

Salmonella on Cantaloupe — Important Questions and Answers

On August 22 the Food and Drug Administration (FDA) announced a recall of cantaloupe grown at Chamberlain Farms in Owensville, Indiana. The recall was issued because cantaloupes from that farm may be contaminated with *Salmonella* associated with a multi-state outbreak. People are advised not to eat cantaloupe grown on Chamberlain Farms. Many illnesses and at least three deaths are linked to this outbreak. The outbreak of *Salmonella* on cantaloupe was first announced on August 17. Chamberlain Farms had already voluntarily recalled their product at that time. Chamberlain Farms also has asked retailers to remove watermelons grown at Chamberlain as a precaution. The Centers for Disease Control and Prevention (CDC) continues to work with the FDA and health officials in the affected states to investigate the outbreak.

In an unrelated incident, the FDA announced on September 12 that DFI Marketing, Inc., of Fresno, California, is voluntarily recalling cantaloupe because it may be contaminated with *Salmonella*. Some of the cantaloupe from DFI Marketing may have been shipped to Indiana between August 27 and September 10.

It is unlikely that recalled product from either Chamberlain Farms or DFI Marketing is still in grocery stores.

Here are some important questions about the issue and answers from Purdue Extension specialists. Information here is current at the time of publication, but it may change as the investigation continues. To follow the outbreak investigation visit the [FDA](#) and [CDC](#).

Q: *What is Salmonella?*

A: *Salmonella* is a group of bacteria and is one of the most common causes of foodborne illness. There are more than 2,500 kinds (or serotypes) of *Salmonella*. Investigators are looking at two serotypes in this outbreak: *Salmonella* Typhimurium and *Salmonella* Newport. Cooking and pasteurization kill *Salmonella*. Since cantaloupe is seldom cooked, this can be a concern.

References

[FoodSafety.gov — Salmonella](#)

[Bad Bug Book, 2nd Edition](#)

Q: *Where did the Salmonella come from? How did it get on the cantaloupes?*

A: While it isn't yet clear how the *Salmonella* got on the affected cantaloupes, there are some basic things we do know about how *Salmonella* can get on produce. *Salmonella*

is common in the environment. The bacteria can live in the digestive tracts of several animals, including humans, wild animals, livestock, and pets. *Salmonella* also is commonly found in the feces of wild and domestic birds, and often associated with reptiles and amphibians. *Salmonella* can be found in soil and water sources (such as streams, rivers, and ponds).

In the field, a cantaloupe could become contaminated if it came in contact with animal feces or soil. During or after harvest, a cantaloupe could be contaminated through contact with contaminated people, equipment, or water. Good agricultural and sanitation practices — such as following strict precautions with manure, ensuring all employees wash hands, and using clean water (to irrigate, wash produce, etc.) — can minimize the possibility of contamination.

References

[FoodSafety.gov — Salmonella](#)

[CDC — Salmonella](#)

Q: *How do I know if a cantaloupe is from Chamberlain Farms or DFI Marketing?*

A: Ask your retailer or wholesale distributor if the cantaloupe came from Chamberlain Farms or DFI Marketing. If it did, do not eat the cantaloupe and do not feed it to animals. Put the cantaloupe in a plastic bag and put it in a sealed trashcan so that animals cannot eat it. More information is available from the [CDC](#).

Q: *I heard that if people had only washed the cantaloupe before they ate it, they wouldn't have gotten sick. Is that right?*

A: Washing produce before eating it is always important. But if the produce is heavily contaminated, or the contamination is inside of the fruit or vegetable, it may not be possible to wash it well enough to make it safe. For that reason, the FDA recommends consumers to throw away all recalled produce.

Q: *I have a cantaloupe that isn't from Chamberlain Farms or DFI Marketing. What should I do with it?*

A: Cantaloupes from other farm sources have not been recalled. Follow [recommended practices](#) for washing, handling, and storing cantaloupe before eating it.

Q: *Is the cantaloupe I bought from my local farmers market safe to eat?*

A: When you purchase cantaloupe from a farmers market, fruit stand, or other outlet, ask the vendor where the cantaloupe came from. Unless the cantaloupe was grown on a farm involved in a recall (Chamberlain Farms or DFI Marketing) there is no particular concern. You should also follow [recommended practices](#) for washing, handling, and storing cantaloupe before eating it

Q: *How should I wash cantaloupe for use in my home?*

A: As with any fresh produce, cut away any damaged or bruised areas, and wash cantaloupe thoroughly under running water before eating or cutting. Use a clean produce brush to scrub the rind thoroughly while washing. Washing with soap or detergent or using commercial produce washes is not recommended. Although you will remove the rind before eating a cantaloupe, it is still important to wash it first so dirt and bacteria aren't transferred from the knife onto the flesh of the melon. Dry the cantaloupe

with a clean cloth towel or paper towel. *Do not* try to wash cantaloupe that has been recalled. When in doubt, throw it out.

Reference

[FDA — Raw Produce: Selecting and Serving it Safely](#)

Q: *How can I make sure there are no harmful bacteria on a cantaloupe?*

A: With cantaloupe and other fresh produce there isn't a way to wash it in a kitchen that will definitely kill 100 percent of the harmful bacteria and viruses — even if you use a disinfectant. That's why experts agree that a "farm to fork" approach is necessary to minimize the chance that someone will get sick. In other words, everyone from the farmer, to the truck driver, distributor, grocer, consumer, and final food preparer needs to prevent contaminating food. If everybody does his or her part, the risk that someone will get sick from eating fresh produce is very small.

Q: *What are the symptoms of infection with Salmonella?*

A: People infected with *Salmonella* usually develop diarrhea, fever, and abdominal cramps between 12 hours and three days after exposure. Young children, the elderly, and individuals with compromised immune systems are particularly vulnerable to severe illness. The disease caused by *Salmonella* is called salmonellosis.

Resource

[CDC — What is Salmonellosis?](#)

Q: *What's the difference between a cantaloupe and a muskmelon?*

A: The terms "cantaloupe" and "muskmelon" are often interchangeable. Both terms refer to netted melons with orange or green flesh. The USDA and FDA use the term cantaloupe.

Q: *How can I stay informed about this outbreak?*

A: More information about the outbreak is available from the [FDA](#) and [CDC](#).

Q: *I still have questions about this outbreak and fresh produce safety. Is there someone at Purdue I can talk to?*

A: Certainly! Contact your [Purdue Extension county office](#) to find someone who will answer your question or direct you to someone who can.

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