.73 x 10 ²	2.2399				1.00 x 10 ²	2.0043				
		R5	1.30 x 10 ²	2.1173				1.40 x 10 ²	2.1492				
	Medium	R1	1.20 x 10 ⁴	4.0786	4.0249	0.0656	1.6307	6.90 x 10 ³	3.8389	3.7190	0.2387	6.4177	0.3059
		R2	9.55 x 10 ³	3.9800				7.40 x 10 ³	3.8693				
		R3	1.20 x 10 ⁴	4.0786				5.50 x 10 ³	3.7404				
		R4	1.14 x 10 ⁴	4.0551				2.00 x 10 ³	3.3012				
		R5	8.56 x 10 ³	3.9325				7.00 x 10 ³	3.8452				
	High	R1	1.90 x 10 ⁵	5.2788	5.3482	0.1044	1.9514	1.60 x 10 ⁵	5.2041	5.0265	0.2076	4.1303	0.3217
		R2	2.50 x 10 ⁵	5.3979				1.10 x 10 ⁵	5.0414				
		R3	1.60 x 10 ⁵	5.2041				5.00 x 10 ⁴	4.6990				
		R4	2.90 x 10 ⁵	5.4624				1.60 x 10 ⁵	5.2041				
		R5	2.50 x 10 ⁵	5.3979				9.64 x 10 ⁴	4.9839				

Matrix	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Surimi	Un-inoculated	R1	<10	0.0000	0.5694	0.7864	138.1050	<10	0.0000	0.0000	0.0000	0.0000	0.5694
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	3.60 x 10 ¹	1.5682				<100	0.0000				
		R5	1.80 x 10 ¹	1.2788				<100	0.0000				
	Low	R1	1.00 x 10 ²	2.0043	2.0697	0.1125	5.4375	1.20 x 10 ²	2.0828	2.0672	0.0944	4.5659	0.0025
		R2	1.55 x 10 ²	2.1919				1.20 x 10 ²	2.0828				
		R3	1.44 x 10 ²	2.1618				9.00 x 10 ¹	1.9590				
		R4	8.18 x 10 ¹	1.9181				1.60 x 10 ²	2.2068				
		R5	1.17 x 10 ²	2.0723				1.00 x 10 ²	2.0043				
	Medium	R1	9.91 x 10 ³	3.9961	3.9991	0.0430	1.0749	6.09 x 10 ³	3.7848	3.8176	0.1402	3.6737	0.1815
		R2	1.14 x 10 ⁴	4.0551				4.20 x 10 ³	3.6234				
		R3	8.74 x 10 ³	3.9415				6.00 x 10 ³	3.7782				
		R4	1.05 x 10 ⁴	4.0229				8.20 x 10 ³	3.9139				
		R5	9.55 x 10 ³	3.9800				9.73 x 10 ³	3.9880				
	High	R1	1.25 x 10 ⁵	5.0985	5.1039	0.0398	0.7803	1.35 x 10 ⁵	5.1289	4.9996	0.1128	2.2555	0.1043
		R2	1.10 x 10 ⁵	5.0414				1.13 x 10 ⁵	5.0520				
		R3	1.27 x 10 ⁵	5.1047				8.64 x 10 ⁴	4.9363				
		R4	1.40 x 10 ⁵	5.1461				6.91 x 10 ⁴	4.8394				
		R5	1.35 x 10 ⁵	5.1289				1.10 x 10 ⁵	5.0414				

Surface	Inoculum Level	Rep #	Microfilm YMC (Yeast Count)					ISO 21527-1/-2					Mean Log ₁₀ Difference
			Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	Count	Log ₁₀	Log ₁₀ Mean	S _r	RSD	
Stainless steel	Un-inoculated	R1	<10	0.0000	0.0000	0.0000	0.0000	<10	0.0000	0.0000	0.0000	0.0000	0.0000
		R2	<10	0.0000				<10	0.0000				
		R3	<10	0.0000				<10	0.0000				
		R4	<10	0.0000				<10	0.0000				
		R5	<10	0.0000				<10	0.0000				
	Medium	R1	4.50 x 10 ²	2.6546	2.6692	0.0576	2.1586	3.40 x 10 ²	2.5328	2.3909	0.1611	6.7387	0.2783
		R2	5.09 x 10 ²	2.7076				1.80 x 10 ²	2.2577				
		R3	5.41 x 10 ²	2.7336				3.00 x 10 ²	2.4786				
		R4	3.82 x 10 ²	2.5830				1.50 x 10 ²	2.1790				
		R5	4.64 x 10 ²	2.6671				3.20 x 10 ²	2.5065				
	High	R1	5.00 x 10 ⁴	4.6990	4.6724	0.0665	1.4230	3.20 x 10 ⁴	4.5052	4.5481	0.0602	1.3237	0.1243
		R2	5.45 x 10 ⁴	4.7368				3.30 x 10 ⁴	4.5185				
		R3	4.91 x 10 ⁴	4.6910				4.20 x 10 ⁴	4.6233				
		R4	4.73 x 10 ⁴	4.6746				4.00 x 10 ⁴	4.6021				
		R5	3.64 x 10 ⁴	4.5607				3.10 x 10 ⁴	4.4914				

^aInoculation Level: Low (1-2 log cfu/g or mL), Medium (2-4 log cfu/g or mL), High (>4 log cfu/g or mL)

^bRep #: Replicate

^cS_r: Standard Deviation =
$$\sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n}}$$

^dRSD: Relative Standard Deviation =
$$\frac{SD}{Mean} * 100$$

^eMean Difference = Candidate Mean Log₁₀ count – Reference Mean Log₁₀ count

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