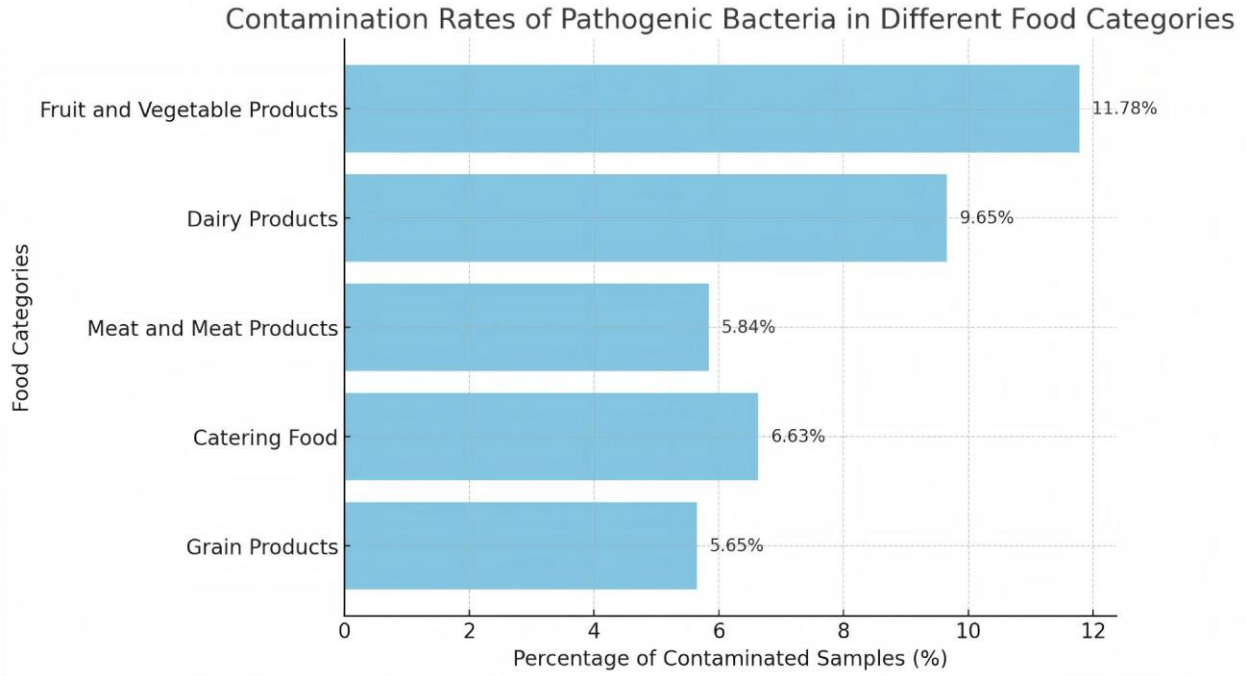
Appendix 1. Prevalence of the five major food-borne pathogens in each food-sample category (Yan'an, June 2023 – June 2024)

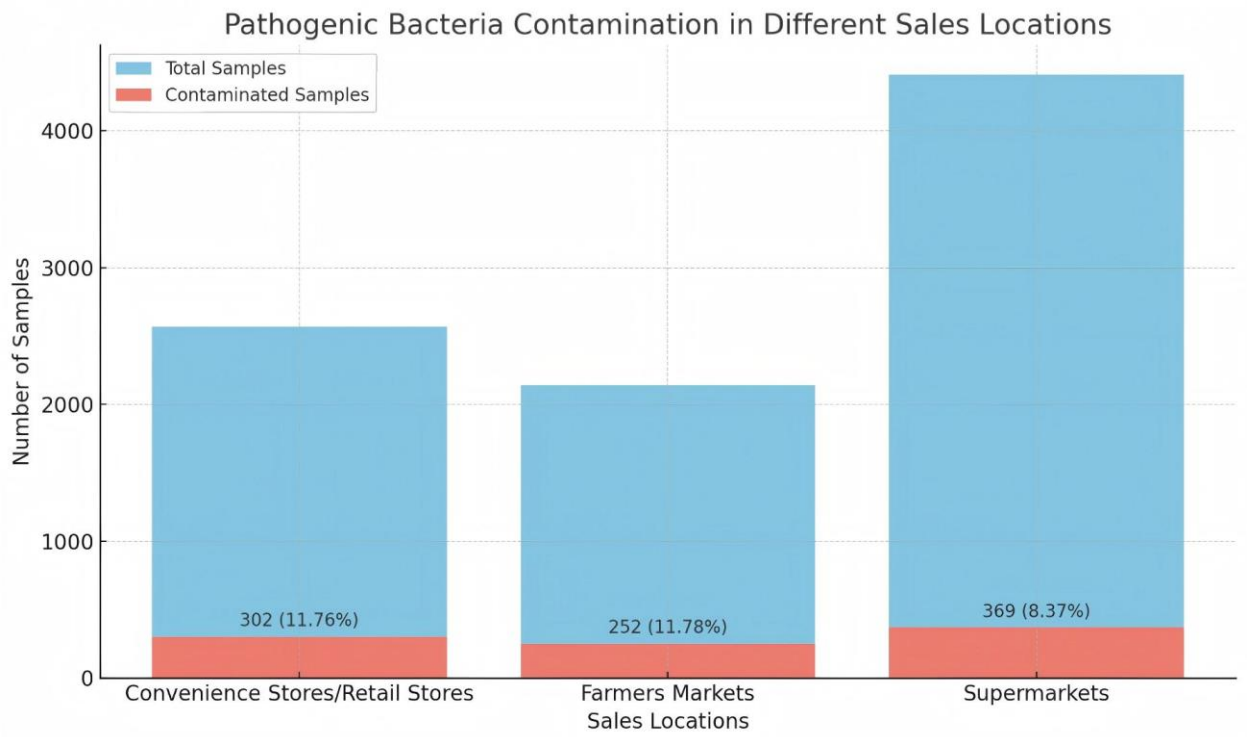
Pathogen	Total isolates (n)	Grain products (n, %)	Meat and meat products (n, %)	Dairy products (n, %)	Fruit and vegetable products (n, %)	Catering food (n, %)	χ^2	*p* value
Bacillus cereus	191	100 (3.21 %)	20 (0.94 %)	3 (0.29 %)	8 (1.28 %)	60 (2.67 %)	53.27	7.5×10^{-11}
Cronobacter spp.	130	10 (0.32 %)	5 (0.24 %)	100 (9.78 %)	10 (1.61 %)	5 (0.22 %)	571.71	2.0×10^{-122}
Staphylococcus aureus	105	10 (0.32 %)	45 (2.12 %)	6 (0.59 %)	4 (0.64 %)	40 (1.78 %)	48.11	8.9×10^{-10}
Salmonella spp.	69	2 (0.06 %)	50 (2.36 %)	7 (0.68 %)	0 (0%)	10 (0.45 %)	99.45	1.3×10^{-20}
Escherichia coli	51	6 (0.19 %)	3 (0.14 %)	2 (0.20 %)	30 (4.82 %)	10 (0.45 %)	218.89	3.2×10^{-46}

Notes: Percentages are prevalence within each food-sample category (denominator: Grain = 3 116; Meat = 2 118; Dairy = 1 022; Fruit/Vegetable = 623; Catering = 2 243). χ^2 tests evaluate whether the prevalence of each pathogen differs across the five food categories (df = 4). All *p* values < 0.05 indicate highly significant heterogeneity.

Appendix 2. Analysis of food categories contaminated by pathogenic bacteria.



Appendix 3. Pathogen contamination in different sales locations.



Appendix 4. Epidemiological characteristics of foodborne disease cases.