

Table S1. Antibioqram profile of the isolates

Code of Isolates	Suspected Microorganisms	TC	OTC	DOX	CTC	ENR	CIP	LEVO	MEM	AMP	AZM
McA ₁ SPG	<i>E. coli</i>	R	S	S	S	R	I	S	S	R	R
McA ₁ OcC	<i>Citrobacter</i>	S	S	S	S	S	R	I	S	R	R
McA ₁ LPG	<i>Klebsiella</i>	S	S	S	S	S	I	S	S	I	R
TCBSA ₁ GC	<i>Vibrio</i>	R	R	S	S	R	R	R	S	R	S
TCBSA ₁ GcY	<i>Vibrio</i>	R	R	S	R	R	R	R	S	R	S
EMBA ₁ SPG	<i>E. coli</i>	R	R	S	S	R	R	S	I	R	R
EMBA ₁ VPc	<i>Klebsiella</i>	S	S	S	S	S	R	S	S	R	R
SSB ₁ BR	<i>Salmonella</i>	I	S	R	S	S	I	S	S	R	S
SSB ₁ BrG	<i>Salmonella</i>	R	R	R	R	S	I	I	R	R	R
SSB ₁ VR	<i>Klebsiella</i>	S	S	R	S	S	R	I	R	R	S
TCBSB ₁ SG	<i>Vibrio</i>	R	R	S	S	R	R	R	S	R	S
TCBSB ₁ MO	<i>Vibrio</i>	R	R	S	S	R	R	R	S	R	S
TCBSB ₁ LOc	<i>Vibrio</i>	R	R	S	S	R	R	R	S	R	S
TCBSB ₁ LG	<i>Vibrio</i>	R	R	S	S	R	R	R	S	R	S
TCBSB ₁ LGc	<i>Vibrio</i>	R	R	S	S	R	R	R	S	R	S
TCBSB ₁ SGc	<i>Vibrio</i>	R	R	S	S	R	R	R	S	R	S
McB ₁ PcLP	<i>Yersinia</i>	S	S	I	S	S	R	S	S	R	S
McB ₁ SP	<i>E. coli</i>	R	S	S	S	R	I	S	R	R	S
McB ₁ SV	<i>Citrobacter</i>	S	S	S	S	R	I	I	R	I	S
McB ₁ MPc	<i>Pseudomonas</i>	R	R	R	R	R	S	S	S	R	R
EMBB ₁ LMS	<i>E. coli</i>	R	R	R	S	R	I	S	I	I	R
EMBB ₁ SDB	<i>Enterobacter</i>	R	S	S	S	S	S	S	S	S	S
EMBB ₁ Sbc	<i>Enterobacter</i>	S	S	S	S	S	I	S	I	R	I
EMBB ₁ LVc	<i>Enterobacter</i>	R	S	S	I	S	I	S	S	R	R
EMBB ₁ MP	<i>E. coli</i>	R	R	R	R	S	R	I	I	R	R
TCBSC ₁ GG	<i>Vibrio</i>	R	R	S	R	R	R	R	S	R	S
EMBC ₁ PR	<i>E. coli</i>	R	R	R	R	R	R	R	I	R	R

EMBC ₁ P	<i>Yersinia</i>	R	R	R	S	R	R	R	I	R	S
SSC ₁ LP	<i>E. coli</i>	R	R	R	R	R	S	R	I	R	S
SSD ₁ SB	<i>Salmonella</i>	R	R	R	S	S	R	I	R	R	R
SSD ₁ O	<i>Proteus</i>	R	S	I	S	S	S	S	S	I	S
SSD ₁ LP	<i>E. coli</i>	R	S	S	S	S	R	R	S	R	S
SSD ₁ DPc	<i>E. coli</i>	R	S	S	S	S	R	R	S	R	S
McD ₁ Pc	<i>Pseudomonas</i>	R	R	R	R	R	I	I	S	R	R
McD ₁ O	<i>E. coli</i>	R	S	S	S	S	I	R	R	R	S
McD ₁ T	<i>Yersinia</i>	S	S	S	S	S	S	R	S	S	S
TCBSD ₁ Gc	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
TCBSD ₁ YBc	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
TCBSD ₁ YI	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
McA ₂ CG	<i>Proteus</i>	R	S	I	S	S	S	S	S	R	S
McA ₂ LPG	<i>Klebsiella</i>	R	S	S	S	S	R	R	S	R	R
McA ₂ SC	<i>Proteus</i>	R	S	I	S	S	S	S	S	R	S
TCBSA ₂ LG	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
TCBSA ₂ LY	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
EMBA ₂ LP	<i>Enterobacter</i>	R	S	S	S	S	R	S	S	R	R
EMBA ₂ Vc	<i>Yersinia</i>	I	S	I	S	S	S	I	S	S	S
SSB ₂ LPC	<i>Klebsiella</i>	R	R	R	S	S	S	S	S	R	S
SSB ₂ SBP	<i>E. coli</i>	R	S	S	S	S	R	I	I	R	S
SSB ₂ MBc	<i>Salmonella</i>	R	R	R	R	R	I	S	S	R	S
SSB ₂ MY	<i>Shigella</i>	S	S	S	S	S	I	S	I	R	S
McB ₂ MT	<i>Proteus</i>	S	S	S	S	S	R	S	S	R	S
McB ₂ MC	<i>Enterobacter</i>	R	S	S	S	S	I	S	R	R	R
TCBSB ₂ MG	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
TCBSB ₂ MY	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
EMBB ₂ VR	<i>E. coli</i>	R	S	S	S	S	R	I	I	R	R
EMBB ₂ BR	<i>Enterobacter</i>	R	I	I	S	S	R	I	S	I	R

McC ₂ O	<i>Pseudomonas</i>	R	R	I	R	R	R	I	R	R	R
SSC ₂ OD	<i>Proteus</i>	S	S	S	S	S	S	S	S	S	S
SSD ₂ SB	<i>Salmonella</i>	R	R	R	I	S	I	S	S	R	R
SSD ₂ LP	<i>E. coli</i>	R	R	I	R	R	R	S	R	R	R
SSD ₂ Y	<i>Shigella</i>	S	S	S	S	S	R	I	S	R	R
SSD ₂ DPc	<i>Klebsiella</i>	S	S	S	S	S	I	I	S	R	S
McD ₂ LP	<i>Enterobacter</i>	R	R	S	S	S	S	I	S	R	S
McD ₂ ST	<i>Proteus</i>	R	S	S	I	S	S	S	S	S	S
McD ₂ DP	<i>Klebsiella</i>	R	S	S	S	R	R	S	S	R	S
McD ₂ LT	<i>Proteus</i>	R	S	I	S	S	S	S	S	S	S
EMBD ₂ MS	<i>E. coli</i>	R	R	R	R	R	R	S	S	R	R
TCBSD ₂ Y	<i>Vibrio</i>	R	R	R	R	R	R	R	S	R	R
TCBSA ₃ SYG	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	R
McA ₃ PCD	<i>Yersinia</i>	S	S	S	S	S	S	S	S	R	R
EMBA ₃ SP	<i>E. coli</i>	R	R	R	R	R	I	S	S	R	S
SSA ₃ PcS	<i>Klebsiella</i>	R	R	S	S	S	R	S	R	R	R
SSA ₃ OcS	<i>Shigella</i>	S	S	S	S	S	R	S	S	R	R
PCAB ₃ W	<i>Plesiomonas</i>	S	S	S	S	S	S	R	S	R	S
EMBB ₃ MP	<i>E. coli</i>	R	R	R	R	R	R	S	R	R	R
EMBB ₃ Lvc	<i>Yersinia</i>	R	R	R	S	S	R	R	S	R	R
EMBB ₃ Bc	<i>E. coli</i>	R	R	R	S	R	R	I	I	R	R
EMBB ₃ MS	<i>E. coli</i>	R	S	S	S	S	I	S	R	R	R
TCBSB ₃ G	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
TCBSB ₃ O	<i>Vibrio</i>	R	S	R	R	R	R	R	S	R	S
PCAC ₃ WBR	<i>Aeromonas</i>	R	S	R	S	R	S	S	S	R	S
SSC ₃ MPG	<i>E. coli</i>	R	R	R	R	R	R	R	S	I	R
EMBC ₃ SP	<i>E. coli</i>	R	S	S	S	S	R	R	R	I	R
EMBC ₃ SV	<i>Klebsiella</i>	R	I	S	S	S	R	S	R	R	S
EMBC ₃ DP	<i>E. coli</i>	R	S	S	I	S	I	S	S	R	R

McD ₃ OcP	<i>Yersinia</i>	R	R	I	S	S	R	I	I	R	S
TCBSD ₃ G	<i>Vibrio</i>	R	S	S	R	R	R	R	S	R	S
EMBD ₃ V	<i>E. coli</i>	S	S	S	S	S	I	S	S	R	S
EMBD ₃ P	<i>E. coli</i>	S	S	S	S	S	I	S	S	R	R
McA ₄ Oc	<i>Pseudomonas</i>	R	R	R	R	R	I	I	S	R	R
McC ₄ GOc	<i>Enterobacter</i>	R	R	I	S	S	R	I	S	R	S
EMBC ₄ RP	<i>Klebsiella</i>	S	S	S	S	S	R	S	R	R	S
McEPG	<i>Klebsiella</i>	S	S	S	S	S	R	S	R	R	S
McFRP	<i>E. coli</i>	R	R	I	I	S	R	R	S	R	R
McFVI	<i>Citrobacter</i>	S	S	S	S	S	S	I	S	R	R

Note. S =Susceptible, I =Intermediate, R =Resistant

Table S2. Distribution of antibiotic resistance patterns in the supply chain

Antibiotics	Degree of Sensitivity	Points				Total n(%)
		Collection n(%)	Processing n(%)	Retail (Pasteurized) n(%)	Retail (UHT) n(%)	
TC	R	30 (41.7%)	23 (31.9%)	16 (22.2%)	3 (4.2%)	72 (76%)
	I	1 (50.0%)	1 (50.0%)	0 (0)	0 (0)	2 (2.1%)
	S	8 (38.1%)	5 (23.8%)	5 (23.8%)	3 (14.3%)	21 (22.1%)
OTC	R	19 (51.4%)	8 (21.6%)	7 (18.9%)	3 (8.1%)	37 (38.9%)
	I	0 (0)	1 (50.0%)	1 (50.0%)	0 (0)	2 (2.1%)
	S	20 (35.7%)	20 (35.7%)	13 (23.2%)	3 (5.4%)	56 (58.9%)
DOX	R	11 (45.8%)	5 (20.8%)	7 (29.2%)	1 (4.2%)	24 (25.3%)
	I	2 (16.7%)	7 (58.3%)	1 (8.3%)	2 (16.7%)	12 (12.6%)
	S	26 (44.1%)	17 (28.8%)	13 (22.0%)	3 (5.1%)	59 (62.1%)
CTC	R	11 (39.3%)	9 (32.1%)	7 (25.0%)	1 (3.6%)	28 (29.5%)

	I	1 (20.0%)	2 (40.0%)	1 (20.0%)	1 (20.0%)	5 (5.3%)
	S	27 (43.5%)	18 (29.0%)	13 (21.0%)	4 (6.5%)	62 (65.3%)
ENR	R	22 (52.4%)	10 (23.8%)	9 (21.4%)	1 (2.4%)	42 (44.2%)
	I	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	S	17 (32.1%)	19 (35.8%)	12 (22.6%)	5 (9.4%)	53 (55.8%)
CIP	R	23 (41.1%)	16 (28.6%)	13 (23.2%)	4 (7.1%)	56 (58.9%)
	I	11 (50.0%)	5 (22.7%)	5 (22.7%)	1 (4.5%)	22 (23.2%)
	S	5 (29.4%)	8 (47.1%)	3 (17.6%)	1 (5.9%)	17 (17.9%)
LEVO	R	19 (55.9%)	6 (17.6%)	8 (23.5%)	1 (2.9%)	34 (35.8%)
	I	7 (35.0%)	8 (40.0%)	2 (10.0%)	3 (15.0%)	20 (21.1%)
	S	13 (31.7%)	15 (36.6%)	11 (26.8%)	2 (4.9%)	41 (43.2%)
MEM	R	6 (37.5%)	3 (18.8%)	5 (31.3%)	2 (12.5%)	16 (16.8%)
	I	7 (58.3%)	3 (25.0%)	2 (16.7%)	0 (0)	12 (12.6%)
	S	26 (38.8%)	23 (34.3%)	14 (20.9%)	4 (6.0%)	67 (70.5%)
AMP	R	33 (40.2%)	24 (29.3%)	19 (23.2%)	6 (7.3%)	82 (86.3%)
	I	4 (57.1%)	1 (14.3%)	2 (28.6%)	0 (0)	7 (7.4%)
	S	2 (33.3%)	4 (66.7%)	0 (0)	0 (0)	6 (6.3%)
AZM	R	13 (33.3%)	11 (28.2%)	12 (30.8%)	3 (7.7%)	39 (41.1%)
	I	1 (100.0%)	0 (0)	0 (0)	0 (0)	1 (1.1%)
	S	25 (45.5%)	18 (32.7%)	9 (16.4%)	3 (5.5%)	55 (57.9%)