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SUPPLEMENTARY MATERIAL

Prevalence of *Listeria* contamination and its relationship with microplastics and *Coliform* in dairy products: a molecular, microbiological, and statistical analysis

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Key words: *Listeria*, *actA* gene, *Coliform*, microplastics, dairy products, microbial interaction network.

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Supplementary Table 1. List of sample coding of cheeses and ricotta.

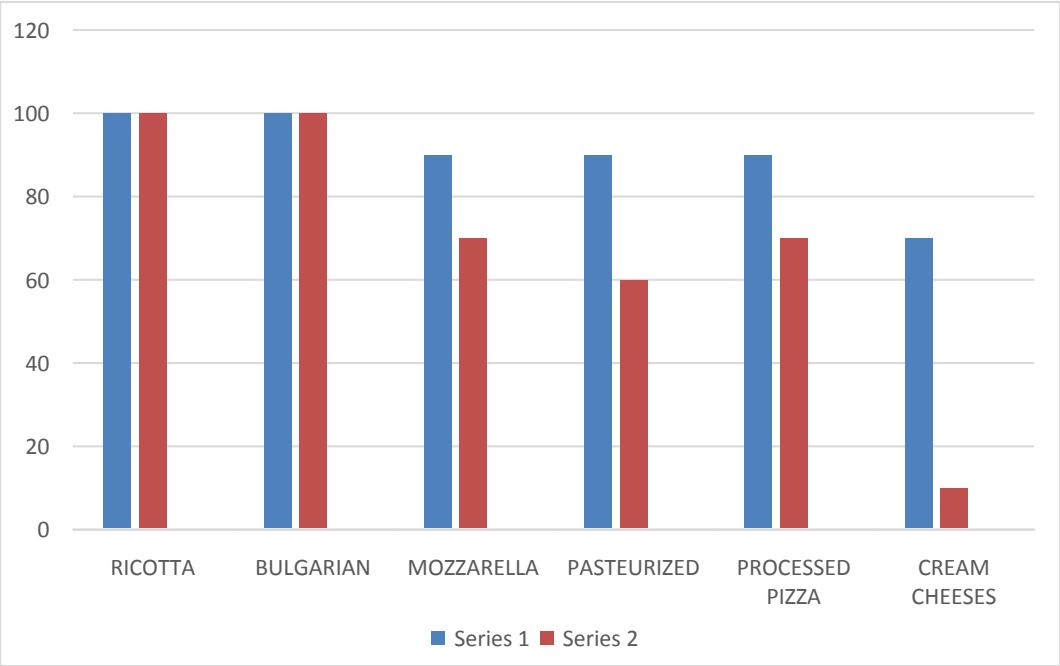
Code	Product name
1	Factory 1, saffron mozzarella cheese
2	Factory 2, ricotta
3	Factory 1, ricotta
4	Market, traditional cheese
5	Factory 1, mozzarella cheese
6	Factory 2, Bulgaria cheese
7	Factory 3, saffron mozzarella cheese
8	Factory 2, pasteurized cheese
9	Factory 4, pasteurized cheese
10	Factory 1, process cheese
11	Factory 1, saffron mozzarella cheese
12	Factory 1, cream cheese
13	Factory 5, cream cheese
14	Factory 6, cream cheese
15	Factory 7, cream cheese
16	Factory 1, UF cheese
17	Factory 2, UF cheese
18	Factory 6, UF cheese
19	Factory 8, UF cheese
20	Factory 1, lactic cheese
21	Factory 2, lactic cheese

Supplementary Table 2. List of butter sample coding.

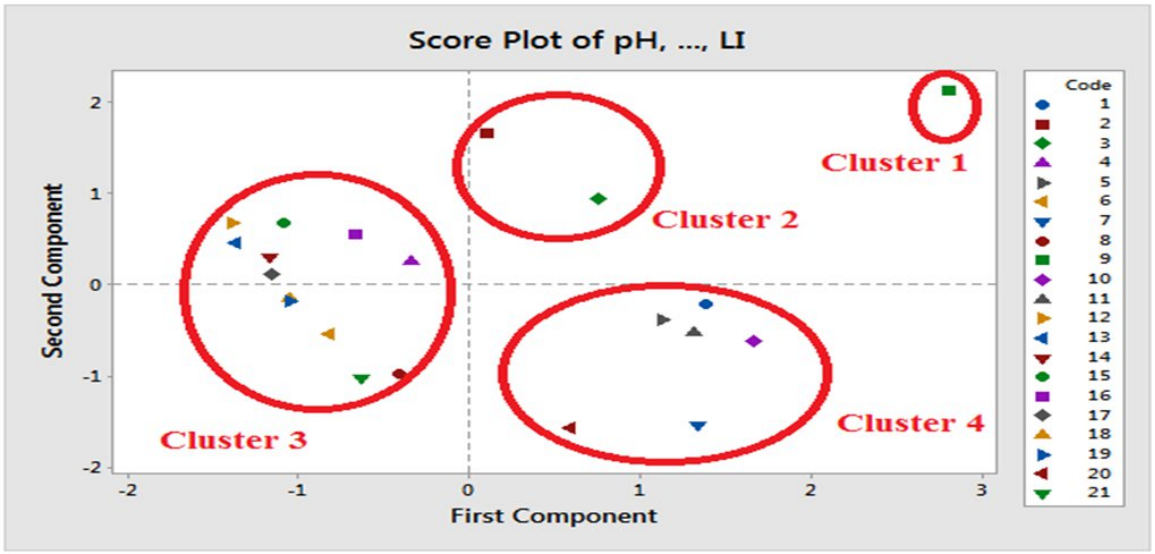
Code	Product name
1	Factory 1, pasteurized Butter
2	Factory 3, pasteuriz Butter
3	Factory 9, pasteurized Butter
4	Factory 2, pasteurized Butter
5	Factory 6, pasteurized Butter

Supplementary Table 3. The results of K^2 test in microplastics.

P value	Df	X^2	Bacteria
0.007	5	15.8	*L. monocytogenes*
0.005	5	32.4	*L. innocua*



Supplementary Figure 1. Relationship between *Listeria* contamination and cheese type in the microplastic study. Blue bars: *L. monocytogenes*; Red bars: *L. innucoa*.



Supplementary Figure 2. Diagram of product clustering as a function of pH effect.