

Enterotoxigenic strains of *S. aureus* are associated with food-borne illness. The classic serotypes are enterotoxins A-E, with A being the most commonly associated with food-borne intoxication. All serotypes are heat stable and resistant to proteolytic destruction by enzymes in the stomach and small intestine. *S. aureus* enterotoxins behave as superantigens, binding to MHC class II molecules, which results in T-cell stimulation and leads to the production of proinflammatory mediators. Their effect on the central nervous system results in severe vomiting within 3-6 hours of consumption. Diarrhea is not a feature. Recovery within 24 hours is usual. The enterotoxins are implicated in autoimmune dysregulation and may be involved in the pathogenesis of inflammatory bowel disease.

Food may be contaminated with enterotoxins by human carriers. Up to 50% of healthy people carry the bacteria on their skin and in their nose. The bacteria grow at room temperature and release toxin. Subsequent heating may kill the organism, but the toxin is stable and small quantities are sufficient to cause illness.

Enterotoxin have been detected by a latex agglutination test, but immunoassays are more sensitive.

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