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

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Why Food Safety?

Foodborne Illness

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

- Fever
- Nausea & Vomiting
- Dehydration
- Upset Stomach
- Cramps
- Diarrhea

- Common foodborne pathogens (germs):
  - E. coli
  - Listeria
  - Salmonella
  - Campylobacter
• 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 Food Safety?

What Foods May Make You Sick

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

97% of attempts to wash hands failed.*

Five steps for handwashing:
1. Wet hands
2. Lather with soap
3. Scrub for at least 20 seconds
4. Rinse
5. Dry with clean towel

*In-Home Food Safety Behaviors and Consumer Education: Results of Year 1 Observational Meal Preparation Experiment
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

- 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

“Is it done yet?”
You can’t tell by looking. Use a food thermometer to be sure.

USDA-Recommended Safe Minimum Internal Temperatures

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>145°F</td>
<td>Beef, Pork, Veal &amp; Lamb Steaks, Roasts &amp; Chops</td>
</tr>
<tr>
<td>145°F</td>
<td>Fish</td>
</tr>
<tr>
<td>160°F</td>
<td>Beef, Pork, Veal &amp; Lamb Ground</td>
</tr>
<tr>
<td>160°F</td>
<td>Egg Dishes</td>
</tr>
<tr>
<td>165°F</td>
<td>Turkey, Chicken &amp; Duck Whole, Pieces &amp; Ground</td>
</tr>
</tbody>
</table>

www.FoodSafety.gov

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

PreguntelenKaren.gov y pregunte sobre el manejo adecuado de los alimentos
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
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**

"Are these leftovers still good?"  
There's an app for that.
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 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.

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
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
Thank you!

Webinar: Food Safety and Kidney Disease

Special thanks to:
American Kidney Fund!
Questions?
Join us for our next webinar!

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

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