



Common Foodborne Pathogen: *Staphylococcus aureus*



What is *Staphylococcus aureus*?

Staphylococcus aureus is a bacterium found on the skin and in the nasal passages of up to 25% of healthy people and animals. *S. aureus* causes foodborne illness by growing in temperature abused food and producing a heat stable toxin. Consumption of this toxin (not the bacteria) can make you very sick, this is why foodborne illness caused by *S. aureus* is called a food intoxication.

S. aureus can contaminate food by direct bodily contact, through skin fragments, or through respiratory droplets produced when people cough and sneeze. Most *S. aureus* foodborne illness results from food contamination by food handlers, meat grinders, knives, storage containers, and cutting blocks. While low levels of the *S. aureus* bacterium exist in many foods, proper food handling techniques can prevent further contamination or growth in the food, thus preventing toxin production.

Commonly Associated Foods

- Prepared Salads (i.e. egg, chicken, tuna, pasta)
- Cream-filled Bakery Items
- Deli Meat
- Milk and Dairy



Symptoms of *Staphylococcus aureus* Intoxication

Common symptoms of *S. aureus* intoxication include nausea, vomiting, retching, abdominal cramps, headaches, exhaustion, and fatigue. Because vomiting and diarrhea may be experienced at the same time, *S. aureus* intoxication is often referred to as "2 bucket disease". Because this illness is caused by a toxin, symptoms appear quickly, within 1-6 hours after consumption of the contaminated food. Symptoms are generally mild and most people recover within 1-3 days.

Who gets *Staphylococcus aureus* Intoxication

Anyone who consumes *S. aureus* toxin can become ill. The severity of the illness will depend on the amount of toxin consumed; more toxin may result in a quicker more severe illness compared to consumption of less toxin.

Proper Food Handling Techniques to Avoid Intoxication

Once *S. aureus* toxin has been produced, it cannot be destroyed by cooking. Proper sanitation by food handlers is the most important control measure. Wash hands thoroughly, especially after blowing your nose, using the restroom, or touching your skin or hair. Do not allow cooked food to sit out at room temperature for prolonged periods of time. Refrigerate or freeze ingredients and leftovers within 2 hours of cooking.

Recent *Staphylococcus aureus* Outbreaks in the U.S.

In the early 1990's, 1,364 children became ill after eating chicken salad served at Texas elementary schools. Frozen chickens were boiled, deboned, cooled to room temperature under a fan, and refrigerated overnight. The following morning, additional ingredients were added and the mixture was blended. The food was transported, in thermal containers, to 16 schools and held at room temperature until served. Contamination of the chicken probably occurred during deboning. The organism grew, producing toxin, while being cooled as well as during room temperature holding.

Safe Food Handling Checklist



- ☐ Wash hands often
- ☐ Wash counter and utensils
- ☐ Keep cold foods cold and hot foods hot
- ☐ Foods should be held at temperatures between 40-140°F for no more than 2 hours

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