Chapter 5 – Food Safety and Sanitation

Food, Nutrition, & Wellness

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1. Foodborne Illness
	1. Foodborne Illness - illness caused by unsafe food
		1. Caused by bacteria, parasites, fungi, viruses and harmful chemicals
		2. Symptoms – mild flu to serious, long-term illness, even death
		3. Infants, children, pregnant women, older adults and people with health problems are at greater risk
	2. Bacteria – microscopic living organisms
		1. Many are harmless, some are helpful
		2. Foodborne illness is caused by harmful bacteria contaminating food
			1. Contaminate – to make impure, become infected
			2. Can happen at any stage of food production
		3. Bacteria multiply whenever there is food, moisture, and warmth
		4. Food can also be contaminated by chemicals, poisons, and non-edible materials
	3. Symptoms – primarily flu-like symptoms – diarrhea, abdominal pain, headache, nausea, etc.
		1. Usually appear 4 to 48 hours after eating
		2. Some symptoms signal serious illness
2. Keep Food Clean
	1. Government Agencies - U.S. Food and Drug Administration - U.S. Department of Agriculture
	2. Sanitation – maintaining cleanliness
	3. Proper Hand Washing
		1. Wash your hands with warm, running water and soap for at least 20 seconds.
		2. Scrub your hands, between your fingers, and under your fingernails
		3. Use a paper towels to turn off the faucet
		4. Dry hands with a clean paper towel or air dryer
		5. Wash – when preparing foods, between different kinds of foods, after cleaning, handling garbage, using the toilet, using a phone, coughing, sneezing, etc.
	4. Spreading Bacteria
		1. Do not handle food if you are sick
		2. Cover open sores with waterproof bandages – wear gloves
		3. Tie back long hair
		4. Do not touch surfaces that contact food when setting the table
	5. Keeping the Kitchen Clean
		1. Use good sanitation practices
		2. Food crumbs, spills, and dirty dishes help bacteria multiply
3. Avoid Cross-Contamination
	1. Cross-Contamination – the spreading of harmful bacteria from on food to another food
	2. Avoid spreading bacteria from raw meat, poultry, fish, and eggs to other foods by
		1. Keeping raw products and their juices away from ready-to-eat foods
		2. Use separate cutting boards
		3. Clean cutting boards in hot soapy water
		4. Use plastic cutting boards for contamination issue foods
		5. Wash everything that touches raw food
4. Store Food Safely
	1. Proper storage ensures safety and sanitation, and preserves food’s freshness, flavor and nutrients
	2. Shopping
		1. Shop refrigerated, frozen, and deli foods last
		2. Picked canned goods without dents, bulges, rust, or leaks
		3. Put raw meat, poultry, and fish in plastic bags
		4. Take groceries home right away
	3. Storing Food
		1. Check packages for storage instructions
		2. Shelf-life – how long a food can be stored and still be safe to eat
		3. Put away frozen and refrigerator foods away first
		4. Put new packages behind older ones – first in, first out
		5. Freezer
			1. Long term freezer storage – below 0°F
			2. Refrigerator/Freezer - between 10°F to 15°F – a few weeks of safe storage
			3. Freezer Burn – harmless, but causes unappealing, dried up white areas on foods
			4. Wrap foods, label with name, date
		6. Refrigerator
			1. Perishable – foods that spoil easily, such as meat, fish, dairy foods, eggs, fresh produce, and leftovers
			2. Keep fridge as cold as possible without freezing
			3. Danger Zone – temperature range in which bacteria grow fastest
				1. 40°F to 140°F
				2. Inside shelves stay colder than door shelves
			4. Raw meat products in plastic bags or containers on the bottom shelf
		7. Dry Storage
			1. Cabinet or pantry, clean dry, dark, and cool
				1. Do not store above refrigerator or stove
				2. Do not keep food under the sink
				3. Store foods away from cleaning supplies
				4. Open packages and bulk foods – store in tightly covered containers
	4. When Foods Spoils
		1. Happens when food is stored improperly or for too long
		2. Spoiled foods have unusual odor, color, texture and flavor.
		3. Throw away spoiled food
		4. When in doubt, throw it out
5. Control Food Temperatures
	1. Thaw Food Safely
		1. Never thaw food at room temperature
		2. Use the refrigerator, cold running water, or the microwave
	2. Cook Food Completely
		1. To destroy bacteria, foods must reach safe internal temperatures
		2. Use an instant-read food-safe thermometer to check internal temperatures
	3. Serve Food Safely
		1. Avoid leaving food at room temperature for longer than 2 hours
			1. Keep hot foods above 140°F
			2. Keep cold foods below 40°F
			3. Limit serving time of perishable foods
	4. Handle Leftovers Properly
		1. Throw away food held at room temp for too long
		2. Refrigerate or freeze as soon as the meal is done
		3. Reheat leftovers to 165°F
		4. Boil leftover soups, sauces, and gravies before eating

Chapter 6 – Kitchen Safety

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1. How to Prevent Accidents –

Avoid careless actions – stop and think - Pay attention to your tasks - Use the right tool for the right job

* 1. Preventing Cuts
		1. Keep knives sharp
		2. Cut away from yourself
		3. Do not point sharp objects at others
		4. Use a cutting board
		5. Do not catch a falling knife
		6. Wash knives separately from other dishes
		7. Never pick up broken glass with your fingers
			1. Use a broom for large pieces
			2. Damp paper towels for tiny pieces
	2. Preventing Falls, Bruises, and Back Injuries
		1. Clean up spills immediately
		2. Use a sturdy ladder or step stool
		3. Choose kitchen rugs with a non-skid back
			1. Plastic or rubber coating
			2. Prevents the rug from slipping
		4. Store heavy items within reach and lift with care
		5. Close drawers and cabinet doors after you open them
	3. Preventing Electrical Shocks and Burns
		1. Keep appliances and cords away from water
		2. Never use appliances when your hands are wet
		3. Keep appliances and cords in good condition
		4. Pull on the plug, not the cord
		5. To get food out of a toaster
			1. Unplug, turn upside down, shake
		6. Do not plug too many appliances into an outlet
	4. Preventing Burns and Fires
		1. Wear close-fitting clothing, roll up sleeves, and tie hair back
		2. Flammable – easy to catch on fire
		3. Use dry potholders and oven mitts
		4. Turn pot and pan handles toward the center of the stove
		5. Tilt the cover of pans so the steam escapes away from you (like a shield)
	5. Preventing Poisoning
		1. Many cleaning and pest control products are poisonous.
		2. Keep foods away from pesticides – poison that kills insect or other pests
		3. Keep household chemicals in their original containers
		4. Never mix chemicals together
		5. Poison Control Center
			1. Medical facility that give free advice about poisoning emergencies
			2. (800) 222-1222
			3. Kind of poison, how much and when swallowed, any symptoms
			4. Look at container to find out if there in antidote – a substance that works against a poison
1. Handling Kitchen Emergencies
	1. Keep emergency numbers by the telephone
	2. Keep a first –aid kit nearby
		1. First aid is immediate care that prevents more injury and relieves pain
		2. Call for help immediately for serious injury
	3. Have an action plan in case of a fire
	4. Heimlich maneuver – lifesaving technique to help someone who is choking
	5. Cardiopulmonary resuscitation (CPR) – a lifesaving technique to restart someone’s breathing and heart beat
	6. Putting Out a Kitchen Fire
		1. Use a fire extinguisher to put out small fires
		2. Grease Fire
			1. Do
				1. Turn off the heat or disconnect appliance
				2. Pour salt or baking soda (smother = cut off the oxygen)
				3. Leave if the fire is out of control – call 911
			2. Don’t
				1. Pour on water – will cause an explosion in the pan as the water turns to steam
				2. Move a burning pan – moving it could spread the fire or you could spill it
		3. Put a cover on a pan or close an appliance door if food is burning inside (smother)