



Kitchen Introduction

Safety in the Kitchen





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Familiarize Yourself with Lab

It is important to not only know **where things are in the lab** to effectively prepare your food, but also the **procedures** involved with kitchen resources, tools and equipment. Below are some items to ensure you know their locations, safe use, and procedures.

- Gas and electric stove/oven, fridge, freezer, dishwasher, clothes washer, microwave, sink, and GFI electrical outlets
- Utensils, knives, cutlery, pots, pans, baking trays, mixers, bowls, measuring cups and spoons, towels, and cutting boards
- Apron storage, sanitizing solution, hand soap, dish detergent, first aid, fire extinguisher, fire alarm, fire blanket, baking soda, and salt



General Safety Rules

- **No Horseplay** or playing with tools and equipment
- Keep a **clean** organized work area
- Pay close **attention** to what you are doing
- Do not operate equipment or handle tools unless you have had **instruction**, understand completely, and feel comfortable with the process
- Learn all the **safety rules and procedures** for the utensils and equipment that you use
- Clean any **spills** immediately, and inform people in the area to be aware
- Report any **injuries** to the teacher, immediately
- Report any safety **hazards** to the teacher, immediately
- Use caution when handling, carrying, and washing **hot items**
- Only use **knives** for their intended purpose



Cleaning



- **Cleaning** is to remove all dirt and bits of food that you can see, from dishes, countertops, cutting boards and other food contact surfaces
- Cleaning is **NOT** the same as sanitizing
- **Hand washing** is the most important activity you can do to keep from getting sick and/or passing on germs, pathogens, and/or viruses
- **Bacteria** are tiny living things that grow in food which you can not smell or taste
- Some bacteria are helpful, while others can cause sickness and are known as **pathogens** or harmful microbes
- If hands are not washed often and thoroughly, **microbes can spread** directly from one person to another or to food or onto surfaces that are touched such as utensils and other food contact surfaces
- A **virus** is the smallest microbe and is usually spread through unwashed hands.
- If you are **sick** (cold, vomiting or have diarrhea) do not attend food class in the lab/kitchen

Sanitizing

Sanitizing is a process of **killing germs**.

- Kitchen and dining surfaces, sanitize regularly using sanitizing solution for food contact surfaces such as: 5 mL (1 tsp) regular unscented bleach in 1 L (4 cups) water for:
 - Dishes and cutlery
 - Counters, sinks and taps
 - Cutting boards and other food preparation equipment
 - Chairs and tables, including the edges
 - Dishcloths, dish towels and sponges
- For non-food contact surfaces, sanitize regularly with a stronger bleach solution: 5 mL (1 tsp) regular unscented bleach in 500 mL (2 cups) water.
 - Toys, bathroom toilets, sinks, taps, counters,
 - Door handles, light switches, and stair railings

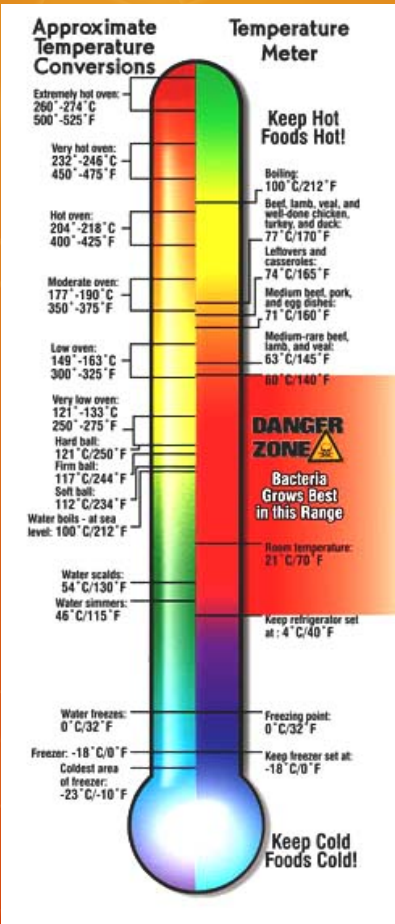
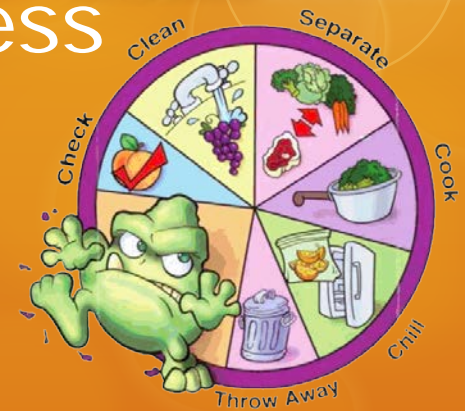
There are also some cleansers that have sanitizing agents included in them such as bleach.



Preventing Food-borne Illness

To fight bacteria that may cause food-borne illness:

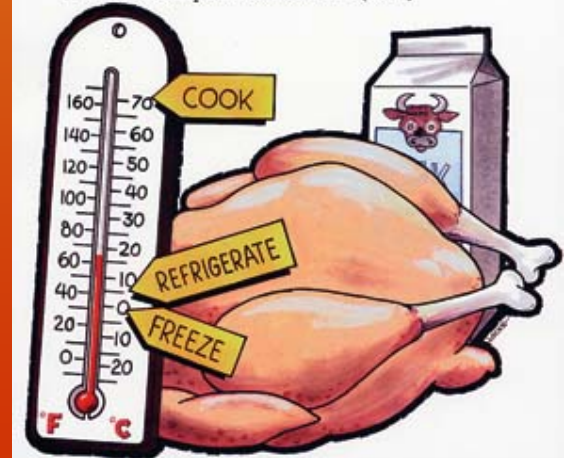
- Cook foods thoroughly to destroy harmful bacteria that may be present in food
- Separate foods to avoid cross-contamination
- Chill food to the appropriate temperature
- Put leftovers in the fridge right away, bacteria multiplies fastest between 4°C and 60°C
- Clean hands, surfaces and produce



Keep Food at Safe Temperatures

Keep all food either hot or cold. This will stop dangerous bacteria from growing. Do not leave food at room temperature for over two hours.

- Cook and reheat at temperatures above 71.1°C (160°F).
- Refrigerate at temperatures below 3.3°C (38°F).
- Freeze at temperatures below 0°C (32°F).



When To Wash Hands

- Before eating or preparing your food
- After using the washroom
- After touching a pet
- Whenever hands come in contact with body fluids including vomit, saliva, and runny noses
- After blowing your nose or sneezing into your hand
- After touching a cut
- After touching your any part of your face or hair
- After playing or working outside
- After taking out the garbage
- After touching raw meat

Wash Your Hands and Utensils

Keeping your hands as well as your equipment and work area clean will prevent bacteria from growing and spreading. Wash with hot soapy water.

Wash hands after:

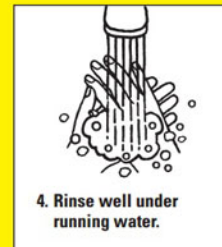
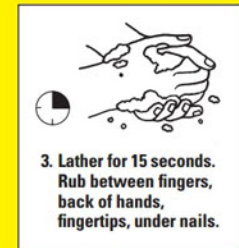
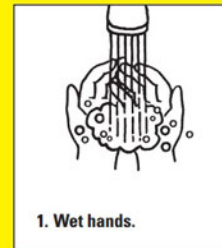
- sneezing or coughing
- blowing your nose
- using the bathroom
- touching pets



How To Wash Your Hands

- **Rinse** your hands with warm water to get them wet
- Apply **soap**, enough to create a lather
- **Rub/scrub** your hands together to make a soapy lather for about 20 seconds
- Wash back, palm of hands, wrists, above wrists, between your fingers and thumb, and nail area
- **Rinse** with clean warm water
- **Dry** with clean paper or cloth towel

Hand Washing



Stop the Spread of Germs

Always Wash Your Hands

After you:

- Sneeze, cough or blow your nose
- Use the washroom or change diapers
- Handle garbage
- Play outdoors

Before and after you:

- Prepare or eat food
- Touch a cut or open sore

Personal Cleanliness and Hygiene



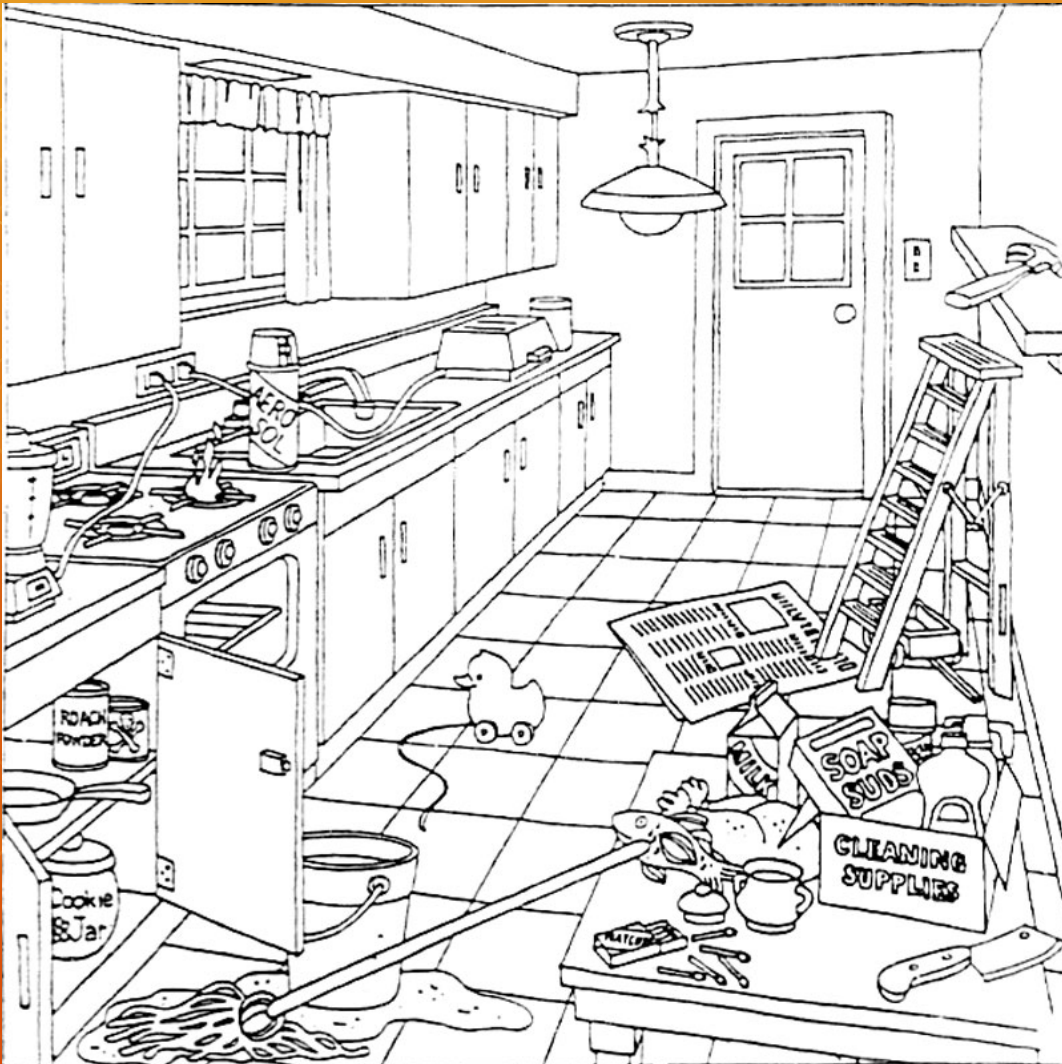
- Thoroughly wash and dry your hands before handling food, and again frequently during food preparation
- Never chew gum, spit, or eat in a food-handling or food-storage area
- Never cough or sneeze over food, where food is prepared, or where it is stored
- If you are sick, stay home and get better, before participating with food preparation
- If you have long hair, tie it back and/or cover it with a hair net
- Roll up long sleeves
- Wear clean clothes and protective clothing, such as a clean apron
- If you have cuts or wounds, make sure they are completely covered by a waterproof a bandage

Personal Cleanliness and Hygiene

- Wear disposable gloves over the top of the wound strip if you have wounds on your hands, and change regularly as needed
- Keep your nails short so they are easy to clean, and don't wear nail polish as it can chip into the food
- Avoid wearing jewellery, or only wear plain banded rings and sleeper earrings
- No hats (unless specially designed for food use)
- Cover cut, sores on your hands with a Band-Aid and gloves before handling food
- Use separate spoons for tasting and stirring - pour a little food from the stirring spoon onto the tasting spoon
- Keep clean wipes close, if needed
- Do not lick you fingers (even if it is delicious!)



Spot the Hazards



1. Blender/blender cord
2. Stove flame
3. Aerosol can
4. Toaster cord
5. Ceiling light
6. Hammer on edge
7. Ladder
8. Toy cart
9. Newspaper
10. Toy Duck
11. Cleaning supplies
12. Cleaver on edge
13. Matches
14. Food container lid
15. Fish & chicken
16. Milk
17. Mop handle
18. Spill, bucket, water on floor
19. Cupboard left open
20. Cookie jar
21. Frying pan handle
22. Poison and bug powder

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Kitchen Lab Rules

- Wash your hands thoroughly before working with food
- Wipe up all spills immediately
- Walk, do not run
- Keep chairs tucked under tables while working
- If glass or china is broken, wrap all fragments in a paper and dispose
- Use a pot holder at the stove, never an apron or a dishcloth
- Keep handles turned away from the edge of the stove
- Lift covers away from you to avoid steam burns
- Check to be sure all burners are turned off at the end of a lesson/food prep.



KITCHEN SAFETY

• Cheat Sheet •

PREVENT CROSS CONTAMINATION



CLEAN EVERYTHING

Clean everything that's going to touch food, including hands.



NO TOUCHING

Keep raw meat, seafood, poultry, and ordinary eggs (hazardous foods) from touching ready-to-eat foods in your kitchen.



SEPARATE SEPARATE SEPARATE SEPARATE

Use separate cutting boards, serving dishes, and utensils for raw and cooked meat, seafood, and poultry.



SHELF SMARTS

For your fridge: Store hazardous foods below others so they can't drip and cross contaminate.



WASH, WASH, WASH

Before switching tasks: Wash your hands and all surfaces that come in contact with raw meat, seafood, poultry, & ordinary eggs.*

*Safest Choice™ Pasteurized Eggs eliminate the risk of cross contamination from eggs in your kitchen.

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KITCHEN SAFETY

• Cheat Sheet •

SAFE FOOD STORAGE

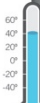
in the FRIDGE

	Bacon	7 days
	Sausage	1-2 days
	Ground beef	1-2 days
	Fresh beef steaks	3-5 days
	Fresh poultry	1-2 days
	Ordinary eggs	3-5 weeks
	Safest Choice™ Pasteurized Eggs	about 9 weeks
	Soups & stews	3-4 days
	Leftover cooked meat or poultry	3-4 days
	Hot dogs, unopened	2 weeks
	Hot dogs, opened	1 week
	Lunch meat, opened or deli	3-5 days
	Lunch meat, unopened	2 weeks
	Leftover macaroni, egg, or tuna salad	3-5 days

deciphering DATES

 DATES ON FOOD PACKAGES ARE VOLUNTARY and describe quality—NOT NECESSARILY FOOD SAFETY.

Some **FOODBORNE BACTERIA CAN GROW EVEN UNDER REFRIGERATION**, so once you buy a food, focus on keeping your refrigerator at **40°F OR BELOW**, and monitor food storage times for safety.



BEST IF USED BY

(or Use By) is the **LAST DATE RECOMMENDED BY THE MANUFACTURER FOR BEST QUALITY.**

SELL BY

tells the store how long to display the product for sale. You should **BUY THE PRODUCT BEFORE THIS DATE**, and then **STORE IT ACCORDING TO STORAGE GUIDELINES.**





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Kitchen Lab Rules

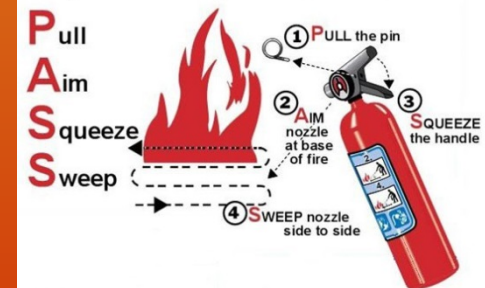
- Long hair must be tied back when cooking
- Do not wear coats, heavy sweaters, or loose clothing when cooking
- In the lab area, all students must wear aprons during food preparation
- Stay in, your own kitchen area, do not visit others
- **Wipe up spills immediately.** Spilled liquid can cause major accidents in the kitchen
- Walk in the kitchen, do not run
- Always **pay attention** to where you are going and what you are doing
- Keep cupboard doors and drawers closed
- Keep all towels, pot holders, and paper away from the burners

Fire Drill

- Turn off all stoves and any electrical appliances and wait for instructions
- Each food lab area has a fire extinguisher
- Will be required to calmly and quickly exit the building to the closest designated exit
- Wait off school property on opposite sidewalk
- Stay off other peoples properties
- A bell/announcement will let us know when it is safe to go back in

CLASSES OF FIRES	TYPES OF FIRES	PICTURE SYMBOL
A	Wood, paper, cloth, trash & other ordinary materials.	
B	Gasoline, oil, paint and other flammable liquids.	
C	May be used on fires involving live electrical equipment without danger to the operator.	
D	Combustible metals and combustible metal alloys.	
K	Cooking media (Vegetable or Animal Oils and Fats)	

To operate an extinguisher:



Class ABC is effective on these types of fires:



trash, wood, paper



flammable liquids



electrical equipment

Grease/Oven Fires



- Fire on stove top:
 - Smother fire with a lid– fire can not burn with out air
 - Never try to carry a burning pan out of the room
 - Do not use water on grease fires, it will make it blow up
- Fire in the oven:
 - Close the door to shut out the air
 - Turn off the element
- Baking soda or salt on the fire will also put it out, if necessary
- Know where the fire blanket is stored if you have one
- Know where the closest fire alarm to the room is

Precautions

- Kitchens have many electric appliances such as coffee pots, toasters, electric mixers, etc. As water is a conductor of electricity **never touch an electrical appliance with wet hands**
- Never pull on the electric cords, take the plug base from the wall first
- Never put a knife or fork (metal object) into a toaster that is plugged in
- Careful not to leave knives on table edges and carry with point down
- Passing to another peer by handle facing peer, blade down
- Ensure pot handles are facing in to stove
- Keep work area organized and clean



Be Safety Conscious

It is very important to know what to do in an emergency or difficult/dangerous situation.

- What would you do in the following situations?
 - You are deep-fat frying and the pan catches on fire?
 - You are broiling lamb chops and they catch on fire?
 - Your lab partner burns her hand over a boiling kettle?
 - You are washing dishes and you break a glass in the sink?
 - You spill grease from the fry pan on the floor?
 - Your lab partner faints in the kitchen in front of the oven?
 - A large knife starts to drop off a table, what do you immediately do?
- Know the location of the following items:
 - Fire extinguisher
 - Fire blanket
 - Fire exit
 - Closest fire alarm
 - Power switch
 - Baking soda/salt



Hazardous Product Symbols



	poisonous	flammable	explosive	corrosive
danger				
warning				
caution				

WHMIS symbols:

	Class A - Compressed Gas	Contents under high pressure. Cylinder may explode or burst when heated, dropped or damaged.
	Class B - Flammable and Combustible Material	May catch fire when exposed to heat, spark or flame. May burst into flames.
	Class C - Oxidizing Material	May cause fire or explosion when in contact with wood, fuels or other combustible material.
	Class D, Division 1 Poisonous and Infectious Material: Immediate and serious toxic effects	Poisonous substance. A single exposure may be fatal or cause serious or permanent damage to health.
	Class D, Division 2 Poisonous and Infectious Material: Other toxic effects	Poisonous substance. May cause irritation. Repeated exposure may cause cancer, birth defects, or other permanent damage.
	Class D, Division 3 Poisonous and Infectious Material: Biohazardous infectious materials	May cause disease or serious illness. Drastic exposures may result in death.
	Class E - Corrosive Material	Can cause burns to eyes, skin or respiratory system.
	Class F - Dangerously Reactive Material	May react violently causing explosion, fire or release of toxic gases, when exposed to light, heat, vibration or extreme temperatures

Procedures & Preventions -Falls

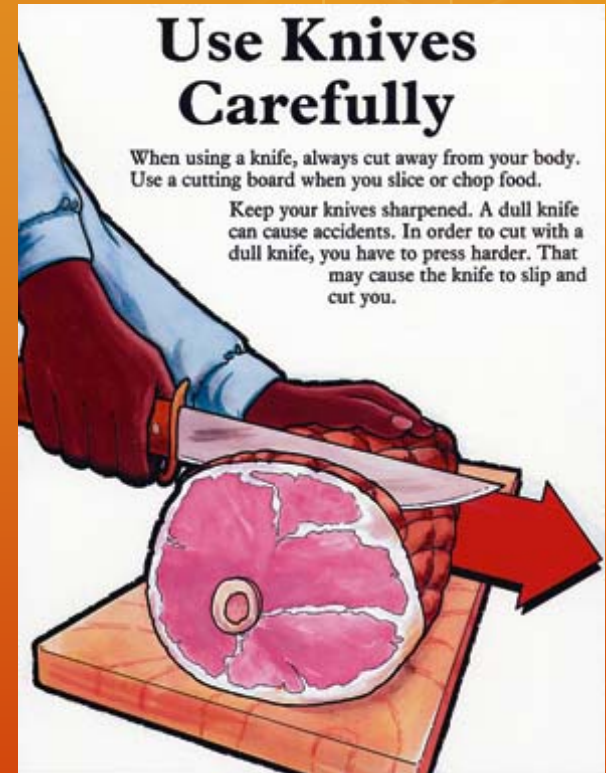
It is critical to **practice safe procedures** on a daily basis creating excellent habits which will probably prevent most falls, cuts, burns, poisoning, and electric shock.

- Prevent falls by:
 - No objects or spills left on the floor
 - Use a step ladder rather than a chair
 - Area rugs must have non-skid backing
- First Aid for falls:
 - Don't move a person with broken bones unless necessary
 - Call medical help if head aches, dizziness, vomiting, or speech impairment results from head injury
 - Mild bruises/sprains need ice bag or cold water/cloths and elevation

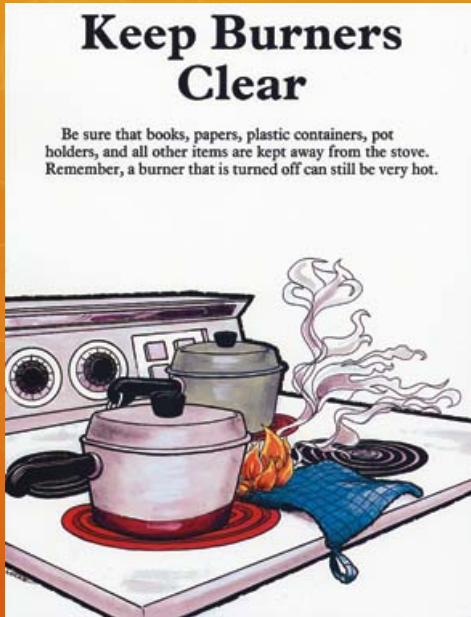


Procedures & Preventions - Cuts

- A number of work habits will **prevent cuts**;
 - Keep knives sharp so you don't have to push as hard
 - Never catch a falling knife in mid air
 - Use the correct knife for the job
 - Use a cutting board, never cut on the counter
 - Do not slice food in your hand
 - Always cut away from your body
 - Careful how you point and carry knives
 - Wash knives separately
 - Keep knives in a rack or separate from other equipment
 - Don't use knives for anything but cutting
 - Keep fingers away from mixer blades
 - Cut can lids completely off and throw out
 - Sweep up rather than pick up broken glass and wipe up tiny pieces with several damp paper towels
 - When a glass breaks in the kitchen sink, let the water out using several paper towels; then wipe out pieces with paper towels
- First Aid for cuts;
 - Stop sever bleeding with the pressure of a thick cloth; get medical help
 - Minor cuts – wash with soap and water, blot dry, disinfect, an bandage



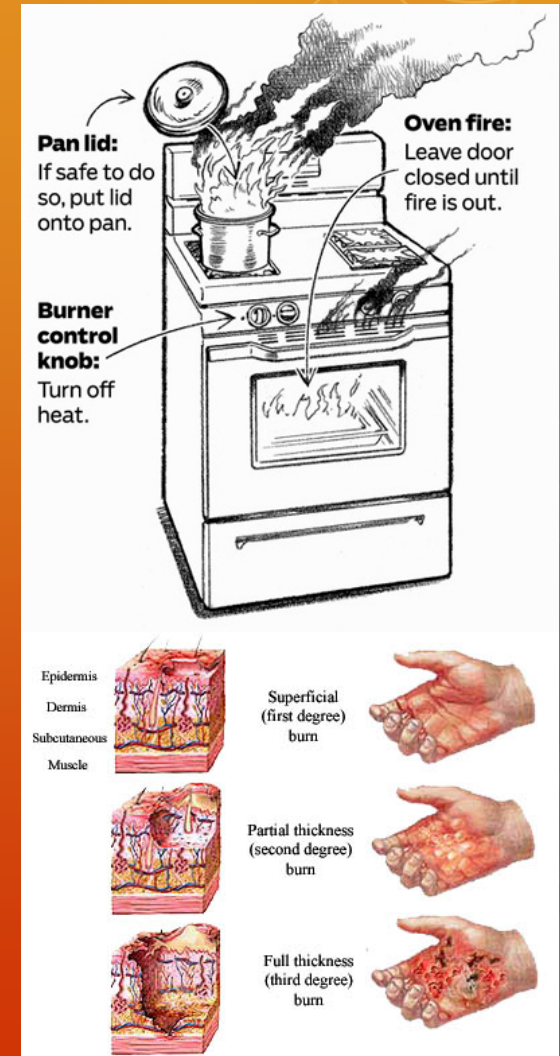
Procedures & Preventions - Burns



- A number of work habits will **prevent fire and burns**
 - No flammable materials near hot appliances
 - Avoid loose clothing with long sleeves
 - Use dry pot holders, not towels
 - Store flammable materials away from heat
 - Wipe off range after each use, to avoid grease build-up
 - If you smell gas don't turn on any appliances-ventilate room and call gas company
 - Turn pan handles in toward the back of the range
 - Remove pan lids so steam escapes away from you
 - Keep appliance cords out of the way
 - Use both hands to remove a pan from the oven
 - Turn off appliances /oven when cooking is finished
 - Lower food with spoon into fat slowly – not fingers

Procedures & Preventions - Burns

- In case of **fire**;
 - Use baking soda instead of water
 - Use a fire extinguisher
 - If clothing catches on fire, drop to the ground and roll
 - Crawl on the ground to get out of smoke filled room
 - Always smother fat fires. Do not put water on them, as burring fat floats on water and spreads even faster
- First aid for **burns**;
 - For minor burns 3" or less (1st/2nd degree) hold the burn under cool water or cold compress for 10-15 minutes
 - Cover the burn with sterile bandage loosely
 - Avoid ointments, grease, egg whites, butter and/or oil, and don't break blisters
 - For 3rd degree bad burns, call 911, don't run water, don't remove clothing, check for breathing, if not – CPR, put cool moist sterile bandage/cloth over burn area



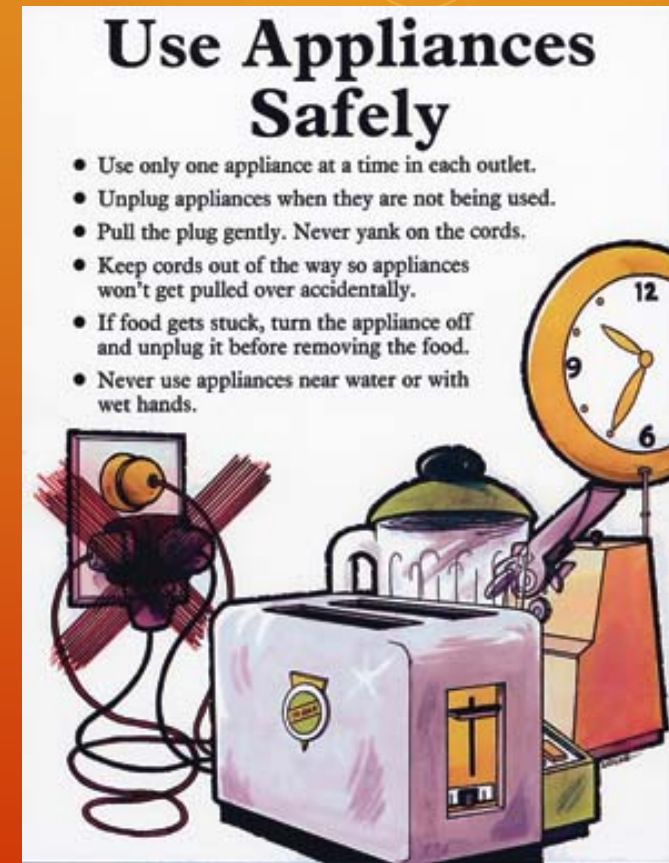
Procedures & Preventions - Poisons



- A number of work habits will **prevent poisoning**;
 - Use original containers with their labels
 - Securely close and lock cabinets
 - Store chemicals on a high shelf away from food containers
 - Follow antidote directions in well ventilated area if poisoning occurs
 - Never mix compounds such as bleach/ammonia
 - Use charcoal/hibachis outside only as it gives off carbon monoxide
- First aid for poisons;
 - Call medical help and if possible use antidote on label
 - Check for WHIMS first aid information
 - If fumes, get person to well ventilated area
 - Flush eyes with water if irritated

Procedures & Preventions - Shock

- A number of work habits will **prevent electric shock**;
 - Keep water away from electrical appliances
 - Never touch an electrical appliance with wet hands
 - No electric cords near hot objects
 - Avoid octopus – one outlet with many cords
 - Use heavy duty extension cord
 - Disconnect appliances before cleaning
 - Don't immerse electric appliances in liquid
 - Connect detachable cord to appliance first then plug it in
 - Don't use damaged appliances
 - Use only a wet/dry vacuum on wet floor
 - Keep metal away from the working parts of an appliance- example fork in toaster to pull out bread
- First aid for electric shock;
 - Don't touch person connected to electricity
 - Turn off power, pull plug or pull person away with cloth loop
 - Administer CPR if qualified and call for medical help



Summary



- Learned about the Kitchen lab, where things are, general safety and specific safety in the lab.
- The difference between cleaning and sanitizing and the importance to washing hands.
- Food temperatures are important in controlling bacteria amounts
- Emergency procedures when there is a fire drill, grease fire.
- General precautions and to always be safety conscious with what you are doing in the kitchen/lab
- Hazardous product symbols that you need to know for your protection
- Procedures and prevention for falls, cuts, burns, poisons and electric shock.



Related References To Checkout

- http://mfranzen.ca/pages/cor/tfj1o1-fs_u4.html
- <http://healthycanadians.gc.ca/eating-nutrition/safety-salubrite/index-eng.php#a2>
- <http://www.crfa.ca/>
- <http://www.restaurantcentral.ca/handhygiene.aspx>
- <http://www.health.gov.bc.ca/protect/food-safety-module/files/home.htm>
- <http://www.youtube.com/watch?v=zaHuHubvvfU>
- http://www.youtube.com/watch?v=4M_rDWdtzus&list=PL9DE5FEFEC0CF1859

