

Though in-person Extension meetings, events and classes are canceled until June 30, we are still working in your communities and bringing online education and resources to all Minnesotans.

Spices linked to Salmonella contamination



Is *Salmonella* lurking in your spice cupboard? 86% of U.S. households use dried spices. Most are imported. The Food and Drug Administration (FDA) found 12% of imported spices were contaminated with pathogens like *Salmonella* or were filthy with insect parts or animal hair. Contamination was found in ground, cracked and whole spices. Coriander, basil, oregano, sesame seeds, pepper, cumin and curry powder were most commonly contaminated.

Birds, animals and humans can be infected or carry *Salmonella* spp. Contamination can occur anywhere during the production chain from contaminated fields, harvest containers, storage areas and production line workers.

Salmonella can cause serious illness and even death. Diarrhea, fever and abdominal cramps develop 12 to 72 hours after infection and can last 4 to 7 days. Children under the age of four, the elderly and people with weakened immune systems are at greatest risk of illness. It's the most common foodborne pathogen.

What can be done to make spices safe? Post-harvest methods such as irradiation, pasteurization and gas ethylene oxide destroy *Salmonella* and other bacteria in spices. However, labeling of these treatment methods is not required. Freezing does not kill *Salmonella* but heating to 160 degrees F does. Food companies purchasing spices and the producers of spices are implementing strategies for safer spices.

Take home message

- Label and date dried herbs and spices after opening. Use within 6–12 months or freeze for longer storage.
- Encourage high risk population groups to add dried spices during the cooking process. Or toast spices to improve flavor and rid of bacterial contamination.
- View [preserving herbs](#) mini-module to preserve home grown herbs.

Sources

- Burden, D. (October 2013.) *Spice Safety*. Iowa State University.

- Schnirring, L. (October 31, 2013.) FDA report says 12% of imported spices tainted. CIDRAP, University of Minnesota.
 - Zuraw, Lydia. (September 9, 2013.) *Food Safety News*.
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