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Food Recalls

Some Products Might Surprise You

by Melissa Vaccaro, MS, CHO

Every year in the news we hear about food recalls or foodborne outbreaks. Every now and then one catches our eye because we would not suspect a food of that type to cause illness or death. Although probably the best in the world, our food supply is not perfect. Bacteria, good and bad, are everywhere. Even the most surprising food products can become contaminated with pathogenic bacteria. Unsanitary conditions, cross-contamination, mishandling, temperature abuse, and employee hygiene are all potential reasons for any food product to become contaminated.

A foodborne outbreak occurs when two or more people get the same illness from the same contaminated food or drink. Our food supply is complex from farm to table. Anywhere along this path food may become contaminated—production, manufacturing, warehousing, distribution, or preparation to a ready-to-eat product.

The goal would be for food to never become contaminated or for no one to ever have a foodborne illness. We will never eliminate this altogether, but we can reduce it. Being proactive and catching contamination or possible contami-

nation before a foodborne outbreak or illness ever occurs. Recall any product before it gets to the consumer. This requires internal product testing. If illness occurs, conduct a foodborne illness investigation; learn from the investigation and educate producers and consumers on how to prevent illness in the future.

Throughout the year many food recalls are issued. Recalls may be issued by the federal government, either the FDA or USDA. They may also be issued by state/local regulatory agencies. When you look at FDA food recalls issued due to possible or identified pathogens issued over the last few months there are some interesting products. Products you may not expect.

FDA Recalled Products Dec. 2014 - Jan. 2015

(Pathogen/Product)

www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/default.htm

Listeria monocytogenes

- Cheeses
- Ice cream
- Caramel apples
- Ice cream sandwiches
- Raw milk cheddar
- Ice cream, gelato, custard, and sorbet
- Apple pistachio salad
- Fresh cut red apples

Salmonella

- Chopped walnuts and pecan cookie pieces
- Peanut butter and cranberry crunch nutrition bars
- Brown rice flour
- Macadamia nuts
- Serrano chili peppers

Staphylococcus

- Premium protein powder

Clostridium botulinum

- Red thread fish

Would you suspect that these products could be contaminated with pathogens? Keep in mind, some of these recalls did not necessarily come about because someone got ill or died. Instead, they were in many cases proactive recalls, which means the products were recalled before any illness happened. Unfortunately, however, when the product makes it to the consumer, illness may occur.

According to the CDC, about 1 in 6 (48 million) people get sick each year from contaminated food, with 128,000 hospitalizations, and 3,000 deaths annually. FoodNet has been tracking trends in the most common infections transmitted through food since 1996. It reports on the

Continued on page 12

Continued from page 11

number of people in the US sickened with foodborne illness infections that have been confirmed by laboratory testing. Unfortunately, not all outbreak investigations get solved and we are left with only suspicions after the investigation concludes.

So you may ask yourself, why apples? Or peppers? Or nuts? Because all foods can possibly get contaminated. With each outbreak we learn. A few years ago "cut leafy greens" were a hot topic. Why did we have so many cut leafy greens associated with outbreaks? Risk assessments that followed the outbreaks found that more product control was needed all the way back to the farm. This led to stricter produce control measures and cut leafy greens being defined as a potentially hazardous food.

Apples are a very popular food in the US, but apple contamination is rare. Don't stop eating your apples. They have a hard skin surface that does not allow bacteria to enter the fruit very easily. Why would *Listeria monocytogenes* be found on apples? In this recent case Lm was found in the firm's apple packing facility. *Listeria* can still grow in cool temperatures. We don't cook apples in many cases. There was no step to kill the bacteria. This outbreak is still being studied to determine the exact source of the contamination.

How in the world did *Salmonella* get into peanut butter? There is no definitive conclusion, but in one outbreak, feces from some animals are a possibility. The roof had a leak. The water from the roof had salmonella in it that might have been from birds that hung around the peanut processing plant. Roasting peanuts will kill *Salmonella*, however, if contamination occurs after the roasting process, all bets are off. *Salmonella* will survive for many months in peanut butter.

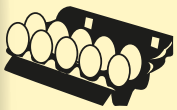
POTENTIAL CONTAMINATION OF FOOD SUPPLY CHAIN

Our food supply is complex from farm to table. Anywhere along this path food may become contaminated—production, manufacturing, warehousing, distribution or preparation to a ready-to-eat product.

01 PRODUCTION

DEFINITION: Growing the plants we harvest or raising the animals we use for food.

EXAMPLES OF CONTAMINATION: If fields are sprayed with contaminated water, fruits and vegetables can be contaminated before harvest.



02 PROCESSING

DEFINITION: Changing plants or animals into what we recognize and buy as food.

EXAMPLES OF CONTAMINATION: If contaminated water or ice is used to wash, pack, or chill fruits or vegetables, the contamination can spread to those items.

DEFINITION: Moving food from farm or production plants to the consumer or a kitchen.

03 DISTRIBUTION/ WAREHOUSING

EXAMPLES OF CONTAMINATION: If refrigerated food is left on a loading dock for a long time in warm weather, it could reach temperatures that allow bacteria to grow.

DEFINITION: Getting the food ready-to-eat. This may occur in the kitchen or a restaurant, institution, or home.

EXAMPLES OF CONTAMINATION: If a cook uses a knife to cut raw chicken and then uses the same knife without washing it to slice tomatoes, the tomatoes can be contaminated by pathogens from the chicken.

04 PREPARATION

Source: http://www.foodsafety.gov/poisoning/responds/index.html

What about nuts? In 2014, cashews. In 2011, pine nuts. In 2008, peanut butter. In 2003, almonds. The recent outbreaks have prompted the FDA to issue a request for information that it could use to compile a risk assessment of Salmonella in Tree Nuts. This risk assessment can then be used to create policy and advise producers of nuts and nut products in addition to consumers.

Production processes and/or hygiene practices can break down. We do not have a perfect food supply, especially with the globalization of our food supply. Prevention of microbial adulteration for many of these foods lies in the use of good agricultural, manufacturing, and storage practices together with a hazard analysis and critical control points (HACCP) system that encompass all stages of production, processing, and distribution. This then must be accompanied by consumer awareness and good home food safety practices.

The Food Safety Modernization Act (FSMA) will produce multiple food safety regulations and substantially strengthen the FDA's food inspection capabilities in the US and overseas. FSMA will fundamentally change the FDA's approach to food safety oversight from reacting to problems to preventing them in the first place. Not only will industry be more accountable for food safety, but so will the government.

Keep in mind, not all outbreaks are associated with food production facilities or distribution centers. Frequently, people make themselves sick. Many outbreaks trace back to events, community functions, fundraisers, and similar. This begs the question: does the consumer understand food safety? Generally the consumer is getting smarter and understanding food safety better than in the past, but they have much more to learn. They may hear and know that they should use a thermometer or wash their hands for 20 seconds, but do they really follow through or do they take shortcuts?

Retail facilities such as grocery stores, restaurants, and institutions must also do their part to prevent foodborne illness. The FDA Food Code provides a risk-based approach to food safety. These food safety techniques must be used every day, not just when the inspector is there. Managers of retail facilities must hold employees accountable and have active managerial control over their facilities.

The CDC reports that in 2013, very little to no change was seen in the incidence of foodborne illness. 2014 assessments are yet to be reported. Only when everyone does their part will foodborne illness be significantly reduced. Never underestimate the power of a pathogen—they can contaminate almost any food or drink.

CDC List of Selected Foodborne Outbreaks in 2014

(Pathogen/Product)

www.cdc.gov/foodsafety/outbreaks/multistate-outbreaks/outbreaks-list.html

Listeria monocytogenes
- Commercially produced, prepackaged caramel apples
- Wholesome soy products sprouts
- Oasis Brands® cheese
- Roos Foods® dairy products

***Escherichia coli* 0157:H7**
- Ground beef

***Escherichia coli* 0121**
- Raw clover sprouts

***Salmonella* Enteritidis**
- Bean sprouts

***Salmonella* Braenderup**
- Nut butter

***Salmonella* Heidelberg**
- Tyson® chicken

***Salmonella* Stanley**
- Raw cashew cheese

***Salmonella* Newport, *Salmonella* Hartford, and *Salmonella* Oranienburg**
- Organic sprouted chia powder

***Cyclospora* Infections in Texas**
- Cilantro

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