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## Botulism Outbreak in Home-Canned Peas



Learn more about canning foods safely at [www.rrc.k-state.edu/preservation/index.html](http://www.rrc.k-state.edu/preservation/index.html)

It has happened again. Improperly home-canned vegetables have been linked to a botulism outbreak. This was due to improperly canned peas.

In June 2018, three women were hospitalized in New York for respiratory failure and cranial nerve palsies (paralysis). These symptoms led to a diagnosis of botulism. Typical symptoms include nausea, dizziness, blurred vision, slurred speech, ptosis, thick-feeling tongue, and shortness of breath. This diagnosis was after about 14 hours of eating a home-

made potato salad containing the home-canned peas.

The peas were canned 1-2 weeks earlier because of a malfunctioning freezer. A peach preserves recipe that uses the boiling water bath canning method was used by substituting the peaches with the frozen peas. The person who did the canning was a novice and unaware of the risks. After canning, one jar did not seal, and it was refrigerated. But, because of the improper canning method and inadequate heating, none of the jars were safe to consume, including the refrigerated jar.

Plain vegetables and meat require pressure canning to eliminate *C. botulinum* spores. This incident also emphasizes the fact that just because the jar seals, does not mean it is safe!

Read the CDC report on this outbreak at [www.cdc.gov/mmwr/volumes/68/wr/mm6810a5.htm?s\\_cid=mm6810a5\\_w](http://www.cdc.gov/mmwr/volumes/68/wr/mm6810a5.htm?s_cid=mm6810a5_w)

## Preventing Norovirus at Camp

Summer is coming! And many youth are gearing up to go on a camping adventure. Getting sick with norovirus at camp will ruin the fun quickly. Norovirus is contagious and will spread quickly when many people are in one location.

How can norovirus happen? An infected person can spread it with:

- A simple handshake
- Shared food or utensils
- Contaminated food or water

- Unwashed hands that touch contaminated surfaces.

Learn more and download a fact sheet and poster at [www.cdc.gov/norovirus/multimedia.html](http://www.cdc.gov/norovirus/multimedia.html).



## Safe Recipe Style Guide

For most cooks, the menu planning starts with a recipe. These instructions help guide the cook to a successful outcome. Including safe food handling instructions can also help! The Partnership for Food Safety Education has launched a Safe Recipe Style Guide to add text for temperature, hand-

washing, cross contamination and produce handling.

Guidelines for adding food safety text follows the AP Stylebook and from the guidance of food safety experts and leading food journalists.

The Style Guide is for any recipe writer. The text is simple and is add-

ed when appropriate for the recipe. It can be added with the ingredients list or in the directions. All recipe instructions should start with washing hands with soap and water.

For more information, guidance, graphics and more, see [www.saferecipeguide.org](http://www.saferecipeguide.org)

**THE MUST-HAVE INGREDIENT FOR SAFE RECIPES = INSTRUCTIONS**  
When recipes contain food safety instructions, people follow them!

**HANDWASHING BEFORE COOKING**  
Observed Consumer Behavior

**90%** of people wash hands using recipes **WITH** safety instructions.

**59%** of people wash hands using recipes **WITHOUT** safety instructions.

**SAFE RECIPE INSTRUCTIONS**

**90% of people wash hands using recipes WITH safety instructions.**



[www.fsis.usda.gov/ChickenLiver](http://www.fsis.usda.gov/ChickenLiver)

## Cook Chicken Liver Like it's Chicken!

Numerous outbreaks of illness associated with chicken liver have occurred. Most of these outbreaks were caused by the bacteria *Campylobacter* and *Salmonella* and were linked to chicken liver dishes that were:

- Pâté or a similar blended dish (e.g. mousse,

spread, or butter);

- Inadequately cooked; and
- Prepared in a restaurant or other foodservice setting.

Inadequately cooked chicken liver is risky because pathogens can exist

both on the external surface of the liver and in its internal parts. **Chicken liver dishes should be consumed only after being cooked throughout to a safe minimum internal temperature of 165°F (73.9°C).** Additionally, chicken liver should be handled carefully to prevent cross-contamination.

## HBA Educator Award

Do you teach baking in a classroom or community program? You may be eligible to WIN \$1,000!

Each year the [Home Baking Association](http://www.homebaking.org) awards outstanding educators in classrooms and communities who engage individuals, families and communities with the many educational benefits baking provides for personal, family or professional development.

Professionals or adult and youth leaders and volunteers who teach baking skills in classrooms, libraries, public or private organizations, community youth programs, families, and youth teaching peers or younger ages are all eligible.

**Registration deadline is March 31, 2019!**



Learn more and apply at [www.homebaking.org/foreducators/educatoraward.html](http://www.homebaking.org/foreducators/educatoraward.html)

## What is Whole Genome Sequencing?



[www.cdc.gov/pulsenet/pathogens/wgs.html](http://www.cdc.gov/pulsenet/pathogens/wgs.html)

Your fingerprint on your hands is unique to you. So is your DNA sequence. Organisms such as bacteria, viruses and humans are made up of DNA, a composition of bases A, T, C, and G, that give a unique pattern. How those bases are ordered is called sequencing. Therefore, whole genome sequencing identifies the complete order of bases in the genome. For food safety, whole genome sequencing is being used to identify bacterial contamination and how they are linked to a foodborne illness outbreak.

Whole genome sequencing is now available in all 50 states, with the help of the Centers for Disease Control and Prevention, to help health departments expedite foodborne illness outbreaks like never before. It is like comparing all of the words in a book to another book, not just the number of chapters. It is fast, affordable, and can be done in one test.

While whole genome sequencing will not prevent outbreaks, it has greatly improved the speed of investigation and tracking of bacteria related to foodborne illness.



## TV Chefs Short on Food Safety

Food chefs on TV provide entertainment and fun food ideas. But, when it comes to safe food preparation, they fall short.

Viewers follow what they see. When chefs handle raw meat, 88% did not wash their hands afterwards. For meat done-

ness, 75% did not use a thermometer to check the temperature. Chefs are often caught licking their fingers, touching their hair, and using the same cutting board for raw and ready-to-eat foods.

Chefs must keep shows

engaging, navigate time schedules, TV sets and crews, and still be relatable to the audience. Consumers can speak up, make chefs accountable, and focus on recipes with food safety messages.

Source: Ellie Kreiger, M.S., RDN, 2019 Partnership for Food Safety Education conference

**It's about "striking a balance between the steak and the sizzle."**

**-Greg Moyer, former President of Scripps International**

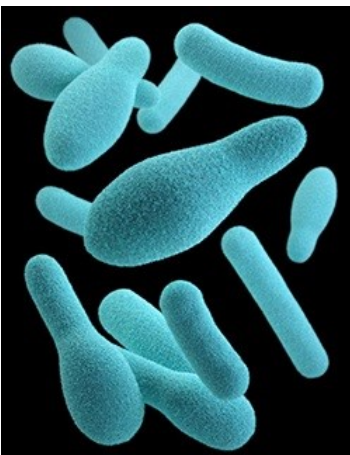


Photo: CDC

## What is *C. botulinum*?

It rarely happens. But, when it does, it can be deadly. The pathogen *Clostridium botulinum* causes botulism. This is because a toxin attacks the body's nerves and causes difficulty breathing, muscle paralysis, and even death. The spores grow and make toxin under the following conditions:

- Low-oxygen or no oxygen (anaerobic) environment
- Low acid, sugar, or salt
- A certain temperature range that support growth of *C. botulinum*

Improperly home-canned foods can provide these conditions to allow *C. botulinum* spores to grow. Learn more about this pathogen at [www.cdc.gov/botulism/index.html](http://www.cdc.gov/botulism/index.html)

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## Start Simple with MyPlate



Do you struggle with making good food choices? Healthy eating can happen with one step at a time. It can be simple!

The U.S. Department of Agriculture has released a new initiative to help consumers meet their health goals. It is called **Start Simple with MyPlate**.

Focus on whole fruits. Add fruit to a bowl of cereal for breakfast or grab one for an easy snack. Don't forget that canned and frozen fruits are great choices when your favorite fresh fruit is not available.

Vary your veggies and think colorfully! Dark green, red, orange, yellow and other colorful veggies add lots of good nutrients to any meal or snack. Prepare extra veggies for a side dish or to use in soup or pasta.

Make half your grains whole grains. This message still holds true! Choose 100% whole grain bread, pasta, crackers, or cereal.

Vary your protein routine. Meat, poultry, fish, seafood, legumes are beneficial. Don't forget to serve veggies and whole grains with your protein choice!

Low-fat or fat-free dairy foods compliment any meal. Be a role model for kids to show dairy foods are healthy!

Learn more at [www.choosemyplate.gov/start-simple-myplate](http://www.choosemyplate.gov/start-simple-myplate).



Karen Blakeslee, M.S.



On the Web at [www.rrc.ksu.edu](http://www.rrc.ksu.edu)



## Recipe Blogs and Food Safety

Food blogs have grown rapidly with social media. These fun and creative food resources have influenced



Photo: [www.pexels.com](http://www.pexels.com)

many home cooks to try new recipes. But, a key ingredient is missing, food safety recommendations.

A recent study, from Ryerson University in Toronto, Canada, reviewed 784 recipes, only 79 included endpoint temperatures for cook-

ing meat, but only 48 of those were correct temperatures. Some of these were paired with improper subjective indicators for doneness.

Of recipes with fresh produce, only 3.3% gave produce washing instructions. Only 4% of the recipes gave instructions to store leftovers safely.

Food bloggers have a great opportunity to help consumers prepare food safely.

Source: Food Protection Trends, Vol 39, No. 1, p. 28-29