

# FOOD TALK



SANITATION TIPS FOR FOOD WORKERS

Winter 2012-2013

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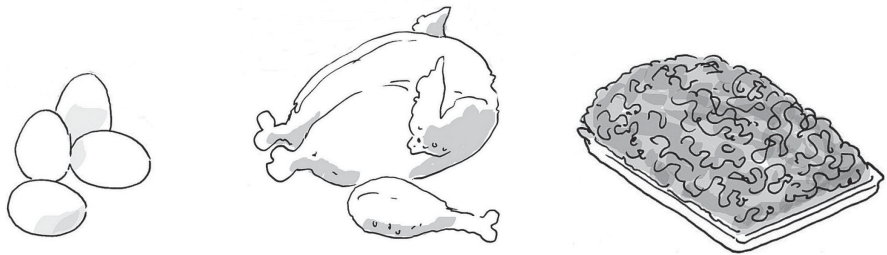
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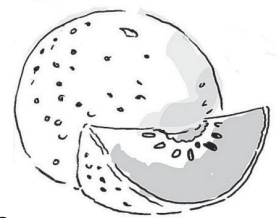
## What do these Foods have in Common?



One thing eggs, poultry, and ground meats have in common is that they are among the foods that are often linked to outbreaks of *Salmonella*. Food safety experts are especially concerned about *Salmonella* right now. Although outbreaks from other dangerous bugs such as *E. coli* O157:H7 have declined, the experts are seeing an increase in *Salmonella* outbreaks. In recent years, major outbreaks have been linked to eggs, peanut butter, cantaloupes, sprouts, poultry and ground meats.

According to the Centers for Disease Control and Prevention, *Salmonella* accounted for 10 of the 13 major outbreaks it tracked during 2011 and for six of the nine big outbreaks it got involved in during 2012.

Besides meats, poultry and eggs, *Salmonella* has been linked to many foods including fruits and vegetables – such as sprouts, tomatoes, peppers, and cantaloupes – as well as peanut butter, chocolate, milk and dairy products, fish, shrimp, spices, yeast, coconut, sauces, unpasteurized salad dressings, cake mixes, cream-filled desserts and toppings that contain raw eggs.



## Protect your customers, your co-workers – and yourself – from *Salmonella*!

Different types of *Salmonella* cause different illnesses. The more common symptoms include nausea, vomiting, cramps and fever. The less common types of *Salmonella* cause typhoid fever, a much more deadly illness.



*Salmonella* Typhi, which causes typhoid fever, is one of the "Big Five" pathogens. This means that, according to the 2009 FDA model Food Code, if you have been diagnosed with *Salmonella* Typhi, you must report the illness to the manager. Symptoms of typhoid can include a



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high fever, diarrhea or constipation, aches, headache, drowsiness, and, sometimes, a rash on your body.

The only way to know if you have salmonellosis is to consult a medical professional.

Unfortunately, food that is contaminated with *Salmonella* may look and smell normal. So you need to do what you can in your establishment to protect customers, co-workers – and yourself – from the pathogen (that’s what the experts call bugs that cause illness). You can help prevent foodborne illness by:

- Washing your hands before and after preparing food.
- Using separate cutting boards for raw meats and produce
- Keeping raw foods separated from cooked foods.
- Not touching ready-to-eat food with your bare hands.
- Checking to make sure cooked food reaches the required temperature.

## When Food Is Contaminated

It’s not possible to tell when food is contaminated with *Salmonella* without microbiological testing that is not usually available in kitchens. But it is sometimes possible to see or smell that something is wrong with the food. Here are some signs of contamination to watch out for:

- **Eggs:** Eggs should be delivered in a refrigerated vehicle that maintains an air temperature of 7 degrees C (45 degrees F) or below. And the

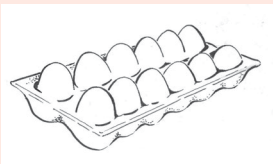
shells should not be cracked or dirty. Crack one open. If the white clings to the yolk and the yolk is firm and does not break easily, the egg is fresh.

- **Poultry:** It’s not a good sign if poultry has soft flabby flesh. A purple or green color around the neck opening could mean that the meat is stale or has been improperly handled. Feel for stickiness under the wings and look for darkening of the wing tips. And sniff for abnormal odors.

**The only sure way to know if you are infected with *Salmonella* is to see your medical professional.**

- **Meats:** Brown, green or purple blotches are a sign of microbial action, and black, white and green spots can indicate mold. A sour smell or the presence of slime are not good signs. Meats turn slimy when temperature and humidity are high. Beef usually spoils on the surface, whereas pork spoils first near the bone. To test for spoiled pork, use a pointed knife to reach inside the meat. A sour smell on the knife indicates spoilage.
- **Seafood:** Fresh fish that is not really fresh will have a strong off-odor. If it is very old, the fish will smell like ammonia. If the eyes look sunken, if the gills are gray or greenish, or if your fingernail indentation stays in the flesh, it’s not fresh. Frozen fish that has thawed and

## When to Accept or Reject Eggs and Egg Products

	Accept	Reject
<p><b>Raw Shell Eggs</b></p> 	<ul style="list-style-type: none"> <li>• Clean</li> <li>• Fresh</li> <li>• Free of cracks or checks *</li> <li>• Refrigerated at an air temperature of 7 degrees C (45 degrees F) or below when delivered</li> </ul>	<ul style="list-style-type: none"> <li>• Dirty</li> <li>• Cracked or checked *</li> <li>• Off odors</li> <li>• Temperature over 7 degrees C (45 degrees F)</li> </ul>
<p><b>Liquid Egg Products</b></p>	<ul style="list-style-type: none"> <li>• In a sealed container</li> <li>• Kept at 5 degrees C (41 degrees F) or below</li> </ul>	<ul style="list-style-type: none"> <li>• Temperature over 5 degrees C (41 degrees F)</li> </ul>

\* Note: A “Check” means the egg has a broken shell or crack but the contents are not leaking.

has been refrozen may have a sour odor and an off color.

- **Frozen Foods:** Look for signs of thawing and re-freezing, especially fluid or frozen liquids in the bottom of the container or for the presence of large ice crystals in the product.
- **Canned Foods:** If the top or bottom is swollen, or if the can leaks or is rusty or has dents or flawed seals, the product could be contaminated. Never taste a canned product that looks or smells spoiled. You may become ill with botulism, which can cause paralysis or death.

### Salmonella: Scarier Than You think



As if *Salmonella* contamination was not scary enough already, one type, called *Salmonella* Enteritidis, can find a way inside eggs that are not cracked and that look just fine. In addition, some types of *Salmonella* are resistant to many of the antibiotics doctors rely on to treat bacterial infections.

The more *Salmonella* that are in an egg, the more likely they are to cause illness. So keeping eggs properly refrigerated helps stop the bacteria in the eggs from

growing. The Centers for Disease Control and Prevention offer these other tips for dealing with *Salmonella* in eggs:

- Don't use cracked or dirty eggs;
- Wash hands and cooking utensils with soap and water after contact with raw eggs;
- Don't keep eggs warm for more than two hours;
- Use pasteurized eggs in recipes such as Caesar salad dressing or Hollandaise sauce that require raw eggs.

*Salmonella* can transfer from raw meat to a ready-to-eat food if the same cutting board is used for both foods. Or blood from raw meat can drip in a refrigerator if pre-cooked or ready-to-eat foods are left underneath. You can avoid cross contamination if you:

- Separate raw foods from cooked, pre-cooked and pre-prepared foods during storage and preparation.
- Keep food contact surfaces clean and sanitized.
- Use separate cutting boards and food contact surfaces for raw and pre-cooked and ready-to-eat foods.
- Don't put bulk food containers on bench surfaces,
- Clean and sanitize all utensils and equipment.
- Thoroughly wash your hands after handling raw foods, especially raw meat.

## Who's at Risk from Raw or Undercooked Foods?

Some Risky Foods	Who's at Risk	Cause of Illness
<b>Raw or undercooked eggs:</b> Caesar salad dressing; soft-cooked eggs, some puddings and custards; mousse; sauces (such as Hollandaise) made with raw eggs.	Everyone, especially older adults, young children, and individuals with weak immune systems.	<i>Salmonella</i> Enteritidis
<b>Raw Dairy Products:</b> Soft cheeses like Camembert and Brie made with unpasteurized milk	Everyone, especially pregnant women, older adults, young children, and individuals with weak immune systems.	<i>Salmonella</i> , <i>Listeria monocytogenes</i> , <i>E. coli</i> O157:H7
<b>Raw or rare meat:</b> Hamburger; carpaccio	Everyone, especially older adults and young children	<i>Salmonella</i> , <i>E. coli</i> O157:H7
<b>Raw or undercooked:</b> Molluscan shellfish; raw clams or oysters on the half shell	Everyone, especially persons with liver disease or alcoholism and individuals with weak immune systems.	<i>Vibrio vulnificus</i> , Other vibrios, hepatitis A
<b>Raw fish:</b> Sushi; ceviche; tuna carpaccio	Everyone, especially older adults and individuals with weak immune systems.	Parasites, <i>Vibrio parahaemolyticus</i>

## Test Yourself on *Salmonella*

Try this quick *Salmonella* quiz and test your knowledge of ways to reduce foodborne illness. As always, if more than one answer looks correct, choose the best one:

1. You may cause contamination of food by *Salmonella* if you:
  - a. Wash your hands after using the restroom and before preparing food.
  - b. Clean and sanitize utensils and food contact surfaces.
  - c. Avoid touching ready-to-eat food with your bare hands.
  - d. None of the above.
2. In recent years, big *Salmonella* outbreaks have been linked to:
  - a. Poultry and ground meats.
  - b. Sprouts.
  - c. Eggs, peanut butter and cantaloupes.
  - d. All of the above.
3. Which of these foods can you accept upon delivery to your establishment?
  - a. Poultry with darkened wing tips and soft flesh.
  - b. Fresh packaged sandwiches at 4 degrees C (40 degrees F) .
  - c. Fresh fish with dull, sunken eyes and soft flesh.
  - d. Fresh meat products delivered at 7 degrees C (45 degrees F).
4. According to the FDA 2009 model Food Code, fresh shell eggs should be transported under refrigeration at:
  - a. 21 degrees C (70 degrees F).
  - b. 13 degrees C (55 degrees F).
  - c. 7 degrees C (45 degrees F) .
  - d. 3 degrees C (38 degrees F).

Answers: 1(d), 2(d), 3(b), 4(c)

Sources for this issue: Essentials of Food Safety and Sanitation: Food Safety Fundamentals; The Bad Bug Book