

Salmonella, E-coli, & Sprouts

by Steve Meyerowitz, Sproutman®

Are Sprouts Safe to Eat?

Recently, stories about alfalfa sprouts contaminated with salmonella bacteria have made the news. Salmonella is bad news, but no food is immune to it. All foods eaten raw carry that risk including fresh fruit and vegetables, which have more pathogen outbreaks than sprouts. Does this mean you should go on a 100% cooked food diet?

According to the Center for Disease Control (CDC), 4 million people contract salmonellosis from foods every year and 93% of these cases are caused by meat, poultry, milk and eggs. The remaining 7% of cases are from shellfish, fresh fruits and vegetables. While fruits and veggies are safer than meat, a single outbreak from Mexican cantaloupes in 1989 caused 25,000 cases of salmonella. Compare this to sprouts: for all outbreaks over their entire 40 year history, the U.S. sprout industry has had a total of 2,000 cases.

What are sprout companies doing about it? Conscientious growers are testing sprouts for e-coli and salmonella before they ship to the stores. The FDA has recommended the chlorination of sprouts, similar to the chlorination of our municipal waters. This achieves a 99.8% reduction of potential salmonella and E. Coli contamination. Put another way, if there was contaminated seed, there would be only a 0.02% probability that the bacteria could survive. Unfortunately, unlike meat and poultry, the tiny sprout industry is not regulated and not every sprout grower is willing to chlorinate. Sprout growers want to keep sprouts raw and organic. Alternative pasteurization methods are currently being tested. They include, among others, heat treatment of raw seeds before sprouting or soaking seeds in acetic acid (vinegar). Look for a safety seal of approval on your sprouts. It indicates your grower has been inspected by an independent certification agency.

No one can guarantee the absence of germs on any food. Food safety is an international problem and one that is partly a creation of our overburdened, complex, global food distribution network. In the worldwide problem of food safety, sprouts are just but a blip on the radar screen. It would be wise to keep things in perspective. According to the National Weather Service, lightning strikes 1.29 people per million each year. The CDC declares that E. coli contamination from all foods afflicts 1.10 people per million each year. Since your chances of getting hit by lightning are greater than contracting e-coli, it is a good bet that the benefits of eating these super-nutritious baby vegetables far outweighs the risks.

Sprout Growers Are Working Hard to Protect You

The International Sprout Growers Association (ISGA) is the professional association of sprout growers and companies that supply products and services to the sprout industry. They are active in educating and informing members about important issues impacting the sprout industry, representing growers' interests before government regulatory agencies, and supporting scientific research that benefits the sprout industry. While they believe that no food is immune to foodborne pathogens and that sprouts represent a statistically minor fraction of the general food pathogen problem, they agree that every effort should be made by the industry to prevent illness due to sprout contamination.

Their recommendations, which are also listed on their website www.isga-sprouts.org, details what stores should do to protect their customers and insure the sprouts they sell are safe for consumers:

- 1) visit the sprouter's facility to check on general sanitation
- 2) request the following from the sprout supplier:
 - a) a copy of the facility's current food processor's registration
 - b) a copy of state or federal inspection findings within the last year
 - c) a statement that the supplier is following the recommended seed disinfection practices using 20,000 parts per million calcium hypochlorite
 - d) a copy of written standard operating procedures (SOPS)
 - e) a copy of written sanitation standard operating procedures (SSOPs)
 - f) a copy of written pest control management procedures
 - g) proof of training in good manufacturing practices within the last year.

The IGSA also recommends that stores and consumers keep sprouts refrigerated at or below 45 degrees F. at all times; observe use-by-dates; and wash sprouts prior to serving. (See home washing instructions below.) The IGSA has established a seal of quality program that allows sprouter farmers to use a special seal on their products if their company has been approved by one of the three current third party certifiers.

At this time, research to ensure the safety of sprouting seeds continues. Researchers are seeking alternatives to the use of chlorine, which, unfortunately, is the only FDA approved method of disinfecting the seeds something that the sprout industry agrees needs to be done given the circumstances of heightened sprout food safety problems and the possibility of a tragic event as occurred with the Odwalla apple juice E.coli 0157:H7 problem.

Organics vs. Sanitation

Some possible alternatives include hot water with the addition of hydrogen peroxide to kill pathogens and the use of ozone as a sanitizer. However, there are not enough tests done yet to ensure that they and other alternative treatments have the same effectiveness of chlorine. The use of chlorine with organic sprouts is currently cancels their organic status. Regretably, at this time,

true organic sprouts will not pass the FDA food safety requirement. Many stores have discontinued organic sprouts for this reason. Also the ISGA, because of its compliance with the FDA, cannot support organic growers.

This is very unfortunate for organic sprout growers who share the commitment to food safety. Organic growers simply disagree about the degree of risk. They believe that bleach is more dangerous to the environment than the protection it offers. They claim that organic farming methods yield clean organic seed that is safe. (Contaminated seed is the source of all salmonella in sprouts.) The HACCP plan (FDA) requires soaking seed in a bleach solution so strong it needed EPA approval. Growers need to wear protective clothing just to use it and object to this approach to the problem because it would mean that the average size grower would be dumping hundreds of gallons of bleach water in local rivers and tributaries on a regular basis.

For more information on what is being done to keep your sprouts safe and nutritious, visit the information section of the ISS sprout growers website at www.sproutnet.com

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