December 2016 Health Notes by Evelyn Ames

Preventing Food Poisoning in the Kitchen!

What a person does in cleaning and preparing food and cleaning countertops, sinks, and hand towels in the kitchen affects the odds of contracting a foodborne illness. Foodborne illness is a common, costly—yet preventable—public health problem. Centers for Disease Control and Prevention (CDC) estimates that 1 in 6 Americans get sick from contaminated foods or beverages and 3,000 die each year. The U.S. Department of Agriculture (USDA) estimates that foodborne illnesses cost $15.6 billion each year. Over 250 different foodborne diseases, caused by bacteria, viruses, and parasites, are described in the public health literature. The microbes enter through the gastrointestinal tract with the first common symptoms being nausea, vomiting, abdominal cramps and diarrhea. Sometimes people say they have the "stomach flu" but more likely it is a foodborne illness.

The majority (75%) of identified foodborne illnesses are of bacterial origin with the three most common pathogens being Staphylococcus food poisoning, Clostridium perfringens poisoning, and Salmonella poisoning. Incubation periods and symptoms help distinguish among these three.

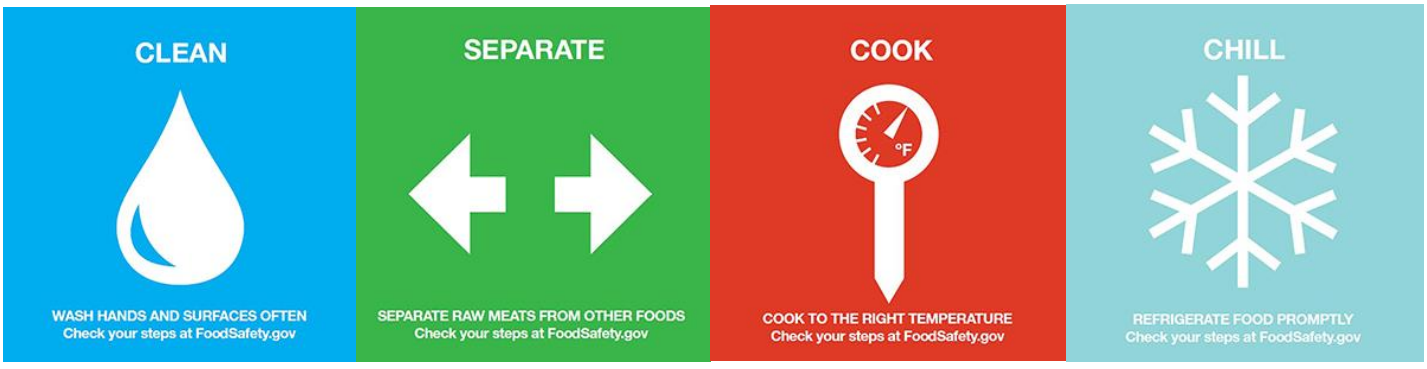
Illness	Incubation Period	Fever	Vomiting	Diarrhea	Duration
Staphylococcal poisoning	1-6 hr	no	yes	yes/no	24-48 hr
Clostridium perfringens	6-24 hr	no	no	yes	24 hrs
Salmonella infection	12-72 hr	yes	yes/no	yes	4-7 days

Frequently incriminated foods for above common pathogens:

- Staphylococcus: meat and meat products, poultry and egg products, salads (egg, tuna, chicken, potato, macaroni), bakery products (cream-filled pies), and milk and dairy products.
- Clostridium: temperature abuse of prepared foods, meats and meat products, and gravy.
- Salmonella: raw meats, poultry, eggs, milk and dairy products, fish, shrimp, frog legs, yeast, coconut, sauces and salad dressings, cake mixes, peanut butter, cocoa and chocolate, and cream-filled desserts and toppings.

Food Safety Tips for the Home:

- Store cooked food in wide, shallow containers and refrigerate as soon as possible.
- Wash hands and under fingernails thoroughly with soap and water before handling and preparing food.
- Do not prepare food if ill.
- If you have wounds or infections on your hands or wrists, wear gloves while preparing food.
- Keep kitchens and food serving areas clean. Do not use the same hand towel for wiping/drying hands as the one used to dry dishes. The towel for drying dishes should not be used to wipe counters and table tops.
- If food is to be stored longer than two hours, keep hot foods hot (warmer than 140°F) and cold foods cold (40°F or colder).



CLEAN: Wash hands and surfaces often. Rinse fresh fruits and vegetables under running water.
SEPARATE: Raw meat, poultry, seafood, and eggs can spread germs to ready-to-eat foods, unless kept separate.
COOK: Cook to the right temperature. Use a food thermometer to ensure foods are cooked to a safe internal temperature: 145°F for whole meats (allowing the meat to rest for 3 minutes before carving or consuming), 160°F for ground meats, and 165°F for all poultry. **CHILL:** Keep refrigerator below 40°F and refrigerate foods properly.

Sanitizing kitchen sponges using microwave or dishwasher: Michigan State University Extension suggests the following steps for using the microwave: (consider doing this once a week)

- Sponges that have metallic scrub pads should not be disinfected/sanitized in the microwave, but can be placed in a dishwasher for cleaning and sanitizing.
- Make sure the sponge is completely wet. Being wet is essential, otherwise the sponge could catch fire in the microwave.
- Put the wet sponge in the microwave for one minute on high. One minute of microwaving is sufficient to kill bacteria.
- Be careful when removing the sponge from the microwave because it will be hot. Set a timer for 10-15 minutes and then take the sponge out of the microwave when it has cooled.

Sanitizing sponges using the dishwasher: use the hottest and longest cycle on dishwasher plus the dry cycle. According to the United State Department of Agriculture (USDA), microwaving sponges kills 99.99999 percent of bacteria present on them, while dishwashing kills 99.9998 percent of bacteria. The bad smell in sponges and dishcloths means bacteria are lurking in them!

Sanitizing sponges using concentrated bleach: use 8.25 percent sodium hypochlorite per quart of warm water and soak for one minute. Another suggestion: use clean paper towels to wipe up raw juices from meats, discard towels and then clean counters with chlorine bleach and let dry.

Resources to consider: http://www.cdc.gov/foodsafety/foodborne-germs.html
http://www.cdc.gov/foodsafety/diseases/staphylococcal.html http://msue.anr.msu.edu/news/sanitizing_kitchen_sponges
www.goodhousekeeping.com/home/cleaning/a18731/how-to-clean-a-sponge/
https://www.foodsafety.gov/keep/index.html
November 2006 HEALTH NOTES by Evelyn Ames -- Food Poisoning (covers food poisoning pathogens extensively)