



Salmonella in Foods

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On February 14, 2007, the U.S. Food and Drug Administration (FDA) issued a consumer warning to discard any used and unopened containers, varieties, and types of Peter Pan and Great Value peanut butter and peanut butter toppings with product code on the lid of the jar beginning with 2111 and purchased since October 2004. Great Value peanut butter and peanut butter products without a product code must be discarded. This code identifies the product as manufactured in ConAgra's Sylvester, Georgia facility. As of March 7, 2007, the Centers for Disease Control and Prevention has identified 425 persons from 44 states (Hawai'i was not included) as sickened by *Salmonella Tennessee* after consuming Peter Pan peanut butter. No deaths were attributed to this infection. Photos of the principal display panel of the product are shown below as part of a six-month pilot program being conducted by the FDA starting mid-February 2007. The purpose of the pilot program is to help consumers identify Class I recalled products, the use of or exposure to which may result in serious adverse health consequences or death.

Salmonella bacterium

Salmonella may be present in a person's intestines for up to 3 days before any symptoms of the illness occur, after which they may continue to harbor the bacterium from 4 to 7 days more. Although most people are susceptible to this foodborne illness, people usually recover without treatment. However, because of their compromised immune systems, the very young, the elderly, and those who are sick may suffer severe symptoms. Salmonella can enter the bloodstream and cause infections. In some cases, the bacterium may linger in the intestines even after the symptoms have resolved.

Salmonellosis—the foodborne illness

Salmonella is widespread among animals, especially poultry and swine and their feces, and can be found in raw meats, water, and soil and on insects and kitchen surfaces. As few as 15–20 cells may be sufficient to cause salmonellosis as soon as 6–48 hours after their ingestion. This is the second most common foodborne illness in the United States, with about 2–4 million cases occurring annually. Acute symptoms include nausea, vomiting, abdominal cramps, diarrhea, headache, and fever, often lasting 1–2 days.

Sources of salmonella

Salmonellosis occurs when contaminated foods derived from infected food animals or when feces from infected animals or persons are ingested. Implicated foods include raw meats, poultry, eggs, milk and other dairy products, fish, shrimp, coconut, sauces and salad dressings, cake mixes, cream-filled desserts and toppings, peanut butter, dried gelatin, cocoa, and chocolate. Raw fruits and vegetables contaminated during slicing have also been sources of salmonella. In the case of *Salmonella enteritidis*, it has been found not only on egg shells but also in the yolk, strongly suggesting that an infected hen deposits the bacterium in the yolk before the shell is formed.

How to prevent salmonella infection

Fortunately, salmonella is easily killed. Heating foods to at least 160°F is sufficient to prevent salmonellosis. Egg yolks must be cooked until solid, and meat and poultry must reach 160°F throughout. Avoid eating foods such as Hollandaise sauce and homemade eggnog, which are prepared from raw eggs. Avoid drinking raw milk and

eating products prepared from raw milk. Thoroughly clean kitchen work surfaces and utensils with soap and water before using them for food preparation and serving. And always wash your hands with soap and water after handling animals or foods of animal origin and before handling foods.

References

- CDC. March 7, 2007. Salmonellosis – Outbreak Investigation, February 2007. www.cdc.gov/ncidod/dbmd/diseaseinfo/salmonellosis_2007/outbreak_notice.htm (accessed March 15, 2007)
- FDA. February 16, 2007. Update on Salmonella outbreak and Peter Pan Peanut Butter and Great Value Peanut Butter. www.fda.gov/bbs/topics/NEWS/2007/NEW01565.html (accessed February 17, 2007)
- FDA. February 14, 2007. FDA's Pilot Program to Better Educate Consumers about Recalled Food Products. www.fda.gov/oc/po/firmrecalls/pilot.html#q1 (accessed February 17, 2007)
- FDA. 1992. Bad Bug Book, *Salmonella* spp, www.cfsan.fda.gov/~mow/chap1.html (accessed February 17, 2007)



U.S. Food and Drug Administration (FDA) has issued a consumer warning to discard any used and unopened containers, varieties, and types of Peter Pan and Great Value peanut butter with a product code on the lid of the jar beginning with 2111 and purchased since May 2006.