The Importance of Food Safety

Developed by: Helenka Ostrum
Special Programs Specialist

Presented by: Jon Huss
Assistant Director

01

Importance of Food Safety

Preventing Foodborne Illness

02

Food Safety Starts with You

Employee Health and Personal Hygiene

03

4 Steps to Food Safety

Clean, Separate, Cook and Chill

04

Store, Transport and Serve Food Safely

01

Importance of Food Safety

Preventing Foodborne Illness

02

Food Safety Starts with You

Employee Health and Personal Hygiene

03

4 Steps to Food Safety

Clean, Separate, Cook and Chill

04

Store, Transport and Serve Food Safely

Importance of Food Safety

Preventing Foodborne Illness

Common Symptoms:

- ❑ Nausea, vomiting, stomach cramps, and diarrhea

Top 5 Common Foodborne Organisms:

- ❑ Norovirus
- ❑ Salmonella
- ❑ Clostridium perfringens
- ❑ Campylobacter
- ❑ Staphylococcus aureus (Staph)

Source: Fightbac.org

Centers for Disease Control (CDC) estimates that each year:

- ❑ 48 million people get sick from a foodborne illness
- ❑ 128,000 are hospitalized
- ❑ 3,000 die

Preventing Contamination

01 Biological

Pathogens/Microorganisms

- ❑ Bacteria, Viruses, Parasites, Fungi

Toxins

- ❑ Naturally occurring toxins in plants or seafood
- ❑ Some pathogens produce toxins

02 Chemical

Chemical materials or excessive/unapproved food additives and preservatives not intended to be in the food

03 Physical

Any foreign material or natural objects not intended to be in the food (i.e. hair, glass, plastic)

01

Importance of Food Safety

Preventing Foodborne Illness

02

Food Safety Starts with You

Employee Health and Personal Hygiene

03

4 Steps to Food Safety

Clean, Separate, Cook and Chill

04

Store, Transport and Serve Food Safely

Food Safety Starts with You!

Employee Health and Personal Hygiene

Staff that handle food should:

- ❑ Dress in clean clothes
- ❑ Keep fingernails trimmed
- ❑ Tie hair back or wear a hair net
- ❑ Bandage wounds and cover with single use glove
- ❑ Wear single use glove when touching ready-to-eat foods
- ❑ Wash hands properly and frequently

Employees should wash hands:

Before

- ❑ Working with food
- ❑ Putting on or changing disposable gloves, and
- ❑ Handling clean dishes, equipment, and utensils

- Employees should wash hands:

After

- ❑ Using the rest room
- ❑ Sneezing, coughing, or using a handkerchief or tissue
- ❑ Touching hair, face, or body
- ❑ Handling raw meats, poultry, or fish
- ❑ Eating, drinking, or chewing gum

- Employees should wash hands:

After

- ❑ Cleaning up – sweeping, mopping, or wiping counters
- ❑ Touching dirty dishes, equipment, or utensils
- ❑ Handling cash registers or money
- ❑ Handling phones or cell phones
- ❑ Handling trash
- ❑ Any instance in which hands become contaminated

• Food Safety Starts with You!

Employee Health and Personal Hygiene

Staff should report the following symptoms or conditions to supervisors:

- ❑ Diarrhea or vomiting
- ❑ Sore throat with fever
- ❑ A cut or wound on hands or arms
- ❑ Foodborne illness diagnosis
- ❑ Jaundice

01

Importance of Food Safety

Preventing Foodborne Illness

02

Food Safety Starts with You

Employee Health and Personal Hygiene

03

4 Steps to Food Safety

Clean, Separate, Cook and Chill

04

Store, Transport and Serve Food Safely

What are some Food Safety Risk Factors?

Some Food Safety Risk Factors

Poor personal hygiene

Step 1: Clean

✓ Wash hands and surfaces often

Wash hands with warm water and soap for 20 seconds, rinse and dry with a clean towel or cloth

- ❑ Tip: sing the “Happy Birthday” song twice

Clean surfaces

- ❑ Clean food preparation surfaces, chopping boards and kitchen utensils with hot water and soap to prevent cross-contamination

Rinse produce under running water

- ❑ Wash the whole fruit with the peels on so bacteria on the surface does not get inside when you cut

Step 1: Clean

✓ Cleaning and Sanitizing

Cleaning is removing food, grease, sauces, dirt and dust from a surface, generally with a detergent and water

Sanitizing is the reduction of bacteria and viruses that may be on a surface with a special solution

- ❑ Sanitize food preparation areas, tables, countertops, cutting boards, drying racks, and sinks
- ❑ Allow items to air dry

Follow State and local health department requirements

Watch for 5 min 30 sec https://www.youtube.com/watch?v=I5-dI74zxPg

Clean Hands Keep You Healthy

Wash your hands with soap and water for 20 seconds.

What are some Food Safety Risk Factors?

Poor personal hygiene

Food from unsafe sources

Step 2: Separate

✓ Don’t cross-contaminate

Prevent bacteria from spreading by following these tips:

- ❑ Separate raw meat, poultry, seafood and eggs away from other foods. This applies when transporting, storing, and cooking food.
- ❑ Use separate cutting boards, utensils and plates for raw meat, poultry, and seafood.

What are some Food Safety Risk Factors?

Poor personal hygiene

Food from unsafe sources

Failing to cook food adequately

Step 3: Cook

✓ Cook to the safe internal temperature

Don’t rely on color and texture to determine if a food is safe to eat!

Use a food thermometer to make sure meat, poultry and egg dishes are cooked to a safe internal temperature

- ❑ Place food thermometers in the thickest part of the food, avoiding bone, fat and gristle
- ❑ Clean the thermometer with hot water and soap after use

Food Thermometers

Checking food temperatures is only useful if your thermometer is accurate. Make sure to calibrate your thermometers regularly.

When do you calibrate a thermometer?

- ❑ Daily or at least weekly
- ❑ If a thermometer is dropped
- ❑ Follow State or local health department guidelines

Best practice: Record when you calibrate thermometers on a log sheet.

Step 3: Cook

✓ Cook to the safe internal temperature

Food should reach the appropriate temp. for a minimum of 15 seconds.

Food	Internal Temp (°F)
Poultry (breasts, whole bird, legs, thighs, wings, ground poultry, giblets)	165°F
Leftovers and casseroles	165°F
Ground beef, pork, veal, lamb	160°F
Egg and egg dishes (frittata, quiche)	160°F cook eggs until yolk and white are firm
Fresh beef, pork, veal and lamb (steaks, roasts, chops)	145°F (Rest time: 3 min)
Fish	145°F or cook until flesh is opaque and separates easily with a fork
Fresh, frozen or canned fruits and vegetables that will be held hot prior to service	135°F
Shrimp, lobster, crab and scallops	Cook until flesh is pearly or white and opaque
Clams, oysters, mussels	Cook until shells open during cooking

Food Safety Risk Factors

Poor personal hygiene

Food from unsafe sources

Failing to cook food adequately

Improper time and temperature control

Time/Temperature Control for Safety Food (TCS) – formerly Potentially Hazardous Food (PHF)

A **TCS food** is a type of **food** that is predisposed to pathogenic growth.

A food item is determined to be a TCS Food by considering FAT-TOM:

- ❑ Food
- ❑ Acidity
- ❑ Temperature
- ❑ Time
- ❑ Oxygen
- ❑ Moisture

Examples:

Eggs, Dairy Products, Cut Leafy Greens, Cut Fresh Tomatoes, Cooked Vegetables and Fruit, Fish and Shellfish, Meat and Poultry, Sprouts, Baked Potatoes, Cooked Rice and Beans.

The Danger Zone

41ºF - 135ºF

Bacteria can multiply rapidly if left at room temperature or in the “Danger Zone” between 41°F and 135°F. Under the right conditions, one bacterium can become a billion in 10 hours.

Step 4: Chill

✓ Refrigerate and freeze food properly

Set refrigerator temperature at 41ºF or below

- ❑ Refrigerate or freeze perishable food, prepared foods and leftovers within 2 hours of purchase or use (or 1 hour if it's hotter than 90°F).

Keep your refrigerator clean

- ❑ Minimize cross-contamination by wiping spills immediately and cleaning the fridge with hot water and soap.

Do not overstuff your refrigerator

- ❑ Cold air needs to circulate.

Step 4: Chill

✓ Cold Storage Principles

- ❑ Separate leftovers into small shallow containers for faster cooling
- ❑ Date mark
- ❑ Tightly wrapped or in closed container
- ❑ Store **6** inches above the floor
- ❑ Check temperatures of food and units often
- ❑ Maintain internal temperature of 41°F or below
- ❑ Do not overload and keep doors closed tightly

Step 4: Chill

Store foods in the refrigerator based on internal cooking temperatures of each food

- ❑ Ready-to-eat foods above raw food
- ❑ Raw poultry on bottom

Refrigerator or Cooler	
Cut items such fruits and vegetables or ready-to-eat items that will be served without being cooked first	Top Shelf (lowest cooking temp.)
Any food that that will be hot held and is not in other categories such as fruits and vegetables 135°	
Items such as roast, steak, pork chops, or fish 145°	
Ground meats 160°	
Poultry, stuffed meats, or leftovers 165°	Bottom Shelf (highest cooking temp.)

Cooling Food Safely

Cooling Methods:

- ❑ Place food in shallow pans
- ❑ Separate food into smaller portions
- ❑ Using rapid cooling equipment (chill sticks/ice paddles)
- ❑ Stirring the food in a container placed in an ice water bath
- ❑ Blast chillers (do not put hot foods in the refrigerator or freezer)

Example of a cooling method

Example of a cooling method

Source: USDA SFSP Nutrition Guide

Cooling Food Safely

Hot food shall be cooled:

- ❑ Within 2 hours from 135ºF to 70ºF and
- ❑ Within a total of 6 hours from 135ºF to 41ºF or less

Room temperature food shall be cooled:

- ❑ Within 4 hours to 41ºF or less

Methods to Thaw Food

Never thaw food at room temperature – harmful bacteria can multiply rapidly at room temperature.

In 20 minutes, the number of bacteria can double.

- **Thaw food in a refrigerator**
  - **Safest Method**
- **Thaw in cold running water**
- **Thaw in the microwave** if food will be cooked immediately. Follow the instructions in your owner's manual for thawing.

01

Importance of Food Safety

Preventing Foodborne Illness

02

Food Safety Starts with You

Employee Health and Personal Hygiene

03

4 Steps to Food Safety

Clean, Separate, Cook and Chill

04

Store, Transport and Serve Food Safely

Store Food Safely

Storing Food tips:

- ❑ Date mark containers and include name of food on label
- ❑ Discard all TCS foods within 7 days
- ❑ Use First in First Out method (FIFO)
- ❑ Six-inch rule (food stored six inches off the floor and away from the wall)

Store food at proper temperatures:

- ❑ Store refrigerated foods at 41°F or below
- ❑ Store frozen foods at 0°F or below
- ❑ Store dry foods 50°F - 70°F

Transport Food Safely

Transporting Food Tips:

- ❑ Maintain proper temperatures (storage and cooking)
- ❑ Separate raw and ready-to-eat foods
- ❑ Clean and sanitize vehicles, food-contact surfaces, utensils and equipment
- ❑ Date mark and label food with instructions
- ❑ Provide handwashing facilities
- ❑ A full cooler will stay colder longer than a partially filled cooler. Fill extra space with ice packs.
- ❑ Pack drinks separately from food so food cooler is opened less frequently

Source: USDA SFSP Nutrition Guide

Serve Food Safely

Serving Tips:

- ❑ Keep hot foods hot at 135°F or above
- ❑ Keep cold foods cold at 41°F or below
- ❑ Use clean utensils to serve each food
- ❑ Do not mix fresh food and food being served
- ❑ Perishable food should not be left out more than 2 hours at room temperature (or 1 hour if it's hotter than 90°F) – additional guidance depending on the temperature of food when it is put out. Check with your health department.

Summary: Four Steps to Food Safety

safe internal temperature

Wash hands and surfaces often

Don’t cross-contaminate

Refrigerate promptly

Texas Public Health Departments

- Some Texas counties and cities are covered by local health departments, others are covered by regional health departments.
- SFSP CEs must notify the appropriate health department(s) in writing of all prospective summer site locations.
- Visit www.squaremeals.org/foodsafety for food safety materials for CEs and links to Department of State Health Services (DSHS) Public Health Coverage Map.
- Subject to the Texas Food Establishment Rules (TFER)

Food Safety Resources

TDA

www.SquareMeals.org/FoodSafety

Federal Food Safety Information

www.foodsafety.gov

U.S. Food and Drug Administration (FDA)

www.fda.gov/food

Texas Department of State Health Services

www.dshs.texas.gov

Institute of Child Nutrition (ICN)

www.theicn.org/icn-resources-a-z/food-safety

Fight Bac

www.fightbac.org

For additional information on food safety for CACFP

www.SquareMeals.org/FoodSafety

Community.Ops@TexasAgriculture.gov

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, sex, disability, age, or reprisal or retaliation for prior civil rights activity in any program or activity conducted or funded by USDA.

Persons with disabilities who require alternative means of communication for program information (e.g. Braille, large print, audiotape, American Sign Language, etc.), should contact the Agency (State or local) where they applied for benefits. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, (AD-3027) found online at: http://www.ascr.usda.gov/complaint_filing_cust.html, and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by:

mail:
U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410;

fax: (202) 690-7442; or email: program.intake@usda.gov.

This institution is an equal opportunity provider.