

List S1: Strains or isolates used in this study

Among the 50 *C. jejuni* isolates used for inclusivity testing were:

- 45 isolates from food samples from routine analysis at the LGL:

Neck skin from broiler chicken: 18-0191152-001-02, 19-0174375-002-01, 19-0179989-001-01, 19-0188397-001-01, 19-0190178-001-01, 19-0237550-001-01, 20-0054561-001-02, 19-0121416-001-01

Chicken breast from retail: 19-0012872-001-01, 19-0232882-001-01, 20-0011754-001-01, 19-0022046-001-01, 19-0169628-001-01, 19-0190005-001-01, 19-0190743-001-01, 18-0030094-001-01, 18-0040422-001-01, 19-0045829-001-01, 19-0177507-001-01, 19-0181629-001-01, 19-0182011-001-01, 19-0188201-001-01, 20-0013904-001-01, 19-0082704-001-01, 19-0089479-001-01, 19-0105212-001-01, 19-0109692-001-01, 19-0137815-001-01, 19-0152069-001-01

Chicken cutlets: 19-0057659-001-01, 19-0069446-001-01, 19-0095209-001-01, 19-0108085-001-01

Chicken leg: 19-0153259-001-01

Cornish hen: 19-0052844-003-01,

Chicken eggs: 20-0106591-001-01

Neck skin from turkey: 18-0190774-001-01, 18-0159516-001-01, 18-0172406-001-01, 18-0173884-001-01, 18-0219158-001-01, 18-0203722-001-01, 19-0171204-001-01

Chicken fresh: 19-0037775-001-01

Unknown: 20-0021896-001-01

- Four isolates from the BfR:

Feces from pig: BFR-CA 13281

Appendix content from calve: BFR-CA 13394

Neck skin with fat from broiler chicken: BFR-CA 17582

Raw milk: BfR-CA-14727

- One strain from the DSMZ (NCTC 11168)

Among the 41 *C. coli* isolates used for inclusivity testing were:

- 31 isolates from food samples from routine analysis at the LGL:

Neck skin from broiler chicken: 19-0174375-001-01, 19-0179989-001-01, 19-0188397-001-01, 19-0232569-001-01, 19-0237550-001-01, 20-0050530-001-02, 20-0250457-001-02, 20-0294097-001-02, 20-0369178-001-02

Chicken breast from retail: 18-0040942-001-01, 19-0223563-001-01, 19-0207347-001-01, 20-0303555-001-01, 19-0227324-001-01, 19-0131395-001-01, 19-0152903-001-01, 19-0063153-001-01

Chicken fresh: 19-0059018-001-01

Chicken eggs: 20-0296367-001-01, 20-0296372-001-01, 20-0312997-001-01, 19-0182760-003-01

Neck skin from turkey: 20-0031702-001-02, 20-0036393-001-02, 20-0064611-001-02, 20-0241240-001-02, 20-0241244-001-02

Neck skin from goose: 19-0213658-001-01

Rinsing sponge: 19-0062664-001-01

Unknown: 18-0217016-002-01, 18-0160411-001-01

- 10 isolates from the BfR:

Neck skin from turkey: BFR-CA 11207

Feces from calves: BFR-CA 13810

Cecal content from broiler chicken: BFR-CA 14941

Chicken eggs: BFR-CA 14973, BFR-CA 15267

Piece of meat from frozen chicken: BFR-CA 15396

Cecal content from pig: BFR-CA 17559

Feces from pig: BFR-CA 17568, BFR-CA-15034

Unknown: BFR-CA-14709

The following strains were used to determine exclusivity:

Campylobacter lari concheus CA 06556; *Campylobacter perliridis* CA 07048; *Campylobacter lari lari* CA 13193; *Campylobacter upsaliensis* CA 14921; *Campylobacter upsaliensis* CA 11921; *Acinetobacter gyllenbergii* DSM22705T; *Arcobacter trophiarum* DSM 25469; *Arcobacter marinus* DSM 24769; *Carnobacterium divergens* DSM 20623; *Citrobacter freundii* DSM 30039; *Cronobacter sakazakii* DSM 4485; *Edwardsiella hoshinae* DSM 13771; *Enterococcus faecalis* DSM 13591; *Enterococcus faecium* DSM 13590; *Klebsiella oxytoca* DSM 5175; *Lactococcus chungangensis* DSM 22330; *Lelliottia nimipressuralis* DSM 18955; *Leuconostoc lactis* DSM 20202; *Listeria monocytogenes* DSM 20600; *Listeria welshimeri* DSM 15452; *Pseudomonas aeruginosa* DSM 46358; *Pseudomonas fluorescens* DSM 50124; *Rahnella aquatilis* DSM 4594T; *Salmonella enterica* subsp *arizonae* DSM 9386T; *Shigella boydii* DSM 7532T; *Shigella flexneri* DSM 4782; *Staphylococcus aureus* subsp *aureus* DSM 20231; *Vibrio cholerae* DSM 100200; *Vibrio parahaemolyticus* DSM 101031; *Yersinia enterocolitica* (non pathogen) ATCC 9610; *Yersinia enterocolitica* (pathogen) (LGL strain)

List S2: Artificially contaminated and naturally contaminated rinses

Campylobacter free rinses, artificially contaminated with live and dead cell standards:

Method comparison study according to ISO 16140-2:2016			
Study	Sample type	Rinse ID	Dilution in PW
Accuracy	Chicken neck skin	A1-A5	1:10 and 1:2
Trueness	Chicken neck skin Chicken breast meat turkey skin	For each sample type: T1-LM to T5-LM (low organic matrix) T2-MM and T5-MM (medium organic matrix)	1:10 and 1:2

Technical measurement uncertainty study according to ISO 19036:2019			
Study	Sample type	Rinse ID	Dilution in PW
technical uncertainty	Chicken neck skin	TU1 to TU5	1:10

Naturally contaminated rinses:

Applicability of v-ddPCR			
Study	Sample type	Rinse ID	Dilution in PW
LGL routine samples	Chicken neck skin	NS_02 to NS_35	1:10 and 1:2
	Chicken breast meat	BM_04 to BM_34	1:10
Retail samples	Chicken neck skin	RS_15, RS_18, RS_22, RS_23	1:10 and 1:2
	Chicken breast meat	RS_02, RS_06, RS_08, RS_10, RS_24	
	Chicken thighs	RS_01, RS_05, RS_16, RS_17, RS_19, RS_25	
	Chicken wings	RS_04, RS_07, RS_11, RS_14, RS_20	
	Chicken drumstick	RS_03, RS_09, RS_12, RS_13	

PW: peptone water

LGL: Bavarian Health and Food Safety Authority