

Food and Nutrition: Course Study Guide

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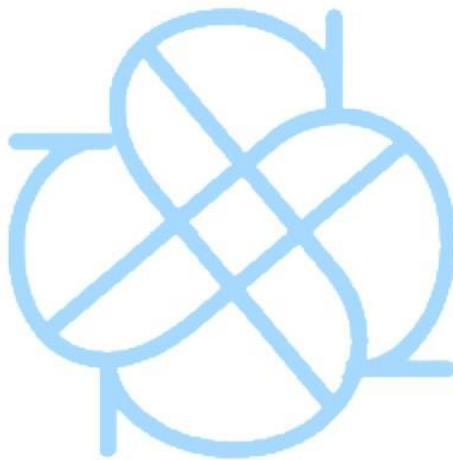
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- 5.1 Terms and Vocabulary



Unit 1: Technical and Applied Skills

1.1 Kitchen Safety and Hygiene

Basic Kitchen Rules:

- Tie hair back before entering the cooking area.
- Wash hands thoroughly for twenty seconds.
- Long sleeves are rolled up.
- Cabinet doors are closed to avoid bumping into them while cooking.
- No wires or cords near the sink.
- Burners must be turned off immediately after use.
- Pot handles must always be turned INWARDS.
- Oven mitts must be used when handling hot pots and pans.
- Unplug small appliances (e.g blender, hand mixer) when not in use.




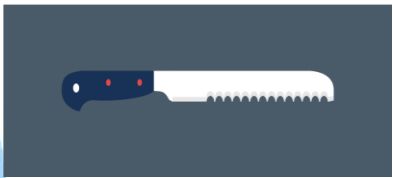





Fire, Oil, and Electricity Safety

- Do not pick up or carry burning pans.
- Know where the fire extinguishers in the classroom are located.
- Never put water on a grease fire.
 - Grease fire: a fire caused by cooking oil that has overheated.
- To put out a grease fire, turn the stove off. Then cover the pot with its lid. Pour baking soda on the fire if it gets too large. If this does not work, notify your teacher and use the fire extinguisher.
- Do not overload electrical outlets.
- Never use metal utensils to remove bread from a toaster.

1.2 Types of Knives and Knife Safety

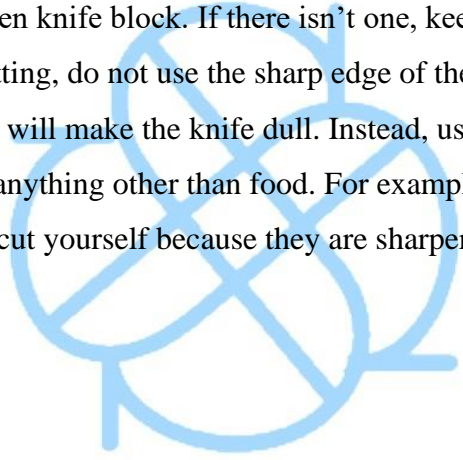
Types of Knives

- There are 9 basic kinds of knives. See table below

Knife type/name	Purpose	Image
Chef's knife	Chopping thicker vegetables like potatoes, onions, and turnips.	
Utility knife	Chopping smaller foods (e.g garlic, shallots, etc.).	
Paring knife	Used for delicate tasks such as peeling vegetables or removing seeds.	
Bread knife or serrated knife	Cutting through a loaf of bread. Also used for cutting through fleshy vegetables or fruit without squishing them (e.g tomatoes).	
Carving knife	Carving meats like chicken, beef, and pork.	
Cleaver/butcher knife	Used to slice raw meat.	
Boning knife	Cutting around the bone in meats. Also used to get rid of the fat and cartilage in the meat.	
Filleting knives	Remove bones in fish like salmon without damaging the meat.	
Peeling knife	Peel vegetables and fruit.	

1.2 Types of Knives and Knife Safety (continued)

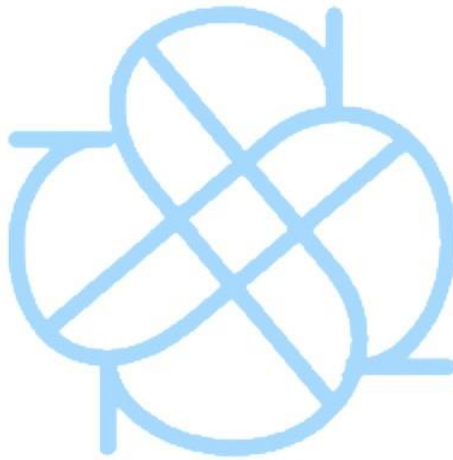
Knife Safety

- Use sharp knives. Dull knives increase the risk of cutting yourself.
 - Use the right knife for the task at hand. Do not use a cleaver, for example, for chopping tomatoes.
 - Never leave knives in the sink while washing dishes. Wash them first instead of leaving them lying around.
 - Always use a cutting board.
 - Put a damp cloth under your cutting board to stop it from sliding.
 - Curl your fingers away from the steel end of the knife when cutting.
 - Walk with the point of the knife pointed towards the floor.
 - If a knife falls, do not try and catch it. Let it fall to avoid being cut.
 - Store knives in a wooden knife block. If there isn't one, keep them in a closed cabinet.
 - When you are done cutting, do not use the sharp edge of the knife to scrape off the chopped ingredients. It will make the knife dull. Instead, use your hands.
 - Do not use a knife for anything other than food. For example, trying to open a bag with a knife is a good way to cut yourself because they are sharper than you think.
- 

1.3 Dishwashing

Dishwashing Steps

- Scrape food off of plates into the garbage.
- Fill up one side of the sink with hot, soapy water. Pile dishes on the other empty side of the sink.
- Wash dishes thoroughly in the hot, soapy water.
- Rinse dishes and load onto the drying rack.
- Dry dishes with a clean kitchen towel.
- Put dishes away into their correct cupboards and drawers.
- Wipe the sink and counter.



1.4 Food Safety

- There are six major things to remember when considering food safety.

- Shopping, storage, preparation, cooking, serving, and leftovers.
- If you do all of those correctly, you should be safe from food that has gone bad or been contaminated.

Shopping

- Never purchase food that has tears, opening, or holes in the packaging.
- Always check the safety seals on foods in jars. If they have been opened, there is a chance the food has been contaminated.
- Only buy the amount of produce you will need in that week to avoid expired fruits and vegetables.
- Avoid buying dented cans as they could be rusting on the inside.
- Make sure eggs are not broken or cracked.
- Check expiry dates.
- Select meats and poultry that look pink. Grayish colour on meats and poultry indicates it has gone bad or will go bad very soon.

Storage

- After returning from the grocery store, immediately refrigerate foods that need to be kept cold.
- Your fridge should always be kept at 40°F or lower and your freezer must be at 0°F or lower.
- Freezing meat and poultry makes them last up to three months longer than if it were kept in the fridge.
- Cook fresh fish, meat, and poultry within a week after buying.
- Canned foods can last for an indefinite amount of time, as long as they are not exposed to extreme heat or extreme cold. Discard cans when they began to look dented or rusted.

1.4 Food Safety (continued)

Preparation

- Wash hands with warm water and soap for at least twenty seconds before and after handling food.
- Avoid cross contamination by keeping raw meats away from other foods.
- Do not use the same knife/cutting board for meats and produce.
- Wash utensils used for raw meats with hot, soapy water.
- Always wash countertops after working with raw meats.

Cooking

- Raw meat (beef, pork, lamb, and veal) must be cooked to a temperature of at least 145°F. Measure with a thermometer before taking off the stove or oven.
- Cook ground meats to 160°F.
- Cook poultry to 165°F.

Serving

- When serving food, keep warm foods covered and at a temperature of at least 140°F.
- Cold foods should be at 40°F when serving.
- Cold food can be kept cold by keeping dishes in ice trays.
- Food should not be left outside at room temperature for more than two hours.

Leftovers

- Throw away foods left outside for more than two hours at room temperature.
- Immediately refrigerate foods you plan to eat later.
- Cooked leftovers must be consumed within four days, longer than that and they will go bad.
- When eating leftovers from the fridge, reheat them to at least 165°F (about 3 minutes in the microwave).
- Meat and poultry can be refrozen after cooking or refrigerated.

1.5 Food-Borne Illness

What is Food-Borne Illness?

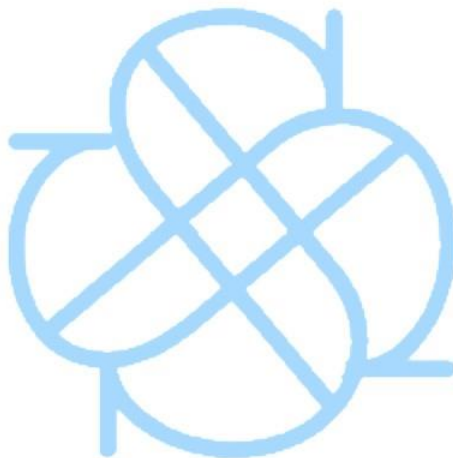
- Also known as food poisoning.
- Illness caused by eating foods that have harmful bacteria, parasites, and/or viruses in them.
- Not always life threatening.
- A major (very common) public health issue.
- In the US alone, there about 48 million cases of food poisoning every year.
- Everyone is at risk. Younger children, pregnant women, and those with weakened immune systems are susceptible to suffering more serious issues if they get food poisoning.
 - Weakened immune systems: one might have a weakened immune system for many reasons.
 - Alcohol, smoking and poor nutrition
 - Some organ transplant patients have weakened immune systems due to the fact that they have to take drugs to prevent their body from rejecting their new organ. These drugs weaken the immune system and make the patient more likely to get sick, and deal with more serious side effects when they do get sick.
 - Someone suffering from AIDS or HIV.

1.5 Food-Borne Illness (continued)

5 Most Common Kinds of Food Borne Illness Causes

Name	Description	Source	Symptoms
E.Coli	<ul style="list-style-type: none"> >bacteria >can live in intestines >some species of E.Coli don't cause disease, and some do 	<ul style="list-style-type: none"> >contaminated food and water >meat/poultry that came into contact with the bacteria >water containing human or animal waste 	<ul style="list-style-type: none"> >stomach cramps >bloody diarrhea >vomiting >nausea >fever >infections vary from mild to serious
Norovirus	<ul style="list-style-type: none"> >most common cause of illness in the US >virus 	<ul style="list-style-type: none"> >contaminated liquids or foods >coming into contact with someone who has norovirus and sharing bodily fluids (using the same utensils, drinking from the same glass, kissing, etc.) 	<ul style="list-style-type: none"> >diarrhea >vomiting >nausea >abdominal cramps and stomach pain
Salmonella	<ul style="list-style-type: none"> >salmonella is a bacteria >salmonella causes two kinds of illness: <ol style="list-style-type: none"> 1. Salmonellosis 2. Enteric fever 	<ol style="list-style-type: none"> 1. Salmonellosis: contaminated food and liquids, like meat, eggs, and fresh produce (fruits and vegetables). 2. Enteric fever: sewage contaminated water. 	<ol style="list-style-type: none"> 1. Salmonellosis: <ul style="list-style-type: none"> a) nausea , vomiting, diarrhea, abdominal cramps, and fever 2. Enteric fever: <ul style="list-style-type: none"> a) Diarrhea, constipation, headache, fatigue, and high fever.
Listeria	<ul style="list-style-type: none"> >bacteria >leading causes of death from food poisoning >listeria causes two kinds of illness: 	<ul style="list-style-type: none"> >dirt, contaminated water, and animal feces >eating raw vegetables that were grown in 	<ol style="list-style-type: none"> 1. Listeria: <ul style="list-style-type: none"> a) Nausea, ahces, vomiting, diarrhea, and fever 2. Invasive listeriosis:

	1. Listeria 2. Invasive listeriosis	contaminated soil >contaminated meat	a) Blood infections, meningitis, also can cause miscarriages and stillbirth in pregnant women.
Campylobacter	>bacteria >also one of the more common causes of food poisoning	>contaminated water >unpasteurized milk and cheese >raw, uncooked meats, poultry, and seafood	>nausea, vomiting, diarrhea, abdominal cramps, and fever



1.6 Parts of a Recipe

- **Yield**
 - The yield is usually the first thing you see when you look at a recipe. It is usually at the very top and tells you how many servings the recipe can make and how big those servings are. Knowing the yield lets you know whether to divide or multiply a recipe to make more or less food.
- **Ingredients**

- The ingredients list tells you what foods you need, and an exact amount of each food. Ingredient lists are usually organized in order of when they are used in the recipe.
- **Directions**
 - The directions take up the largest part of the recipe. This is basically a step by step guide on how to combine the ingredients to make the food. Directions are listed in order and numbered so they are easy to follow.
- **Time and Temperature**
 - The recipe will give you the exact cooking time and the temperature of the oven/stove to fully cook the meal. If there is not an exact time, the recipe will provide instructions like “heat until water boils”, because the boiling time will vary.
- **Nutritional Analysis**
 - Nowadays, it is becoming popular for recipes to include the nutritional content in the recipe. This is very useful information for people trying to fit this food into a specific eating plan.
 - The nutritional analysis section can be very vague (only calories) or very detailed (macronutrients, fibre, sodium, etc.).
 - Most recipes have nutritional analysis sections these days, especially online recipes and cookbooks.

1.7 Measuring Foods and Liquids

- Different ingredients are not measured in the same way. There are two kinds of ingredients; wet ingredients and dry ingredients. Dry ingredients include flour, sugar, and cornstarch, Wet ingredients include milk, oil, and water. Wet and dry ingredients are measured differently to get the most accurate measure possible.
- Dry measures can also be used for yogurt, cheese, and cream cheese (thicker ingredients).

- There is also another type of ingredient called fat ingredients, such as butter, shortening, and margarine. Fat ingredients are measured using dry measuring cups.
- Wet ingredients use different measuring cups than dry ingredients, but both use the same standard measuring spoons.
 - Standard measuring spoons: ¼ tsp, ½ tsp, 1 tsp, 1 tbsp (15mL, 5mL, 2mL, and 1mL)

Dry Measuring

- Measuring cups: usually have a flat handle, come in sizes 1 cup, ½ cup, ⅓ cup, ¼ cup.
- Spoon ingredients into measuring cups.
- Do not pack the ingredient in. The only ingredient you would ever need to pack into a measuring cup is brown sugar because it is more dense than regular sugar.
 - Packing an ingredient: pressing the ingredient firmly into the measuring cup.
- Use a straight edge to level off the extra until it is completely flat.

Liquid Measuring

- Measuring cups have a curved handle, measurement lines on the sides, and come in sizes 0.5 cup, 1 cup, 2 cups, 4 cups, and 8 cups.
- When measuring liquid ingredients, put the measuring cup on a flat surface and look at it at eye level, so you can get an accurate measurement.

Fat Ingredient Measuring

- Use dry ingredients measures.
- Pack the ingredient in.

1.8 Strategies for Becoming an Informed Consumer

Shop Smart at the Grocery Store

1. Only go when you need to.
 - Visit the grocery store no more than once a week, and when you are there, make sure you are buying enough groceries to last you the entire week to avoid multiple trips.
2. Plan ahead.

- Making a grocery list seems basic enough, but a lot of people skip this step when grocery shopping. Take your time to look in your pantry and fridge and write down what you do not have and what you need. By doing this, you can avoid making impulse buys when you are at the store.
 - Impulse buys: when you purchase something in a spur of the moment decision and you did not really need it.
3. **Eat a meal or snack before shopping.**
 - This might seem like a strange tip, but there is actually a lot of common sense behind it. When you are hungry and you go shopping, you are more likely to pick up things you are craving at that moment instead of things you actually need and will eat throughout the week. By going shopping on a full stomach, you can avoid this.
 4. **Pick up dairy and meat items last.**
 - Dairy and meats are kept in cool areas of the store. Pick them up last so they won't lose their cool as you walk around the store.
 5. **Not everything on sale is a deal.**
 - A bright, red sale sticker might seem appealing at first. But, many stores will up the price before marking it down and claiming it is on sale. Also, just because that particular item is cheaper than its original price does not mean it is the cheapest option. You are bound to find another option that is not on sale but is still cheaper.

1.8 Strategies for Becoming an Informed Consumer (continued)

Marketing

- How does a grocery store subtly convince you to buy and spend more at their store? Here are just a few examples an informed consumer ought to know...
1. **Shopping Carts**

- Shopping carts have gotten larger and larger over the years and this was not by accident. The purpose of a larger cart is, yes, to give you more space for your items, but the store also wants you to fill it up. You may have also seen stores with smaller shopping carts. If you have children tagging along with you, this is for them to pick their own items, so you end up buying more.

2. Fresh Produce

- Most grocery stores place the fresh produce section right at the front of the store, so it's the first thing you see when you walk in. This is done on purpose so that when you are done purchasing all your fresh produce, you can move on the aisles with the less healthy foods and feel less guilty about buying them because you have already bought your healthy foods. This is the idea behind having fresh produce right at the front.

3. Staple Foods

- Dairy, eggs, milk, and meat are usually located in the farthest aisles in the back. Why? The store wants to draw you through as many aisles as possible to get there, so you can see all the promotions and deals they have to offer. They don't want you to just get your essentials and go.

4. Aisle Layout

- The products that stores want you to buy the most are always placed at eye level in the aisles. This is so that they are the first thing you see, and many of us are unlikely to look at the lower or higher sections of the aisle.

Unit 2: Fundamentals of Nutrition

2.1 Nutrients and Nutrient Classification

- Nutrients: important compounds our bodies cannot make sufficient amounts of, so we get them from eating certain foods.

- Essential nutrients are broken into two categories
 - **Micronutrients:** include vitamins and minerals that we only need in small amounts
 - **Macronutrients:** humans consume in large amounts because our bodies need them more

Essential Nutrients

1. Protein

- “Building blocks” for the body
- Every cell in our body contains protein
- Used for growth in the body, overall health, and maintaining the body’s functions
- Made up of amino acids
- Sources: meat, fish, eggs, beans, nuts, etc.

2. Carbohydrates

- Give your body energy, especially for the brain and central nervous system
- Helps the body fight disease, fuels the body
- Simple vs complex carbs: we want complex carbs (whole grains and wheat) vs simple carbs (bread, pasta, white bread)
- Sources: beans, whole grains, vegetables with a lot of fibre

2.1 Nutrients and Nutrient Classification (continued)

3. Fats

- Helps blood clotting and cell building
- High in calories but a good energy source for the body
- Anti-inflammatories
- Sources: seeds, nuts, vegetable oils, avocados, olives, etc.
- Avoid trans fats like cheese, red meat, butter, and cream

4. Vitamins

- Protects the body from disease
- Keeps the body healthy
- 13 essential vitamins the body needs, including vitamin A, C, and D
- Sources: vitamin supplements BUT if you eat a balanced diet following all the nutritional recommendations, you likely will not need to take vitamin supplements

5. Minerals

- Almost the same role as vitamins, supporting the body
- Essential for many bodily functions like growing teeth, strong bones, healthy hair, etc.

6. Water

- Essential for life
- About 60 percent of the body is made up of water
- Flushes out toxins and waste in the body
- Improves brain function
- Prevents constipation
- Sources: fruits and vegetables are a good source of water. Fruits and vegetables like watermelon and spinach are more than 50% water and are a great source.

2.2 Food Guide Recommendations

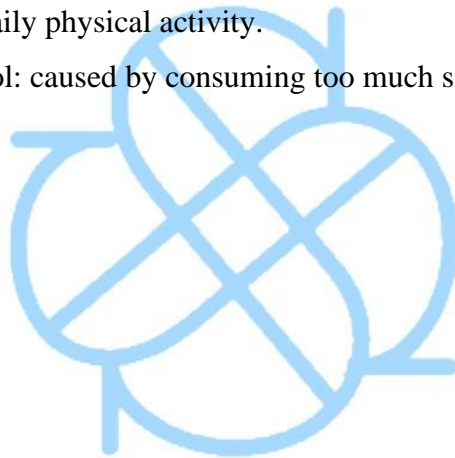
- Canadians follow Canada's Food Guide which outlines the recommended serving of food from each food group for both genders and every age group.



2.3 Relationships Between Diet and Disease

- Eating too much/too little of certain foods can put you at risk for certain diseases.

- Although many food related diseases are because of diet, some can also be inherited such as diabetes.
 - Obesity: caused by eating too much and gaining weight in the process.
 - Osteoporosis: caused by low calcium intake. Someone who has osteoporosis is more likely to get fractures and has diminished bone density.
 - Heart disease and stroke: caused by consuming too many unhealthy fats such as butter, cheese, and red meats. This results in clogged arteries that can lead to heart attacks and strokes.
 - Type 2 diabetes: abnormally high levels of glucose in the blood affects the body's ability to moderate sugar levels.
 - High blood pressure: develops over time from consistent unhealthy diet choices and a lack of daily physical activity.
 - High cholesterol: caused by consuming too much saturated and trans fats



2.4 Special Diets/Food Lifestyles

Type of Diet	Foods eaten	Foods avoided
Lacto-ovo vegetarian	Fruits, vegetables, grains, legumes, nuts, seeds, dairy products, eggs	Meats (beef, pork, lamb, etc.), poultry, fish, seafood, duck
Ovo-vegetarian	Fruits, vegetables, grains, legumes, nuts, seeds, eggs	Dairy products, meat (beef, pork, lamb, etc.), poultry, fish, seafood, duck
Vegan	Fruits, vegetables, grains, legumes, nuts, seeds, dairy alternatives (e.g almond, soy, and coconut milk)	Dairy products, meats (beef, pork, lamb, etc.) poultry, fish, seafood, duck, cheese, butter, honey
Plant based	Emphasizes eating less processed foods and consuming foods that come from plant sources	Meats and animal products (but not absolutely)
Flexitarian	Fruits, vegetables, grains, legumes, nuts, seeds, meats (incorporate from time to time) Focuses on getting protein more from plant sources instead of animal products	Limit processed foods, added sugar and sweets
Pescatarian	Fruits, vegetables, grains, nuts, seeds, eggs, dairy products, fish, seafood	Meats (beef, pork, lamb, etc.), poultry, duck
Diabetics (Low Carb)	Fruits, vegetables, legumes, nuts, seeds, meats, poultry, fish, seafood, dairy products, eggs, limits carbs but can still be consumed in moderation	Limits carbs including starchy fruits and vegetables
Celiac disease diet	Fruits, vegetables, legumes, nuts, seeds, eggs, dairy products, meats	Grains (pasta, bread, cereal) any foods with gluten

2.5 Nutrition Labels

- The FDA (Food and Drug Administration) requires that every food and beverage has a nutrition label
- A nutrition label provides detailed information on the food/drink's nutritional content

Contents of a Nutrition Label

1. Serving Information:

- This information is right at the top of the label. It tells you exactly how many servings are in the entire container, and how many cups/grams is one serving (e.g. 8 serving per container, serving size: $\frac{3}{4}$ cup)

2. Calories

- Usually, calories are given per serving and not the number of calories in the whole package. This means that if you were to eat more than the serving size on the package, you double or triple the number of calories you are consuming.

3. Nutrients

- The nutrients on a nutrition label include fats, cholesterol, sodium, carbohydrates, fibre, sugar, protein, calcium, iron, and potassium.

4. % Daily Value

- This number tells you what percentage of potassium, for example, you are getting out of this food, in regards to how much you should be getting in one day. For example, if you need 10g of potassium per day, and this food contains 5g of potassium, the daily value percentage would read %50. This number is located in the right hand column of the nutrition label.
- The daily value percentage is based on a diet of 2,000 calories per day. It is not always reliable because you may need less or more depending on your weight, age, height, and gender.

2.6 Energy Balance

What is Energy Balance?

- Energy balance = the relationship between energy in and energy out, in regards to food/calories one consumes
- Energy in = consumed calories
- Energy out = calories burned through our body's energy requirements and exercise
- Your body burns a certain amount of calories, even at rest, but exercising and moving around can increase your "energy out"
- Energy balance, whether positive or negative, will determine if you lose, gain, or maintain your current weight.
- Energy balances determine our overall health.

Negative Energy Balance

- Negative energy balance (more energy out than energy in) can be good when someone is trying to lose weight. The body will notice that there is a deficit and will start burning fat reserves to make up for it,
- But, too much negative energy balance can be really bad for the body. This will lead to metabolism slowing down, reduced bone mass, and an inability to concentrate or perform any physical activities due to the lack of energy.

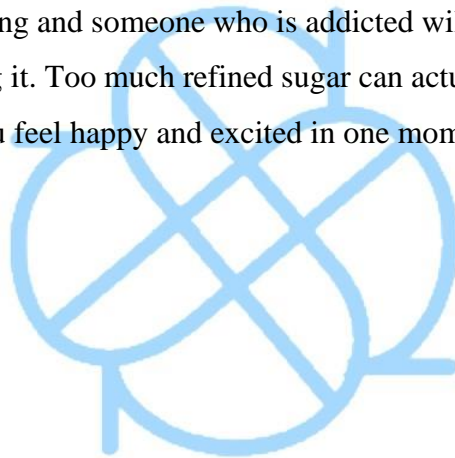
Positive Energy Balance

- Positive energy balance (more energy in than energy out).
- Positive energy balance can happen in two ways: overeating and under exercising.
- When you consume way more calories than you actually need, you put yourself at risk for high cholesterol, high blood pressure, heart attacks, stroke, and many other diseases.

2.7 Stimulants in Food and Other Substances

- There are a surprising amount of foods we eat that can affect our mood and how we feel, simply because of chemicals found inside them. The most common example of this is coffee.

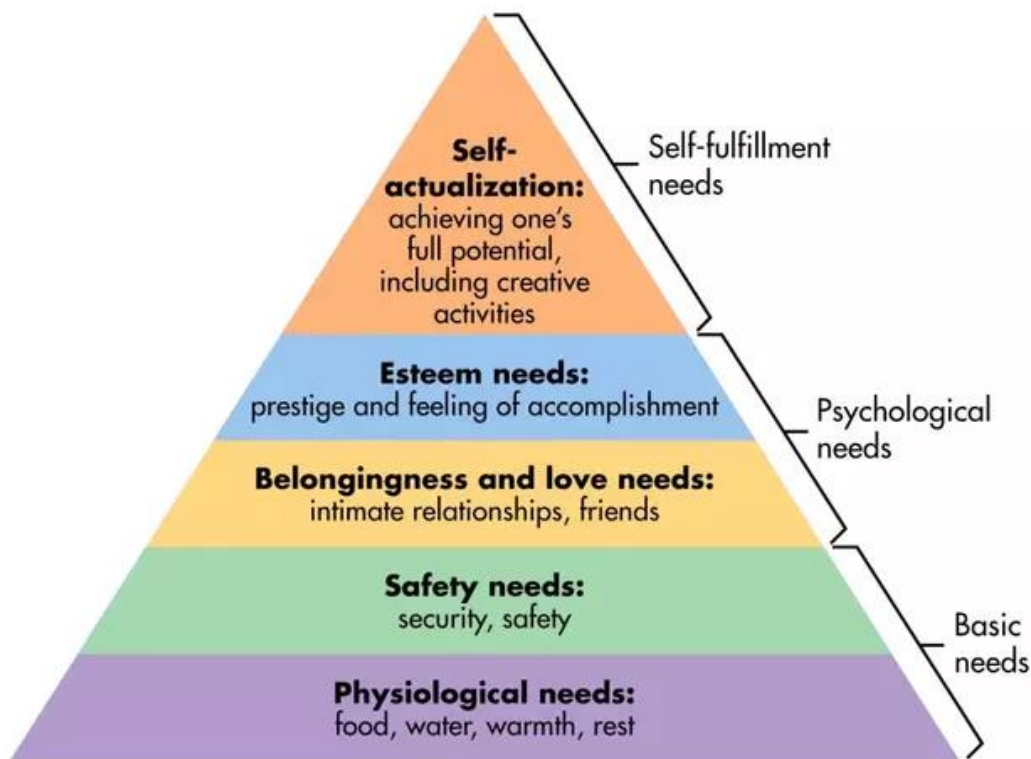
- **Coffee:** Coffee contains caffeine which is a stimulant that provides you with a short lived burst of energy and makes you feel more awake. This is temporary though and withdrawal from coffee causes painful headaches.
- **Nutmeg:** This spice can actually make you hallucinate, if consumed in large doses. It contains myristicin, and too much of the chemical can actually kill a small child.
- **Cocoa:** Cocoa beans have a few chemicals that can alter your mood and ultimately make you feel happier. Theobromine is one example. Consuming cocoa beans will improve your mood for a short while.
- **Sugar:** Eating sugar in large amounts causes something commonly known as a “sugar rush”, or a sudden burst of energy that can last for hours. Refined sugar is actually addicting and someone who is addicted will find it extremely difficult to stop consuming it. Too much refined sugar can actually affect your mood as well. It can make you feel happy and excited in one moment, then tired and depressed in the next.



Unit 3: Relationships and Influences

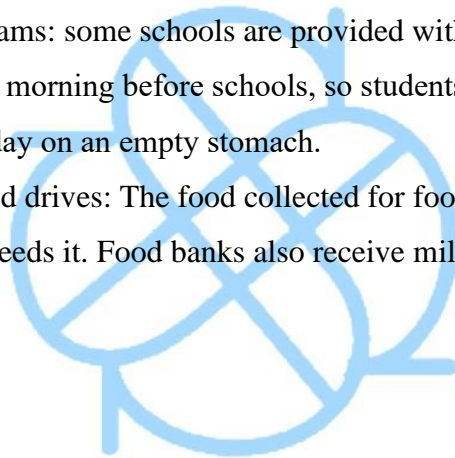
3.1 Maslow's Hierarchy of Needs

- Maslow's hierarchy of needs is a pyramid that represents humans' needs from the most basic ones like food and water at the bottom, to more complex ones like fulfillment and esteem at the top.
- There are five needs in Maslow's pyramid:
 - Physiological needs
 - Safety needs
 - Belongingness and love needs
 - Esteem needs
 - Self fulfillment needs
- The image below breaks down what each layer includes:



3.2 Food Security and Insecurity

- Food security: with a reliable source of nutrient rich, affordable meals
- Food insecurity: without a reliable source of nutrient rich, affordable meals
- Food insecurity is a larger issue than many people think. It does not mean one is necessarily homeless or without a job. Someone who does not know whether they will be able to afford their next meal even if they have a job, would still be considered someone with food insecurity in their household.
- In 2014, close to 20 million households in the U.S reported being food insecure at one or many times during the year.
- There are programs in place in cities, schools, and community centres to fight this issue, such as:
 - Nutrition programs: some schools are provided with the funding to give students breakfast in the morning before schools, so students who can't afford breakfast don't start the day on an empty stomach.
 - Food banks/food drives: The food collected for food banks is available to anybody who needs it. Food banks also receive millions of dollars in donations yearly.



3.3 Environmental Impact of Food Production and Consumption

Food Production and Consumption

- Food production makes up more than 20% of the world's greenhouse gas emissions.
- Producing food takes massive amounts of energy. Before it comes to your plate, fresh produce, dairy products, grains, meats, etc. go through the farming, washing, cutting, packaging, transportation, and so many more smaller steps.
- Because food is produced in such large amounts, large machinery is often used. For example, when grain is being harvested, large combine harvesters are used for the field. These machines use so much fuel and put that right back into the environment.
- Farming and agriculture also gets rid of large plot of land that used to be home to thousands of species, ruining biodiversity and forever disrupting the ecosystems that once existed there.
- Food production also used a lot of water. Almost 60 million gallons of water are required per second to make enough food to sustain the current population.

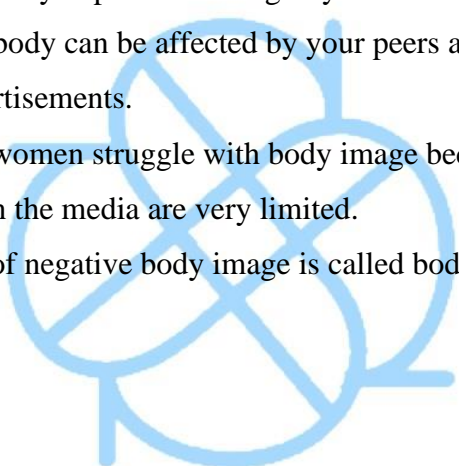
Food Waste

- Food waste is also another factor that contributes to the environmental impact.
- 1.4 billion tons of food are wasted every year. To put it into perspective, that is not just food waste, that is also throwing away all the resources that went into producing that food in the first place. The fuel used to power the harvesting machines, all the machinery used in the production/manufacturing process, and the materials used to package that item of food. All this is thrown out and it is a complete waste of resources.
- Waste goes straight to landfills, where a greenhouse gas called methane is released. If we stopped throwing away so much food, we could collectively cut back on more than 10% of greenhouse gas emissions that are produced by food consumption and waste.
- Many foods that are thrown out, especially by grocery stores, have not actually gone bad, they just have a dent or a spot that doesn't actually affect the quality of the food at all.

Unit 4: Understanding Healthy Food

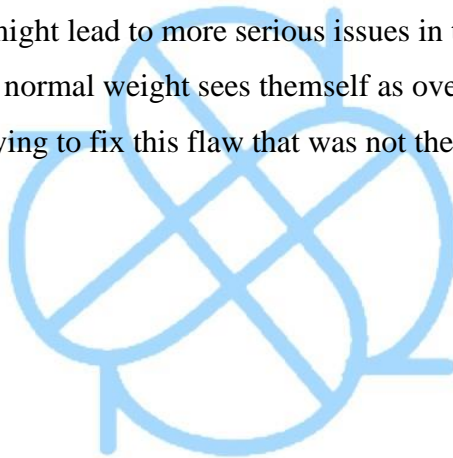
Relationships

4.1 Body Image

- **Body image:** the mental image you create of yourself. The idea of body image is made up of three things:
 - How you feel (positively/negatively) about your body's size and shape
 - What you believe your body looks like
 - How you physically experience being in your own skin.
 - The way you see your body can be affected by your peers and the media, like magazines, social media, and advertisements.
 - Many young men and women struggle with body image because the types of body shapes and sizes represented in the media are very limited.
 - The most severe form of negative body image is called body dysmorphia, or dysmorphic disorder.
- 

4.1 Body Image (continued)

- **Dysmorphic disorder:** a mental disorder where you are fixated on your perceived flaws. More often than not, these flaws are in fact very minor, and go unnoticed by others.
 - Signs someone might have dysmorphic disorder:
 - They frequently look for reassurance from others that their flaws are not noticeable.
 - Perfectionist tendencies
 - They avoid social situations because they feel as if people will be staring at their flaws.
 - Constant comparison between themselves and others.
 - Strong belief that these flaws are a defect in their appearance.
- Negative body image might lead to more serious issues in the future. For example, if someone who is a very normal weight sees themselves as overweight, they can develop an eating disorder from trying to fix this flaw that was not there in the first place.



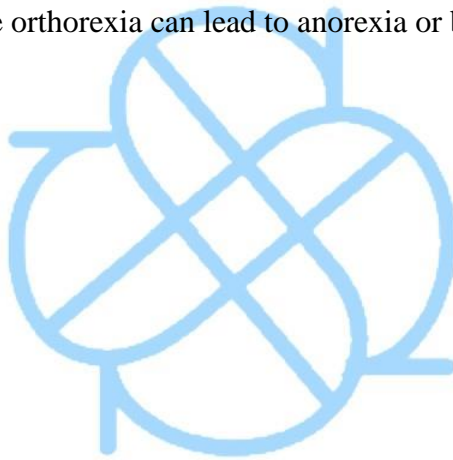
4.2 Disordered Eating

- Disordered eating is when one's eating habits reflect those of someone with an eating disorder. Just because you have disordered eating habits, does not always mean you have an eating disorder. Continued habits of disordered eating will eventually lead to you developing an eating disorder.
- An eating disorder is a mental illness where mental disturbances such as depression, anxiety, body dysmorphia, and self hatred caused someone to be constantly preoccupied with food and their weight. Cultural ideals (media) can also affect someone's mental health to the point where they develop an ED.
- Eating disorders are MENTAL disorders. You cannot tell if someone has an eating disorder simply by looking at them. A common misconception about ED's is that only slim people suffer from them.
- There are four common types of ED's:
 - Anorexia Nervosa:
 - Most common kind of ED
 - Affects more women than men.
 - Intense fear of gaining weight.
 - Heavily restricted diet (ranging from 1000 cals per day to less than 200)
 - Obsessive compulsive disorder tendencies
 - Bulimia Nervosa
 - Binge eating episodes followed by purging
 - Purging: vomiting, fasting, excessive exercising, or taking laxatives to get rid of what you ate
 - Consume unusual amounts of food at one time, then purge
 - Fear of gaining weight

4.2 Disordered Eating (continued)

- Binge eating disorder

- Eating large amounts of food in secret without control
- No purging
- Feelings of shame and guilt associated with the bingeing
- Often overweight or obese
- Increased risk of heart disease and stroke
- Orthorexia
 - Obsession with healthy food and “clean eating”
 - Extreme focus on ingredients, exact amounts on nutrition labels and extreme calorie counting
 - Food planning
 - Completely eliminating certain food groups/types of food
 - Extreme orthorexia can lead to anorexia or bulimia



Unit 5: Terms and Vocabulary

- **Grease fire:** a fire caused by cooking oil that has overheated.

- **Food-borne illness:** also known as food poisoning, sickness caused by a virus or bacteria in food that has been contaminated
- **Weakened immune system:** one's immune system's ability to fend off disease has been reduced due to a number of factors including organ transplant drugs, alcohol, or smoking.
- **E.Coli:** a type of bacteria that can live in the intestines of animals and humans. Some species of E.Coli do not cause disease while some do.
- **Norovirus:** a type of virus and also the most common cause of food related illness in the U.S
- **Salmonella:** a type of bacteria that can cause two kinds of illness: salmonellosis and enteric fever.
- **Listeria:** a type of bacteria and the leading cause of death from food poisoning in the U.S. Listeria can cause two kinds of illness: listeria and invasive listeria.
- **Campylobacter:** a type of bacteria that causes food related illness.
- **yield:** how many serving a certain recipe can make.
- **packing:** pressing an ingredient firmly into a measuring cup.
- **nutrients:** important compounds our bodies cannot make sufficient amounts of, so we get them from eating certain foods.
- **micronutrients:** includes vitamins and minerals that we only need in small amounts.
- **macronutrients:** humans consume these nutrients in large amounts because our bodies need more of them.
- **daily value:** a number found on nutrition labels that tells you what percentage of that specific nutrient you are getting from the food, in regards to how much you should be getting per day. This number is based on a 2,000 calorie diet.
- **energy balance:** the relationship between energy in and energy out, in regards to food/calories one consumes.
- **energy in:** consumed calories

Unit 5: Terms and Vocabulary (continued)

- **energy out:** burned calories
- **positive energy balance:** more energy in than out
- **negative energy balance:** more energy out than in

- **food security:** with a reliable source of nutrient rich, affordable meals
 - **food insecurity:** without a reliable source of nutrient rich, affordable meals
 - **body image:** the mental image you create of yourself.
 - **dysmorphic disorder:** a mental disorder where you are fixated on your perceived flaws.
- More often than not, these flaws are in fact very minor, and go unnoticed by others.

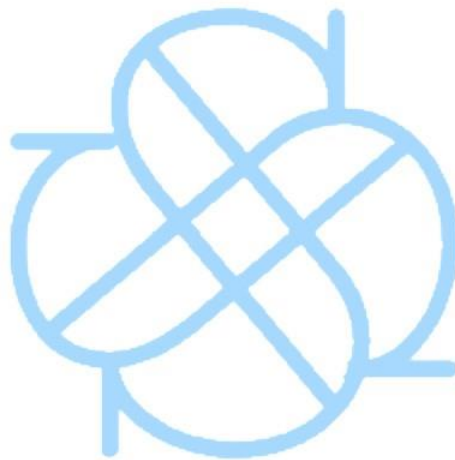


Image Sources

- <https://www.allianceonline.co.uk/blog//2018/04/types-of-knives-a-guide-to-kitchen-knives-and-their-uses/> (Knives)

- <https://foodforhealth.techno-science.ca/health-and-nutrition/canadas-food-guide/> (Food guide)
- <https://www.simplypsychology.org/maslow.html> (Maslow's hierarchy of needs)

