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Back-to-School!



The first important lesson of the school year is packing a safe lunch. All it takes is a quick refresher course:

- Remember to always keep it clean. Wash your hands with warm water and soap for at least 20 seconds before and after handling food. Use hot water and soap to make sure food preparation surfaces and utensils are clean.
- Perishable items (sandwiches, fresh fruit) and shelf-stable items

(crackers, packaged pudding) need to be kept chilled to reduce risk of foodborne illness.

- Rinse all fresh fruits and vegetables under running tap water. Blot dry with a paper towel.
- Prepare sandwiches or other perishable items the night before. Store lunch items in the refrigerator until your child is ready to go to school.
- Insulated, soft-sided lunch totes are best for keeping perishable foods chilled. A cold source, such as a small frozen gel pack or frozen juice box, should be packed with perishable foods. Frozen gel packs will keep foods cold until lunchtime, but are not recommended for all-day storage.

For more tips, see www.fightbac.org/kidsfoodsafety/school-lunches/.

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Fish Oil Supplements Deemed Non-beneficial

Fish oil supplements have been touted as beneficial for the heart and eyes. But, a meta-analysis of 10 clinical trials with almost 78,000 participants showed that the fish oil caplets are of little benefit

to patients with heart disease.

Another study, regarding dry eye disease, also concluded that fish oil supplements are not beneficial. This study compared fish oil supplements with olive oil supplements.

Evidence still supports the benefits of eating eight ounces of fish per week to reduce cardiovascular disease risks.

Sources: Tufts Health & Nutrition Letter, August 2018 and <https://bit.ly/2AR9FVk>

What is Clean Meat?

It sounds like science fiction, but it's not fiction at all. Clean meat may be on your future dining table. Clean meat is also referred to as lab-grown, *in vitro*, or cultured meat. Instead of getting meat from an animal, it comes from cell culture.

With the growing concern of a population increase and less access to agricultural land, clean

meat may become a reality. The term "clean" refers to the sanitary closed system used to produce the product and to ease the minds of consumers who oppose animal slaughter.

The current product looks like ground meat, but has no fat. The goal is to develop a product that mimics whole meat cuts. It begins with a

needle biopsy of starter cells from an animal and are grown *in vitro*. This could be satellite stem cells that only develop into skeletal muscle cells. The cells are placed on culture medium and then placed into a bioreactor to grow.

Many questions are being asked, and answers are yet to be given, including if consumers will eat clean meat, safety, and cost.

Sources:

Is the Future of Meat Animal-Free?, Food Technology, Jan. 2018

www.bestfoodfacts.org/is-synthetic-meat-in-our-future/



September is Food Safety Education Month

Since 1994, food safety has been the focus during the month of September to increase awareness of food safety education.

Once again, Food Safety Education Month (FSEM) is highlighting many topics related to food safety

for consumers and food service workers. Do you create a culture of food safety?

Register now for a FSEM webinar about new, shareable information from the Partnership for Food Safety Education at

<https://bit.ly/2M2QU6m>.

More Fight Bac!® events can be found at www.fightbac.org/events/. For food service workers, look for FSEM resources from ServSafe® at <https://bit.ly/2ff1ia3>.

What is *Bacillus cereus*?

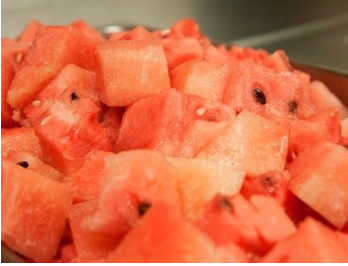
You may have had foodborne illness caused by *Bacillus cereus* and didn't know it. Most people have mild symptoms and it goes away in about a day.

B. cereus can be a serious illness. When consumed through contaminated food, it can cause diarrhea, cramps, nausea and symptoms start in about 6-15 hours. The most common foods it is associated with are rice, but also starchy foods such as potatoes, pasta, cheese products and other food mixtures such as sauces, soups, salads and casseroles.

Temperature control of food is important. If food is left at warm temperatures, *B. cereus* can form spores, which can lead to more bacterial growth and more toxins form. Cooking will kill the bacteria, but may not destroy the toxin. Keep hot foods hot and cold foods cold, wash your hands, and prevent cross-contamination.



www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM297627.pdf

**Sources:**

www.cdc.gov/salmonella/adelaide-06-18/index.html

<https://food.unl.edu/salmonella>

www.fightbac.org/wp-content/uploads/2015/08/ConsumerFact_Sheet.pdf



Pre-Cut Melon and *Salmonella*

This summer, pre-cut melons were recalled due to *Salmonella* contamination. This included pre-cut cantaloupe, watermelon, and a fruit salad mix sold in grocery stores in nine states. While *Salmonella* is usually connected to meat, poultry, or eggs, it may seem unusual for melons. But, melons are not like many other fruits.

Most fruits are considered high acid, or low in acidity with a pH averaging between 3.0 and 4.0. Melons have a pH between 5.0 and 7.0. This makes them a low acid food. *Salmonella* thrives in a pH range of 4.1-9.0. So melons can support the growth of *Salmonella*. It can also grow in a temperature range of 43-115°F. Therefore, in this recall, if temperature abuse occurred at any point, *Salmonella* would grow.

Good handling practices are your best defense. Always scrub and wash melons before cutting them open. Store cut fruit in the refrigerator. Keep it separate from raw meat, poultry, seafood, or eggs. Use clean utensils to serve fresh melons. Wash your hands before and after handling melons or other produce. When buying pre-cut melons or other fresh produce, be sure they are cold and refrigerate promptly.

Symptoms of *Salmonella*

Salmonella is a bacteria that was discovered by an American scientist named Dr. Salmon, and has been known to cause illness for over 125 years.

Most people infected with *Salmonella* develop diar-

rhea, fever, and abdominal cramps between 12 and 72 hours after infection. The illness usually lasts 4 to 7 days, and most individuals recover without treatment. In some cases, diarrhea may be so severe that

the patient needs to be hospitalized. In these patients, the *Salmonella* infection may spread from the intestines to the blood stream, and then to other body sites. In these cases, *Salmonella* can cause death unless the person is treated

promptly with antibiotics. The elderly, infants, and those with impaired immune systems are more likely to have a severe illness.

Learn more at <https://www.cdc.gov/salmonella/>.



Salmonella and Crackers

Two types of crackers were recently recalled due to *Salmonella* contamination from whey powder. While this was a voluntary recall by the whey powder supplier, it highlights another challenge in food manufacturing.

Crackers are baked and that heat will kill *Salmonella*. But the recalled crackers had a topping added after baking that contained the whey powder. Adding the whey after any baking or cooking has occurred, such as the application of seasoning powder, icing, or other topping components that include the whey powder can introduce pathogens such as *Salmonella*. Post-baking contamination has previously been associated with foodborne *Salmonella* outbreaks.

View the list of recalled products at www.fda.gov/Food/RecallsOutbreaksEmergencies/SafetyAlertsAdvisories/ucm614437.htm.

www.fda.gov/Safety/Recalls/ucm614548.htm

Kansas State University
Research & Extension

Rapid Response Center
221 Call Hall
Manhattan, Kansas 66506

Phone: 785-532-1673
Fax: 785-532-3295
Email: kblakesl@ksu.edu

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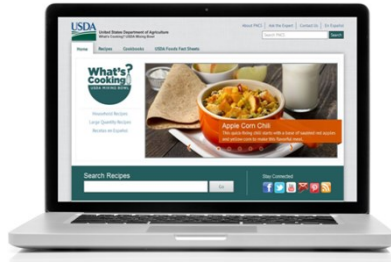
Karen Blakeslee, M.S.



On the Web at
www.rrc.ksu.edu



Electronics and Food Safety



Source: www.fda.gov/Food/FoodborneIllnessContaminants/BuyStoreServeSafeFood/ucm614915.htm

Think about where you use your smartphone, tablet or laptop. Do you use it in the kitchen? If so, the bacteria on those electronic devices could contribute to foodborne illness. While no incidences have been linked to electronic devices, it is good to be aware of the possibility.

In the 2016 Food Safety Survey, conducted by the FDA in collaboration with the USDA, consumers reported taking electronic devices everywhere—work, the bathroom, the gym, shopping, just everywhere. Then they use them in the kitchen, usually to view a recipe to cook. These devices are so integrated into our lifestyles, that the thought of food safety does not relate to the consumer.

What can you do? Wash your hands before and after handling the electronic device to keep hands clean.



Canning Soup

Summer is still in full force, but fall and winter are on their way! Soup is a great way to warm up a chilly day.



For instructions on canning meat, chicken, or turkey stock, see https://nchfp.uga.edu/how/can5_meat.html

Canning soup can be done with ingredients that already have separate canning recommendations. This includes a variety of

vegetables, dried beans or peas, meat, poultry, or seafood

based soups. These soups must be pressure canned.

Caution: Do not add noodles or other pasta, rice, flour, cream, milk or other thickening agents to home canned soups. If dried beans or peas are used, they *must* be fully rehydrated first.

For instructions, see https://nchfp.uga.edu/how/can_04/soups.html and <https://nchfp.uga.edu/publications/nchfp/factsheets/soups.html>