Food Safety

Food Safety

- The US food supply is among the safest in the world.
- However, foodborne illness continues to be a national public health issue.

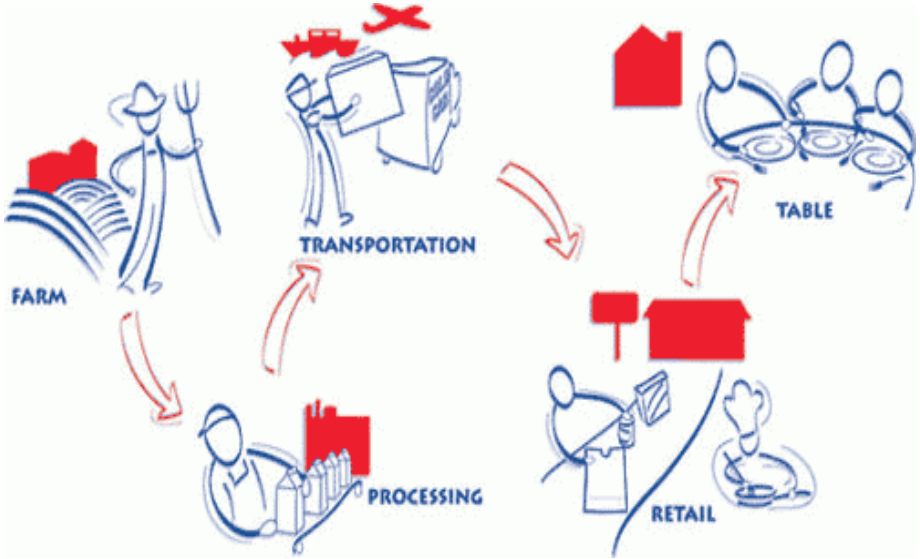
What is foodborne illness?

- An infection or illness often caused by bacteria or a virus which is transmitted by food.
- An important warning sign of foodborne illness is bloody diarrhea. Other common acute symptoms, which can range from mild to severe, are: diarrhea, cramps, nausea, fever, vomiting, and body aches.

Food Safety is Farm-to-Table

- Each stop along the farm-to-table chain plays a role in ensuring that our nation's food supply is fresh, of high quality, and safe from hazards. If a link in this chain is broken, the safety and integrity of our nation's food supply can be threatened.

The Five Farm-to-Table Steps



What can you do to keep food safe?

- Fight Bac! And Be Food Safe
  - Clean
  - Separate
  - Cook
  - Chill
- www.fightbac.org
- http://www.fsis.usda.gov/Be_Food Safe/

be food safe™
from USDA
and the Partnership
for Food Safety Education

Clean

- **Wash your hands** with warm water and soap **for at least 20 seconds** before and after handling food and after using the bathroom and handling pets
- Wash your cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item and before you go on to the next food.

Separate

- **Separate raw meat, poultry, seafood and eggs from other foods** in your grocery shopping cart, grocery bags and in your refrigerator.
- Use one cutting board for fresh produce and a separate one for raw meat, poultry and seafood.
- Never place cooked food on a plate that previously held raw meat, poultry, seafood or eggs.

Cook

- Use a **food thermometer** which measures the internal temperature of cooked meat, poultry and egg dishes, to make sure that the food is cooked to a safe internal temperature.

- **Cook roasts and steaks** to a minimum of **145°F**. All **poultry** should reach a safe minimum internal temperature of **165°F** as measured with a food thermometer. Check the internal temperature in the innermost part of the thigh and wing and the thickest part of the breast with a food thermometer.

Cook

- Cook ground meat, where bacteria can spread during grinding, to at least **160°F**. Information from the Centers for Disease Control and Prevention (CDC) links eating undercooked ground beef with a higher risk of illness. **Remember, color is not a reliable indicator of doneness. Use a food thermometer to check the internal temperature of your burgers.**

Cook

- Cook eggs until the yolk and white are firm, not runny. Don't use recipes in which eggs remain raw or only partially cooked.
- Make sure there are no cold spots in food (where bacteria can survive) when cooking in a microwave oven. For best results, cover food, stir & rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking.

Chill

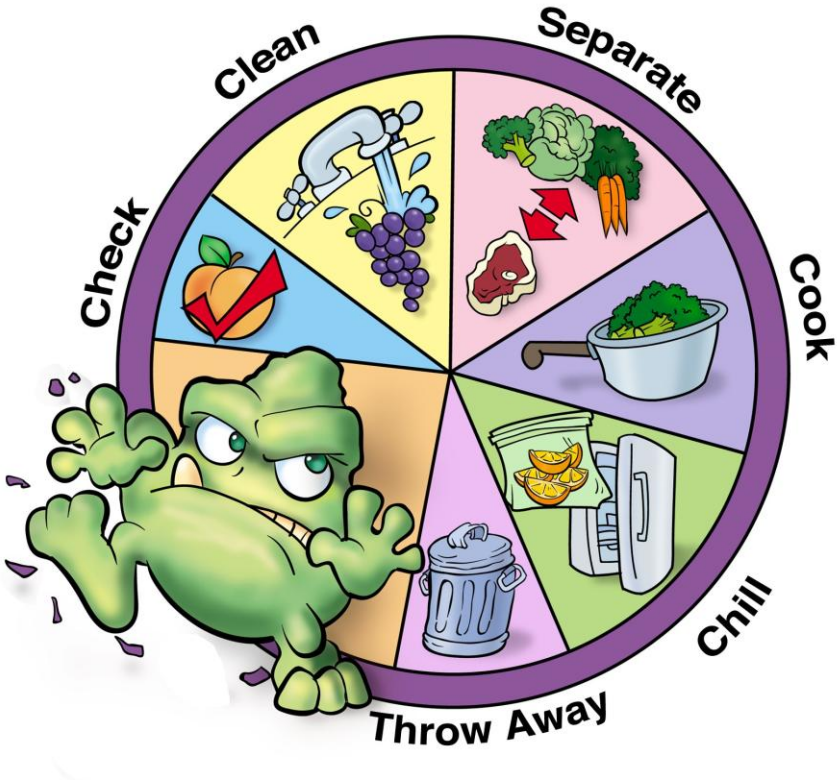
- Refrigerate or freeze meat, poultry, eggs and other perishables as soon as you get them home from the store.
- **Never let raw meat, poultry, eggs, cooked food or cut fresh fruits or vegetables sit at room temperature more than two hours** before putting them in the refrigerator or freezer (one hour when the temperature is above 90°F).

Chill

- Never defrost food at room temperature. Food must be kept at a safe temperature during thawing. There are three safe ways to defrost food: in the refrigerator, in cold water, and in the microwave. **Food thawed in cold water or in the microwave should be cooked immediately.**
- Always marinate food in the refrigerator.
- Divide large amounts of leftovers into shallow containers for quicker cooling in the refrigerator.
- Use or discard refrigerated food on a regular basis.

Safe Handling of Fresh Fruits and Vegetables

- Check
- Clean
- Cook
- Separate
- Chill
- Throw away



Check

- **Check** to be sure that the fresh fruits and vegetables you buy are not bruised or damaged.

Clean

- **Wash** hands with warm water and soap for at least 20 seconds before and after handling fresh fruits and vegetables.
- **Clean** all surfaces and utensils with hot water and soap, including cutting boards, counter tops, peelers and knives that will touch fresh fruits or vegetables before and after food preparation.

Clean

- **Rinse** fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten. Packaged fruits and vegetables labeled “ready-to-eat”, “washed” or “triple washed” need not be washed.

Separate

- When shopping, be sure fresh fruits and vegetables are **separated** from household chemicals, and raw foods such as meat, poultry, and seafood in your cart and in bags at checkout.
- Keep fresh fruits and vegetables **separate** from raw meat, poultry, or seafood in your refrigerator.

Separate

- **Separate** fresh fruits and vegetables from raw meat, poultry and seafood. Do not use the same cutting board without cleaning with hot water and soap before and after preparing fresh fruits and vegetables.

Cook

- **Cook** or throw away fruits or vegetables that have touched raw meat, poultry, seafood or their juices.

Chill

- **Refrigerate** all cut, peeled or cooked fresh fruits and vegetables within two hours.

Throw Away

- **Throw away** fresh fruits and vegetables that have not been refrigerated within two hours of cutting, peeling, or cooking.
- **Remove and throw away** bruised or damaged portions of fruits and vegetables when preparing to cook them or before eating them raw.
- **Throw away** any fruit or vegetable that will not be cooked if it has touched raw meat, poultry or seafood.
- **If in doubt, throw it out!**

What do food scientists do to keep foods safe?

- There are many things food scientists do to keep your foods safe.
- There are several formal processes which help food scientists prevent food borne illness in processed foods. These include:
  - GAP: Good Agricultural Practices
  - GHP: Good Handling Practices
  - GMP: Good Manufacturing Processes
  - HACCP: Hazard Analysis Critical Control Points

What do food scientists do to keep foods safe?

- When formulating a product, food scientists use “hurdle technology” which means they use a combination of preservation methods so that microorganisms have several hurdles they must get over in order to grow and cause illness.

- Some of these methods include:
  - Heating
  - Chilling
  - Drying
  - Curing
  - Acidification
  - oxygen-removal
  - Fermenting
  - Adding preservatives, etc.

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