

## “You Are What You Eat.....” *Salmonella*?

By

Eric Stockley and Lillian Gomes

Charlotte County Health Department’s Office of Disease Control and Prevention staff.

*Salmonella*, despite its pretty name, is not a fine French fish dish. *Salmonella* bacteria is the most frequently reported cause of foodborne illness in the USA. Following the recent national epidemic of *Salmonella* in the US and all the press it has received we are bringing you this information to help reassure your fears and show you what you can do to protect your self from getting sick with *Salmonella*. *Salmonella* enters our bodies through our mouths by eating contaminated food or by touching contaminated surfaces and then touching our mouth without first washing our hands. In order to reduce salmonellosis, a comprehensive farm-to-table approach to food safety is necessary. Farmers, food industry, food inspectors, retailers, food service workers, and consumers are each critical links in the food safety chain. Here are some of the questions that we often get asked at the Charlotte County Health Department along with some information to help prevent you and your family from becoming infected with *Salmonella*.

Q. What is *Salmonella*?

A. *Salmonella* is a microscopic bacterium that passes from the feces of people or animals to other people or other animals. It can also be contracted from touching and handling contaminated surfaces and not washing ones hands. Two types of *Salmonella* collectively account for half of all food borne human infections in the US. *Salmonella* does not usually affect the taste, smell, or appearance of the food. The bacteria live in the intestinal tracts of infected animals and humans

Q. What is salmonellosis?

A. Named after its discoverer Dr. Salmon, salmonellosis is an infection caused by the bacteria *Salmonella*. According to the Centers for Disease Control and Prevention (CDC), salmonellosis causes an estimated 1.4 million cases of foodborne illness and more than 500 deaths annually in the United States. Most of these deaths occur in persons with already weakened immune systems (see below).

Q. What are the symptoms of salmonellosis?

A. Most people experience diarrhea, abdominal cramps, abdominal pain, fever and chills within 8 to 72 hours after the bacteria was ingested. Additional symptoms may be headache, nausea, and vomiting. Symptoms usually disappear within 4 to 7 days. Many people with salmonellosis recover without treatment and may never see a doctor. Some people can become infected with *Salmonella* and not have any symptoms, however, they are still infectious and can pass the disease to on to others. *Salmonella* infections can be life-threatening, especially for infants, young children, pregnant women-their unborn babies, and older adults. These people are at a higher risk of severe disease associated with foodborne illness, as are people with weakened immune systems (such as those with HIV/AIDS, cancer, diabetes, kidney disease, and transplant patients).

Q. Are there long-term consequences?

A. Usually not, most people recover naturally without treatment. Persons with symptoms usually recover completely, although it may be several months before their bowel habits are back to normal. A small number of persons who are infected with *Salmonella* may still have the bacteria

in their systems for up to a year and show no symptoms, yet they remain contagious through out this period.

Q. How do people get salmonellosis?

A. The *Salmonella* bacteria live in the intestinal track of humans and other animals, including birds (poultry) and reptiles. *Salmonella* is usually transmitted to humans by eating foods contaminated with feces. *Salmonella* present on raw meat and poultry can survive if the product is not cooked to a safe minimum internal temperature, as measured with a food thermometer. *Salmonella* can also cause foodborne illness (salmonellosis) through cross-contamination. An example being when juices from raw meat or poultry come in contact with ready-to-eat foods. When food preparation surfaces come in contact with raw meats and poultry juices and are not sanitized properly they can spread the bacteria to other foods. Food may also become contaminated by the unwashed hands of an infected food handler. *Salmonella* can also be found in the feces of some pets, especially those with diarrhea. People can become infected if they do not wash their hands after contact with these feces. Reptiles are particularly likely to harbor *Salmonella* on their skins. People should always wash their hands immediately after handling a reptile, even if the reptile appears healthy.

Q. What foods are most likely to make people sick?

A. Any raw food of animal origin, such as meat, poultry, dairy products, eggs, seafood, and some fruits and vegetables may carry *Salmonella* bacteria. The bacteria can survive to cause illness if the meat, poultry, and egg products are not cooked to a safe temperature and if fruits and vegetables are not thoroughly washed. Also, improperly processed commercial foods, i.e. peanut butter, can transmit the bacteria if they become contaminated. Safe food handling practices are necessary to prevent bacteria on raw foods from causing illness.

Q. How can consumers prevent salmonellosis?

A. Bacteria on raw foods of animal origin do not always cause illness. The key to preventing illness at home, in a restaurant, or anywhere else is something we can all do. Cooking foods to a safe temperature prevents kills the bacteria. Follow these guidelines for safe food preparation:

**CLEANING: Wash Hands and Surfaces Frequently and Thoroughly**

Wash your hands with warm soapy water for 20 seconds before and after handling food. Also be sure to wash your hands thoroughly after using the bathroom, changing diapers, and handling pets.

Wash utensils, cutting boards, and dishes, with hot soapy water after preparing each food item and before you go on to the next item. Countertops can be disinfected with many commercial products, be sure to read the labels first.

Consider using paper towels to clean kitchen surfaces. If you use cloth towels, wash them often in the hot cycle of your washing machine and preferably using a little bleach if possible.

**SEPARATE: Don't Cross-contaminate**

Separate raw meat, poultry, and seafood from other foods in your grocery shopping cart with plastic bags to prevent raw juices from contaminating other foods. When storing raw meats in the refrigerator keep them separated from other foods and clean up any spills with disinfecting agent.

If possible, use one cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.

Never place cooked food on a plate that previously held raw meat, poultry, or seafood. Never use a raw marinade, always cook it first.

#### COOKING: Cook to Safe Temperatures

Using a food thermometer assures a safe internal temperature when cooking foods. Some examples of safe temperatures are:

Beef, veal, and lamb steaks, roasts, and chops to 145 °F.

All cuts of pork to 160 °F.

Ground beef, veal and lamb to 160 °F.

Egg dishes, casseroles to 160 °F.

All poultry should reach a safe minimum internal temperature of 165 °F.

Stuffing poultry before cooking is not recommended. Cooking stuffing separately to 165 °F. insures that all bacteria are killed.

Fish should reach 145 °F.

Bring sauces, soups, gravy and marinates to a boil when heating.

Reheat all leftovers thoroughly to at least 165 °F.

#### REFRIGERATION:

Keep food safe at home by refrigerating foods promptly and properly after purchase. Refrigerate or freeze perishables, prepared foods, and leftovers within 2 hours (1 hour if temperatures are above 90 °F).

Freezers should register 0 °F or below and refrigerators 40 °F or below.

Thaw food in the refrigerator, in cold water, or in the microwave. Foods should not be thawed at room temperature on the kitchen counter. Foods thawed should not be refrozen without first being cooked to the recommended temperature.

Marinate foods in the refrigerator.

Divide large amounts of leftovers into shallow containers for quick cooling in the refrigerator.

Don't pack the refrigerator. Cool air must circulate to keep food cold and safe.

For updated information, please visit our website at [www.charlottechd.com](http://www.charlottechd.com)

You can also ask any questions you might have on food safety on this web site.

#### Reference:

CDC's Web site : [http://www.cdc.gov/ncidod/dbmd/diseaseinfo/salmonellosis\\_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/salmonellosis_g.htm)