

One Team, One Purpose



Food Safety and Inspection Service

Protecting Public Health and Preventing Foodborne Illness

Food Safety and Kidney Disease



Chrystal Okonta, MSPH, CHES

Thanks to our speaker!

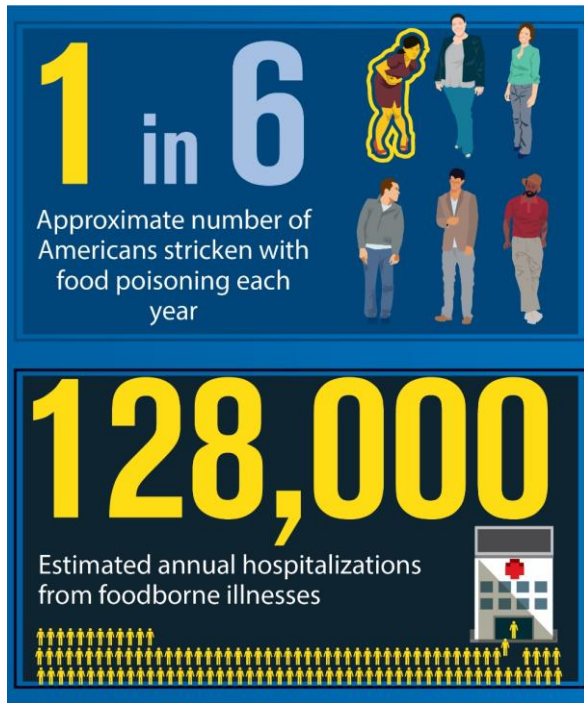


Chrystal Okonta, MSPH, CHES

- Technical Information Specialist for USDA Food Safety and Inspection Service
- In her role, she seeks to protect public health and prevent foodborne illness
- Leads educational efforts to improve the public's knowledge and awareness of food safety

Why Food Safety?

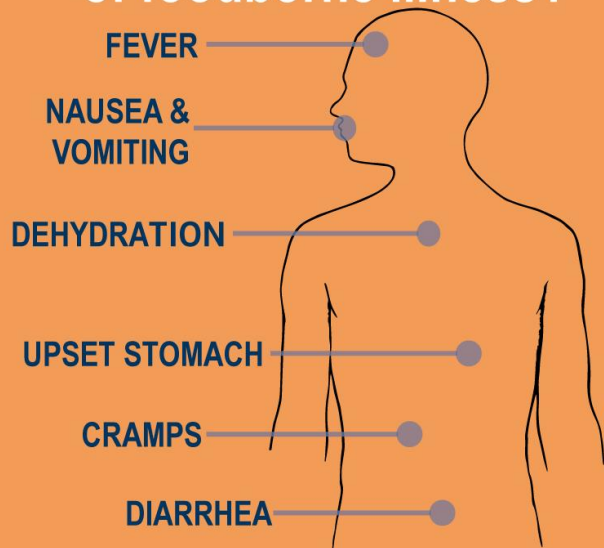
- Foodborne illness is a serious problem in the United States:
 - Sickens 1 in 6 Americans each year
 - Results in about 128,000 hospitalizations
 - Causes about 3,000 deaths each year
 - Costs consumers \$6.9 billion per year
 - Costs the US economy \$15.6 billion per year



Why Food Safety?

Foodborne Illness

What are the **SYMPTOMS** of foodborne illness?



- Common foodborne pathogens (germs):
 - E. coli
 - Listeria
 - Salmonella
 - Campylobacter

Why Food Safety?

Kidney Disease

- Decreased kidney function may lead to increased growth of bacteria
- Kidney disease can affect the immune system, leaving patients more at risk for foodborne illness
 - Symptoms are more likely to last longer or be more severe
- Acid production in the GI tract may be affected in patients with diabetes, causing food to move more quickly through the digestive system
- Suppressing the immune system in transplant recipients can decrease the body's ability to fight off infection from foodborne illness

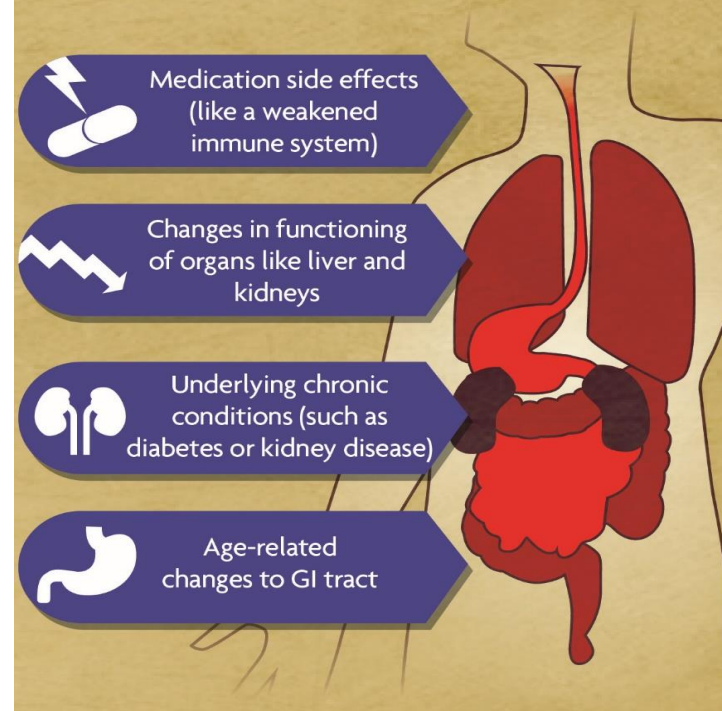
Why Food Safety?

Other At-Risk Populations

- Older adults (65 and older)
- Diabetes patients
- Cancer patients
- Transplant recipients
- *Immuno-compromised individuals*
- *Pregnant women*
- *Children under 5 years*

Why Are You at Risk?

Older adults are at elevated risk for hospitalization and death from foodborne infections. Why?












Why Food Safety?

What Foods May Make You Sick

What May Make You Sick?

Here's a look at some of the most common food pathogens that affect older adults and where they're found:

E. COLI O157:H7	CAMPYLOBACTER	SALMONELLA
 Undercooked ground beef, unpasteurized milk and juices, contaminated raw fruits and vegetables, and water	 Unpasteurized (raw) milk	 Raw or undercooked eggs, poultry or meat
 Person-to-person contact	 Raw or undercooked meat, poultry or shellfish	 Unpasteurized (raw) milk or juice
	 Untreated or contaminated water	 Cheese and seafood
		 Fresh fruits and vegetables

- Some foods are more risky than others
- Foods that are more likely to contain harmful germs fall into **two** categories:
 1. Uncooked fresh fruits and vegetables
 2. Some animal products (raw, undercooked, or processed)

Why Food Safety?

Make Wise Food Choices

- Cook meat, poultry, seafood and eggs to a safe internal temperature
- Wash all produce before preparing or eating
- Avoid raw or unpasteurized milk, cheese and juice; avoid deli salads
- Reheat hot dogs and deli meats to 165°F or until steaming hot

Foods to AVOID



Raw or undercooked meat, poultry, or seafood



Unpasteurized or raw milk



Raw or undercooked eggs



Unwashed fresh produce



Soft cheeses made from unpasteurized (raw) milk



Cold hot dogs & deli meats



Raw sprouts (alfalfa, bean, etc)

Foods to EAT



Meat, poultry, & seafood cooked to a safe internal temperature



Pasteurized milk



Cooked eggs with a firm yolk



Washed fresh or cooked produce



Hard cheeses or soft cheese made from pasteurized milk



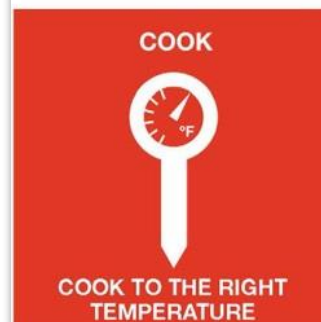
Reheat hot dogs & deli meat to steaming hot or 165 °F



Cooked sprouts

The Four Steps to Food Safety

- Clean
- Separate
- Cook
- Chill



The Four Steps: Clean



- Wash your hands with warm soapy water for **20 seconds**
- Key times to wash hands:
 - Before meal preparation and eating
 - After handling raw meat, poultry, seafood or eggs
 - After using the bathroom, tending to a sick person, handling pets, etc.

The Four Steps: Clean

Proper Handwashing



The Four Steps: Clean

Don't Wash Raw Meat or Poultry

- **DON'T** wash raw meat or poultry before cooking!
- Washing raw meat and poultry can spread illness-causing bacteria to kitchen sinks and surfaces
- **CLEAN** inner sink and kitchen surfaces with warm soapy water
- Then, **SANITIZE** with a sanitizing solution or sanitizing wipes



The Four Steps: Separate



- Keep raw meat, poultry and seafood away from raw produce and other ready-to-eat foods
 - Keep them separate in your grocery cart and shopping bags
 - Store separately in the refrigerator

The Four Steps: Separate

During Meal Preparation

During Meal Preparation

- Use separate utensils and cutting boards:
 - One for raw produce
 - One for raw meat, poultry and seafood
- Clean and sanitize knives, cutting boards, and other utensils between use
- Never place cooked food on the same plate that held raw food



The Four Steps: Separate

Cross-Contamination

Cross-Contamination

- Kitchen towels are a major source for cross contamination in the kitchen
 - Wash towels frequently in hot water to remove bacteria
- Contaminated spice containers, faucets, and refrigerator doors can also carry bacteria
 - Wash hands well after handling raw meat



The Four Steps: Cook



- Cooking to a safe internal temperature will destroy food poisoning bacteria
- Always use a food thermometer
- Color is not a reliable indicator of doneness

The Four Steps: Cook

Safe Internal Temperatures

USDA United States Department of Agriculture

"Is it *done* yet?"

You can't tell by looking. Use a food thermometer to be sure.

USDA-Recommended Safe Minimum Internal Temperatures

145°F	145°F	160°F	160°F	165°F
with a 3-minute rest time				
				
Beef, Pork, Veal & Lamb Steaks, Roasts & Chops	Fish	Beef, Pork, Veal & Lamb Ground	Egg Dishes	Turkey, Chicken & Duck Whole, Pieces & Ground

www.FoodSafety.gov

USDA Meat & Poultry Hotline: 1-888-MPHotline (1-888-674-6854)
Chat or email us at AskKaren.gov

PregunteleaKaren.gov y pregunte sobre el manejo adecuado de los alimentos

Food Safety and Inspection Service

USDA is an equal opportunity provider, employer, and lender

July 2005
Slightly Revised May 2018

Icons: CLEAN, SEPARATE, COOK, CHILL, and social media links for Facebook, Twitter, YouTube, and Instagram.

The Four Steps: Chill



- Put all leftover food in the refrigerator within 2 hours after cooking
 - Within 1 hour if temperatures are above 90°F
- Set refrigerator to 40°F or below; Set freezer to 0°F or below
- No need to wait for leftovers to cool to room temperature before refrigerating

The Four Steps: Chill

The Danger Zone (40° to 140° F)



Keep Hot Food Hot

- Store hot food in warming drawer of oven, chafing dishes, or slow cookers until ready to serve
- Keep at **140°F or warmer**

Keep Cold Food Cold

- Put cold side dishes on beds of ice
- Serve small amounts at a time and leave the rest in the fridge until serving
- Keep at **40°F or cooler**

The Four Steps: Chill

Safe Storage Times

Storage Times

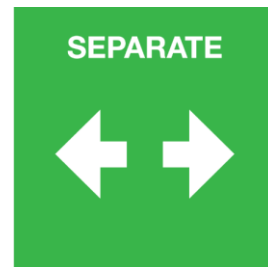
- Use all refrigerated leftovers **within 3-4 days**
- Frozen leftovers are safe for a long time, but at best quality **for 2-6 months**



The Four Steps to Food Safety

Summary

- **Clean:** Wash your hands and surfaces often
- **Separate:** Keep raw meat and poultry away from other food
- **Cook:** Cook to the right temperature and use a food thermometer
- **Chill:** Refrigerate your food on time



Foodborne Illness

During Holiday Meals – Thanksgiving

Foodborne Illness Can Occur Because...

- Larger amount of food prepared
- Opportunities for cross-contamination
- Foods left out in the “Danger Zone” too long
- Undercooking of meat and poultry
- Guests with higher risk of foodborne illness



Fresh or Frozen?

Thanksgiving Turkey

FROZEN

- Purchase 1 pound of turkey per person
- Best quality within 12 months
 - Safe for a long time
- Only purchase frozen pre-stuffed turkeys

FRESH

- Purchase 1 pound of turkey per person
- Buy 1 to 2 days before you plan to cook
 - Or check manufacturer's label for date through Thanksgiving
- **Do NOT purchase fresh pre-stuffed turkeys**

Three Ways to Safely Thaw

Thanksgiving Turkey

Refrigerator:

Safe to store the turkey for another 1 – 2 days in the refrigerator.

This is the USDA recommended thawing method.

How to thaw:

Allow approximately 24 hrs. for every 4-5lbs of bird.



BEST

Keep turkey in original wrapper, place on tray to catch juices

Cold water:

Cook immediately after thawing.

How to thaw:

Submerge the bird in cold water & change every 30 mins.



Good

Allow 30 minutes of thawing per pound

Microwave:

Cook immediately after thawing.



How to thaw:

Use defrost function based on weight

Good

Check owner's manual for minutes per pound

The Four Steps: Clean

Thanksgiving



- Wash hands for 20 seconds before meal preparation and after handling raw turkey, meat, or eggs
- Sanitize any surface that comes into contact with raw turkey with a sanitizing solution
- Homemade sanitizing solution:
 - 1 tablespoon bleach per 1 gallon of water

The Four Steps: Separate Thanksgiving



- Prevent cross-contamination of foods, hands or equipment
- Keep raw turkey away from ready-to-eat food
- Use separate cutting boards, knives, and other utensils for raw turkey

The Four Steps: Cook Thanksgiving



- Done at **165°F** in three places:
 - Innermost part of thigh
 - Innermost part of wing
 - Thickest part of breast
- Safest **not** to stuff a turkey
 - Cook stuffing to **165°F** as well
- Safe to cook a frozen turkey
 - Cooking will take ~50% longer than thawed turkey

The Four Steps: Cook

Thanksgiving Turkey



- Set oven temperature no lower than **325°F**
- Even if “pop-up” says done, check with a food thermometer in all three places
- Let turkey stand for 20 minutes before carving
- No “interrupted cooking”

The Four Steps: Chill

Thanksgiving



- Do not leave food at room temperature for **more than 2 hours**
 - Store leftovers in small, shallow containers
 - Leftover turkey should be carved into smaller pieces
- Use all refrigerated leftovers within **3 to 4 days**
 - Freeze for longer storage
- Reheat **leftovers to 165°F**
 - To keep turkey moist, add broth or water

Thanksgiving

Cooking for Groups

Cooking for Groups

Reheating Food
Reheat cooked food to at least **165 °F**
In the microwave
On the stove top

Keep Hot Food Hot
Cooked food should be held at or above **140°F**
Use heated chafing dishes, warming trays, or slow cookers to keep hot food hot

Keep Cold Food Cold
Store food in the refrigerator at **40°F** or below
Place cold food in containers on ice to keep food below **40°F**

Serving Food
Use clean containers and utensils to serve food

Two-Hour Rule
If perishable food is kept at room temperature, do not leave it out for more than **2 hours**

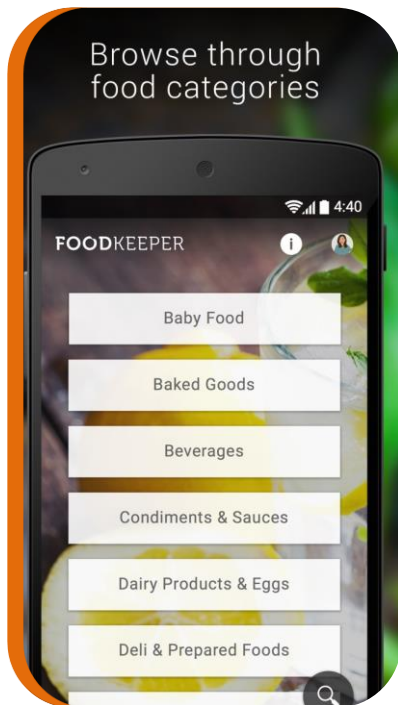
What is the DANGER ZONE?
Temperature range (between 40 °F and 140 °F) where bacteria multiplies quickly.

DANGER ZONE
140° F
40° F

USDA
Ad Council
ADDITIONAL SOURCE CDC
For more summer food safety tips, go to **FoodSafety.gov**
USDA IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER

The FoodKeeper App

Resources



Includes:

- Tips to **prevent food waste**
- Storage advice on more than **600 food and beverage items**
- **Cooking advice** for meat and poultry
- **Recall** information

Technical Features:

- Syncs to your **calendar**
- Access to **food safety questions**

USDA Meat and Poultry Hotline

Resources



Open Monday – Friday: 10 am to 6 pm ET
On Thanksgiving Day: 8 am to 2 pm ET

1-888-MPHotline

(1-888-674-6854)

Live Chat: **ask.usda.gov**

Email: **MPHotline@usda.gov**

Resources



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www.FoodSafety.gov
**(in partnership with
FDA and CDC)**



FoodKeeper App



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Thank you!

Webinar: Food Safety and Kidney Disease

Special thanks to:
American Kidney Fund!

Questions?



Join us for our next webinar!



Ken Sutha, MD, PhD



Bayli Park

Balancing Kidney Disease: Teenage Perspective

Thursday, December 12, 2019 from 6:00 – 7:00 p.m. EST

Join our speakers to hear more about their:

- Their journey with kidney disease and transplant
- Answers to common questions from teens
- Resources for teens

Go to www.KidneyFund.org/webinars to
learn more and register!