

SUPPLEMENTARY MATERIAL

Assessment of antibiotic residues and microbiological safety in Lebanese dairy products: Akkawi cheese, yogurt, and labneh, collected across Lebanese dairy industries

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Key words: dairy products, antibiotic residues, LC-MS/MS, microbial contamination, antibiotic resistance.

Supplementary Table 1. Maximum residue limit set by the European Union, mean recoveries, standard deviation, relative standard deviation of repeatability, and limits of quantification for a number of antibiotics tested.

Antibiotics	Mean recoveries (%)	STDEV	RSD (%)	LOQ µg/L
Sulfonamides				10 µg/L
Sulfisomidine	89	6.29	7.06	
Sulfamethazine	81.42	3.88	4.77	
Sulfameter	92.16	4.47	4.85	
Sulfachloropyridazine	104.24	6.79	6.52	
Sulfamethoxypyridazine	89.45	3.15	3.52	
Sulfapyridine	94.76	14.64	15.46	
Sulfadimethoxine	93.056	3.76	4.04	
Sulfamethoxazole	110.35	6.71	6.1	
Sulfabenzamide	104.7	8.7	8.3	
Sulfaquinoxaline	85.75	5.03	5.87	
Sulfadoxine	93.06	3.76	4.04	
Tetracyclines				
Tetracycline	85.275	7.32	7.69	
Oxytetracycline	84.6	9.77	11.55	
Quinolones				
Enrofloxacin	119	14.8	12.43	
Danofloxacin	116.97	12.50	10.69	
Lomefloxacin	96.79	7.05	7.29	
Sarafloxacin	82.8	9.45	11.42	
β-lactams				
Ampicillin	127.73	2.55	4	

Supplementary Table 2. Occurrence of antibiotic residues in dairy product samples.

	Contaminated samples (48%)		Non-contaminated
	Mono-contaminated	Poly-contaminated	
Dairy product samples (n=126)	19 (15%)	41 (33%)	66 (52%)

Supplementary Table 3 Antibiotic resistance of the *S. aureus* isolates (15 for 2022).

Antibiotics	15 isolates for <i>S.aureus</i> isolates from 2022					
	Sensitive		Intermediate		Resistant	
	Nb	%	Nb	%	Nb	%
Tetracycline	12	80	0	0	3	20
Doxycycline	12	80	0	0	3	20
Ciprofloxacin	13	87	0	0	2	13