



LEVEL 1
CURRICULUM
FOOD EXPLORERS
FALL 2024

2.0

newyorkedge

TABLE OF CONTENTS

- [Getting Started](#)
- [Purpose Statement](#)

- [Lesson 1: Balanced Meals](#)
- [Lesson 2: Mindful Eating](#)
- [Lesson 3: Macros and Micros](#)
- [Lesson 4: Hydration](#)
- [Lesson 5: Metabolism](#)
- [Lesson 6: Reading a Recipe](#)
- [Lesson 7: Healthy Cooking Substitutes](#)
- [Lesson 8: Cost Efficient Cooking](#)
- [Lesson 9: Smart Snacking](#)

[Appendix](#)

- [Food Handlers Safety Training Information](#)
- [Changing Yielded Servings](#)
- [Ordering From Fresh Direct](#)
- [Lesson Tracker](#)
- [Specialist Evaluation Tool](#)
- [Family Letter Template](#)

GETTING STARTED

TO DO LIST:

1. Specialists complete the [Specialist Waiver Form](#).
2. Principal complete the [Principal Waiver Form](#).
3. Specialists need to [create their profile](#) and complete the following trainings on EdPuzzle:
 - a. [General Food Safety Training](#)
 - b. [Master Cookbook Training](#)
4. Review the [Supplies List](#) and order your materials as soon as possible.
5. Use [Fresh Direct](#) to order ingredients.
6. Review the Food Explorers Curriculum available on [the portal](#).

NEED MORE SUPPORT?

Have questions about a lesson or a recipe?

Schedule a meeting with Emelia or Shelby during their office hours:

- Emelia (Bronx, Manhattan) - [Click here to schedule](#)
- Shelby (Queens, Brooklyn, Staten Island) - [Click here to schedule](#)

PURPOSE STATEMENT

In level 1 students will learn about the basics of foods and nutrition such as MyPlate and the five food groups in an age-appropriate, positive, fun, interactive, and engaging way.

Level 1 is designed to encourage students to eat healthy by providing positive food experiences, which will help our students develop an awareness of good nutrition and develop healthy eating habits for a lifetime.

By the end of this level students would be exposed to a variety of learning experiences about food.

At the end of this level, we want students to have the knowledge to make consciously healthier choices when preparing their own food, or selecting lunches and snacks in the lunchroom.

We also want to expose students to important lifestyle skills, like reading a recipe card, properly measuring ingredients and changing the yielded serving sizes of their meal.

LESSON 1

Balanced Meals

LEARNING OBJECTIVES

- Explain what a balanced diet is and why it is important for maintaining overall health.
- Identify the main food groups that should be included in a balanced diet
- Learn the role of different nutrients (vitamins, minerals, proteins, carbohydrates, and fats) in the body and how they contribute to health.
- List examples of foods from each food group that contribute to a balanced diet
- Understand why it is important to limit foods high in added sugars, salt, and unhealthy fats, and be able to give examples of such foods.

SEL BENCHMARK

- 3B. 3b. As part of decision-making, consider strategies for making choices based on their values that promote personal and collective safety and well-being.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS


- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food Safety Supplies
- Large paper plates
- Markers or colored pencils
- Food magazines or printed food images
- Scissors
- Glue
- Nutritional guides (MyPlate)

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Antioxidants:**
 - Antioxidants help remove harmful molecules called free radicals in the body. Free radicals come from environmental factors like pollution, UV radiation, and cigarette smoke. Small amounts are produced naturally in our body. Excessive production of free radicals in the body is dangerous and can make it easy for diseases like cancer to form in our body.
- **Dairy Alternatives:**
 - A dairy alternative refers to any food or beverage product designed to replace dairy products, typically made from milk, with non-dairy ingredients. These alternatives are often used by people who are lactose intolerant, allergic to dairy, vegan, or looking to reduce their consumption of animal products for health or ethical reasons.
- **Essential Vitamins:**
 - Essential vitamins are nutrients that the body requires in small amounts for various body functions. They have to be obtained through the foods we eat or in the form of supplementation in the form of a multivitamin or a special beverage.
- **Unhealthy Foods:**
 - Foods that are high in calories, sugars, unhealthy fats (such as trans fats), sodium, and refined carbohydrates, while being low in essential nutrients like vitamins, minerals, and fiber. Examples are:
- **Fast Food:**
 - Burgers, fries, fried chicken, and other fast-food items are often high in unhealthy fats, sodium, and calories.
- **Non Restrictive Diet:**
 - An approach to eating that focuses on flexibility, enjoyment, and overall well-being rather than strict rules or limitations.
- **Nutrients:**
 - Nutrients are the great healthy things in foods. It is essential for growth, development, and maintenance of health in the human body. Nutrients provide energy, support metabolism, and contribute to various bodily functions.
- **Portion:**
 - The amount of a particular food that is served to one person at a single eating occasion. This can vary depending on the type of food, the meal, and cultural or individual dietary practices.



Click on the words for pronunciations!

HOOK

- Please play the following video for your students on a SMART Board or large screen device.
- [A balanced meal: How do you eat well?](#) (1:55 in duration)

SHARE

- Many people rationalize eating unhealthy foods; Have you ever done this and in what ways did you justify eating unhealthy foods?
 - *Possible Answers:*
 - *Treating yourself: Believing that you deserve a treat after a tough day or achieving something.*
 - *Social settings: Feeling pressured to eat unhealthy foods in social gatherings to fit in.*
 - *Convenience: Choosing fast food or processed snacks due to a busy schedule or finances.*
 - *Emotional comfort: Turning to comfort foods during stressful or emotional times.*
-
- In this lesson we will discuss how to create balanced and nutritious meals.

TEACH

- A balanced diet includes different types of foods in appropriate proportions to meet our nutritional needs and maintain overall health .
 - A balanced meal typically includes a variety of nutrients from different food groups, aiming to provide essential vitamins, minerals, proteins, carbohydrates, and healthy fats.
 - It is important to be mindful of food allergies and medical conditions that require food restrictions.
 - It is also important to limit foods high in added sugars, salt, and unhealthy fats.
- Here are some examples of foods typically included in a balanced diet:
 - **Fruits and Vegetables:** These should make up a big portion of your daily intake, providing vitamins, minerals, fiber, and antioxidants. Examples include apples, oranges, berries, spinach, broccoli, carrots, and bell peppers.
 - **Protein:** Essential for building and repairing tissues, proteins can come from both animal and plant sources. Examples include lean meats (chicken, turkey), fish (salmon, tuna), eggs, beans, lentils, tofu, and nuts.
 - **Whole Grains:** These provide carbohydrates for energy, fiber for digestion, and essential nutrients. Examples include whole wheat bread, brown rice, oats, quinoa, and barley.
 - **Dairy or Dairy Alternatives:** Rich in calcium and other nutrients important for bone health. Examples include milk, yogurt, cheese, and fortified plant-based milks (soy, almond, oat milk).
 - **Healthy Fats:** Important for brain function, energy, and absorption of fat-soluble vitamins. Sources include avocados, nuts (like almonds, walnuts), seeds (flaxseeds, chia seeds), olive oil, and fatty fish (salmon, mackerel).
 - **Water:** Water is not a food but it is important for hydration and our overall health. Drinking plenty of water throughout the day is crucial for maintaining our bodily functions.

SHARE

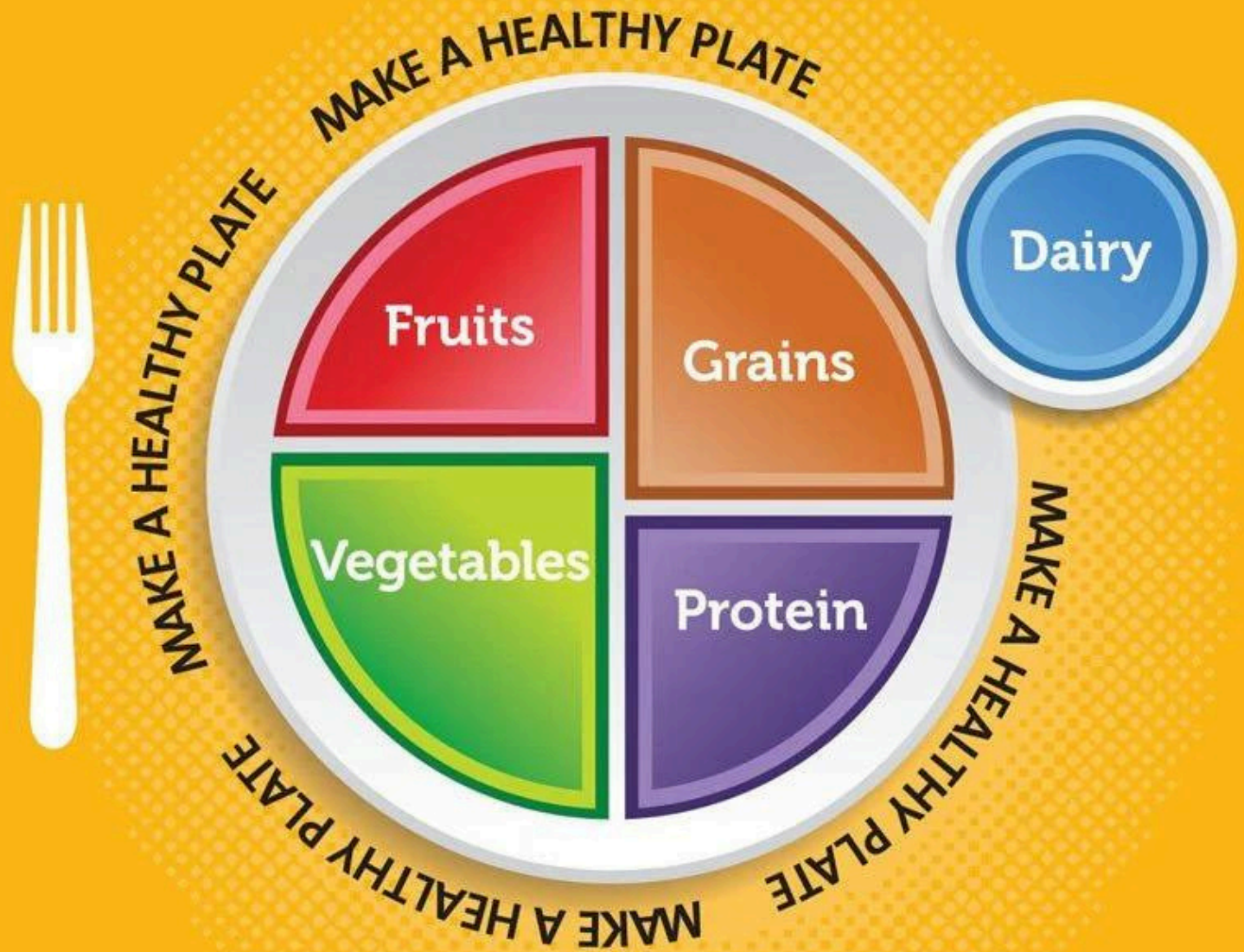
- Can you name one healthy food from each food group that you would put on your plate for a balanced meal?
- *Possible Answers:*
 - *Fruits: Apple*
 - *Vegetables: Broccoli*
 - *Grains: Whole wheat bread*
 - *Protein: Grilled chicken breast*
 - *Dairy: Low-fat yogurt*

INDEPENDENT/GROUP PRACTICE

SHARE

What does the phrase "daily dietary diversity" mean to you?

- For today's activity, we are going to learn about and create a balanced diet using visuals and magazines.
- Materials Needed:
 - Large paper plates
 - Markers or colored pencils
 - Food magazines or printed food images
 - Scissor
 - Glue
 - Nutritional guides (MyPlate)
- Lets keep in mind that a balanced diet must include a variety of food groups: fruits, vegetables, grains, protein, and dairy
 - A balanced diet provides essential nutrients such as vitamins and Minerals
 - It supports growth and development and physical health
 - It helps us maintain muscle mass, bone health, and overall body function.
 - It also boosts our energy Levels
- Instructions:
 - We will work in groups to complete this activity
 - I will provide each group with MyPlate handouts
 - I want you all to familiarize yourselves with the different food groups and the recommended daily servings.
 - I will now give each participant a large paper plate and markers.
 - Divide the plate into sections for each food group, based on the nutritional guide (e.g., half for fruits and vegetables, a quarter for grains, and a quarter for protein).
- Food Image Collection:
 - I will distribute magazines and printed food images
 - Cut out images of foods and categorize them into the appropriate food groups.
- Plate Creation:
 - Working in groups glue the images onto your paper plates, arranging them according to the sections you created.
 - Be creative in arranging the foods to make your plates look appealing and balanced.



1 serving:
 1 cup fruit
 1 cup 100% juice
 1/2 cup dried fruit



1 serving:
 1 cup veggies
 2 cups leafy greens
 1 cup 100% juice



1 serving:
 1 slice bread
 1 cup dry cereal
 1/2 cup cooked cereal, pasta, rice



1 serving:
 1 ounce meat, fish, poultry
 1/4 cup cooked beans
 1 ounce nuts
 1 tablespoon nut butter
 1 egg



1 serving:
 1 cup skim/lowfat milk
 1 cup yogurt
 2 ounces processed cheese
 1.5 ounces hard cheese

Visit www.chooseMyPlate.gov to find your personal eating plan.

SHARE

- Explain why you chose specific foods and how they fit into a balanced diet.
- Discuss the variety and balance of foods on each plate.
- Talk about portion sizes, the importance of moderation, and how to incorporate healthy choices into daily meals.

LINK

- Remember, adopting a balanced diet is a journey, not a destination. It's about making changes that you can maintain over the long term. Don't be too hard on yourself if you occasionally eat less than healthy foods.
- Prioritize eating a balanced diet because you are investing in your overall health and well-being.
- Let's commit to making small, positive changes every day that will lead to a healthier, happier life.
- Plan your meals ahead of time to ensure they are balanced.
- Read nutrition labels to make informed food choices.
- Cook more meals at home to have control over ingredients and portions.
- Incorporate regular physical activity into your routine to complement your balanced diet.
- Balance and moderation are key !

EXIT TICKET

- In their journal have students answer the following question:
"What are some ways you could track and analyze your eating habits?"

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

LESSON 2

Mindful Eating

LEARNING OBJECTIVES

- Explain what mindful eating is and how it involves using the senses to fully experience food.
- Engage in mindful eating exercises, such as mindful chewing, savoring flavors, and paying attention to food textures
- Learn to recognize and respond to the body's signals of hunger and fullness
- Reflect on meals, noting any differences in satisfaction, digestion, and overall well-being eating mindfully.

SEL BENCHMARK

- 1A.3a. Identify the connections between their thoughts, feelings, and behaviors.
- 1C.3a. Develop a plan and prioritize steps in working toward a goal.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS


- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food safety Supplies
- A variety of colorful fruits (e.g., strawberries, blueberries, kiwi, pineapple, apple slices, grapes)
- Small plates or napkins for each student
- Small cups of water for rinsing hands
- Blindfolds (optional for added fun)
- A quiet space with seating arrangements

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Digestion:**
 - The process by which the body breaks down food into smaller pieces so that it can be absorbed and used for energy, growth, and repair: Digestion transforms food into nutrients the body can use.
- **Savor:**
 - To enjoy the taste or smell of something for as long as possible: This involves taking the time to fully appreciate and enjoy the flavors or aromas of food or drink, often by eating or drinking slowly and attentively.
- **Mindful Eating:**
 - Eating mindfully means paying full attention to what you are eating and how you are eating it. It involves focusing on the taste, texture, and enjoyment of your food, and being aware of your hunger and fullness signals.
- **Mindless Eating:**
 - Mindless eating happens when you eat without paying much attention to what, when, or how much you're eating. It often involves eating quickly, while distracted, or without really noticing the taste or texture of your food.
- **Fullness Signal:**
 - The signal from the body indicating that it has received enough food and is satisfied: These signals are part of the body's natural system for hunger and fullness.
- **Obesity:**
 - A medical condition which causes excessive body fat that poses a risk to health: For children, obesity is typically determined based on their body mass index (BMI) compared to age- and sex-specific growth charts. Obesity can lead to a range of health problems, including type 2 diabetes, high blood pressure, high cholesterol, sleep apnea, and joint issues.
- **Type 2 diabetes:**
 - A health condition where the body has trouble managing sugar (glucose) in the blood: This happens because the body either doesn't make enough insulin or doesn't use insulin properly. Insulin is a special helper that helps sugar from food enter cells to give them energy.



Click on the
words for
pronunciations!

HOOK

- Please play the following video for your students on a SMART Board or large screen device.
- [Fastest Time Eating a Burrito](#) (0:41 in duration)

SHARE

- What are some specific behaviors in the video that indicate the person is not eating mindfully?
- If this person ate like this all the time, how might these behaviors affect their overall eating experience and health?
- *Possible Answers:*
 - *Rushing, not chewing her food before swallowing.*
 - *Not eating mindfully can cause the following negative effects on a person's overall eating experience and health:*
 - *Overeating: When people eat without paying attention, they are more likely to overeat because they may not notice when they are full. This can lead to weight gain and obesity.*
 - *Poor Digestion: Eating quickly and without attention can lead to digestive issues, such as bloating, gas, and indigestion, because the body doesn't have time to properly process the food.*
 - *Reduced Satisfaction: Eating mindlessly often means missing out on the full sensory experience of eating, which can reduce satisfaction and enjoyment of meals.*
 - *Emotional Eating: Mindless eating can lead to using food as a way to cope with emotions, rather than eating in response to hunger, which can contribute to unhealthy eating patterns and potential eating disorders.*

PREVIOUS LESSON REVIEW

- Adopting a balanced diet is a journey, not a destination. It's about making changes that you can maintain over the long term. Don't be too hard on yourself if you occasionally eat less than healthy foods.
- Prioritize eating a balanced diet because you are investing in your overall health and well-being.
- Let's commit to making small, positive changes every day that will lead to a healthier, happier life.
- Plan your meals ahead of time to ensure they are balanced.
- Read nutrition labels to make informed food choices.
- Cook more meals at home to have control over ingredients and portions.
- Incorporate regular physical activity into your routine to complement your balanced diet.
- Balance and moderation are key!

TEACH

- Mindful eating is like using your superhero senses at mealtime.
- It's about paying super close attention to how food looks, smells, and tastes.
- When we eat mindfully, we enjoy each bite and notice when we are full, so we don't overeat. It's a cool way to make mealtime awesome!"
- Using the powers of focus and attention to enjoy our food involves practicing mindful eating. Here are some steps to help achieve this:
 - **Eliminate Distractions:** Turn off the TV, put away your phone, and avoid reading or working while eating. Create a calm and quiet environment to focus solely on your meal.
 - **Set an Intention:** Before you begin eating, take a moment to set an intention to be present and fully enjoy your food. This can help center your mind and prepare you for a mindful eating experience.
 - **Engage Your Senses:** Pay attention to the colors, textures, smells, and sounds of your food. Take note of how it looks on your plate, how it smells, and the different textures you can feel.
 - **Chew Slowly and Thoroughly:** Take small bites and chew your food slowly and thoroughly. This not only aids digestion but also allows you to savor the flavors and textures of each bite.
 - **Pause Between Bites:** Put your fork down between bites and take a moment to breathe. This can help you slow down and tune into your body's hunger and fullness signals.
 - **Listen to Your Body:** Pay attention to how your body feels as you eat. Recognize signs of hunger and fullness, and respond accordingly.
 - **Reflect After Eating:** After your meal, take a moment to reflect on how you feel. Notice any differences in your satisfaction, digestion, and overall well-being when you eat mindfully.
 - **Practice Regularly:** Like any skill, mindful eating improves with practice. Make it a regular part of your routine to build your focus and attention while eating.

SHARE

- What do you think is the most difficult reason that prevents people from mindfully eating at every meal?

INDEPENDENT/GROUP PRACTICE

- We are going to explore the flavors, textures, and smells of different fruits in a fun and interactive way.
- **Materials Needed:**
 - A variety of colorful fruits (e.g., strawberries, blueberries, kiwi, pineapple, apple slices, grapes)
 - Small plates or napkins for each student
 - Small cups of water for rinsing hands
 - Blindfolds (optional for added fun)
 - A quiet space with seating arrangements
- **Instructions:**
 - In today's activity it is all about exploring food with all your senses and enjoying the experience.
- **Warm-Up Activity: "Mystery Fruit Feel" :**
 - I will hand out blindfolds.
 - I want you all to take turns feeling a fruit without looking at it.
 - Describe its texture, shape, and weight to the group.
- **Observe and Smell:**
 - I will give each of you a small plate with a piece of a different fruit.
 - Look at the fruit closely. What colors and shapes do you see?
 - Take a moment to smell the fruit. What scents do you notice?
 - Describe the smells to the group.
- **Taste Exploration:**
 - Take a small bite of the fruit. Chew slowly and really focus on the flavors, textures, and how the fruit feels in your mouth.
 - Take note of the taste sweet, sour, tangy, or juicy.
 - After tasting, let's discuss your experiences.
 - What was your favorite fruit and why?
 - Did you notice any new flavors or textures you hadn't experienced before?

SHARE

How did eating slowly and paying attention change the way you felt about the fruit? Did you notice anything different that you maybe haven't acknowledged before?

LINK

- Today, we explored how mindful eating helps us enjoy our food more and listen to our bodies.
- Remember, next time you eat, try to use your senses: look at your food, smell it, and taste it slowly. Notice how your body feels and when you are full.
- Practicing mindful eating makes mealtime more enjoyable and helps us make healthy choices. Keep up the great work!

EXIT TICKET

- In their journal have students answer the following question:

"Draw/Explain how you will practice mindful eating during your next meal."

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

LESSON 3

Macros and Micros

LEARNING OBJECTIVES

- Identify and classify macronutrients and micronutrients
- Differentiate between macronutrients and micronutrients based on the amount needed by the body and their role in daily bodily functions.
- Describe common food sources of various macronutrients and micronutrients, including both water-soluble and fat-soluble vitamins
- Explain the importance of consuming a balanced diet that includes both macronutrients and micronutrients to support overall health and prevent deficiencies.

SEL BENCHMARK

- 3B. 3b. As part of decision-making, consider strategies for making choices based on their values that promote personal and collective safety and well-being.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS

- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food safety Supplies
- Night Blindness comparison images

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Macronutrients:**
 - Macronutrients are the main nutrients our bodies need to grow and stay healthy. There are three types of macronutrients, carbohydrates, proteins and fats
- **Micronutrients:**
 - Micronutrients are tiny nutrients that our bodies need in small amounts to stay healthy and grow. They include vitamins and minerals, and they are found in many different foods. Even though we only need a little bit of them, they are very important for our health.
- **Metabolic processes:**
 - Metabolic processes are all the different things happening inside our bodies that help us stay alive and healthy. Think of it like a busy factory where lots of tiny workers (our cells) are doing important jobs.
- **Gasoline:**
 - Gasoline is a special liquid that we use to make cars, trucks, and other machines go. It's made from oil that comes from deep underground. When you put gasoline in a car's tank, it helps the engine run so the car can move. It's like fuel for a car, just like food is fuel for your body.
- **Combusted:**
 - When something is combusted, it means it has burned. Combustion is a process where a material reacts with oxygen to produce heat and light. For example, when you light a candle, the wax combusts and creates a flame. It's like when wood burns in a campfire, turning into bright flames and heat.
- **Carbohydrates:**
 - Carbohydrates are one of the main types of nutrients that our bodies need for energy
- **Protein:**
 - Protein is a nutrient that our bodies need to grow, repair, and stay strong. Think of it as the building blocks for our muscles, bones, skin, and other parts of our bodies.
- **Fats:**
 - Fats are nutrients that our bodies need to function properly. They provide energy, help absorb certain vitamins, and play a role in many important bodily functions.
- **Vitamins:**
 - Vitamins are tiny nutrients that our bodies need to stay healthy and grow.


VOCABULARY

- **Minerals:**

- Minerals are natural substances that our bodies need to function properly and stay healthy. They are essential for various bodily functions, and we get them from the foods we eat.

- **Water Soluble:**

- Water-soluble means that something can dissolve in water, like sugar dissolving in a glass of water. When something is water-soluble, it mixes completely with water and disappears into it.



Click on the
words for
pronunciations!

HOOK

- Discussion: Have students answer the following questions.
 - What role does gasoline play in the function of a car?
 - Gasoline is the fuel for the car. It is the main source of energy and it is combusted to make the engine run.
 - What role does oil play in the function of a car?
 - Oil is critical for the engine to move. It allows all the parts of the engine to move smoothly and efficiently.
- Macronutrients and micronutrients are like gasoline and oil for our bodies. Macronutrients are the main source of fuel, and micronutrients keep our bodies functioning efficiently.

PREVIOUS LESSON REVIEW

- In our last lesson, we explored how mindful eating helps us enjoy our food more and listen to our bodies.
- Remember, next time you eat, try to use your senses: look at your food, smell it, and taste it slowly. Notice how your body feels and when you are full.
- Practicing mindful eating makes mealtime more enjoyable and helps us make healthy choices.

TEACH

- Macro- and micro-nutrients are defined by the amount that is needed in the diet.
 - Macronutrients are nutrients that your body needs in large amounts to fuel the body to perform daily tasks and functions.
 - Macronutrients include carbohydrates, proteins and fats.
 - Micronutrients are nutrients that your body needs in small amounts.
 - They are responsible for maintaining the metabolic processes that produce energy.
 - Micronutrients consist of vitamins and minerals.
 - Vitamins and minerals are not made by the body; they must be consumed in the diet or be supplemented.
-
- Vitamins are split into two categories.
 - Water Soluble: B Vitamins and Vitamin C
 - Stored in the blood
 - Found in:
 - Animal meats or animal by-products such as dairy or eggs
 - Green, leafy vegetables and other bright-colored vegetables
 - A variety of nuts and seeds
 - Micronutrient-rich grains and legumes
 - Enriched or fortified grains or oils in moderate quantities
 - Fat-Soluble: A, D, E, K
 - Stored in the body tissues
 - Found in:
 - Fatty fish
 - Vitamin-rich nuts and seeds
 - Fortified dairy products
-
- Minerals are naturally occurring and are required to sustain life.
 - Most minerals relevant to humans are considered metals - but not all of them!
 - Calcium, Chromium, Copper, Fluoride, Iodine, Iron, Magnesium, Mercury, Phosphorous, Potassium, Selenium, Sodium, Zinc
 - Found in:
 - Green, leafy vegetables
 - Fish
 - Mineral-rich tubers (e.g., potatoes and turnips).
 - Legumes and/or whole grains
 - Lean cuts of animal meat and/or dairy products

INDEPENDENT/GROUP PRACTICE

- Fortified with Iron Activity
- Now we are going to demonstrate how foods can be fortified to give us extra nutrients.
- IRON:
 - Function:
 - Essential for blood production and oxygen transport.
 - Food Sources:
 - Red meat, beans, fortified cereals, spinach.
 - Materials:
 - Iron-fortified cereal
 - Magnet
 - Small bowl and water
 - Activity:
 - Crush iron-fortified cereal in a plastic bag.
 - Add water until cereal is submerged.
 - Use a magnet to show how iron particles are attracted to it, demonstrating the presence of iron in the cereal.

Example: <https://www.youtube.com/watch?v=oQ5lpAw2qE>

SHARE

What is your favorite iron-rich food?

LINK

- Today, we discussed how vitamins and minerals work to make our body function properly and efficiently.
- Some foods can be enriched to give us more vitamins and minerals in our diet.
- It's important that we make a special effort to consume all of our vitamins and minerals to optimize our health!

EXIT TICKET

- In their journal have students answer the following question:

"Do you think that a daily multi-vitamin supplement is a good replacement for a healthy diet?"

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

LESSON 4

Hydration

LEARNING OBJECTIVES

- Understand the importance of hydration for overall health and specific body functions.
- Learn about daily water intake recommendations based on age, gender, and activity level.
- Analyze how environmental factors such as climate and physical activity influence individual hydration needs.
- Identify common signs and symptoms of dehydration

SEL BENCHMARK

- 1C.3a. Develop a plan and prioritize steps in working toward a goal.
- 3B. 3b. As part of decision-making, consider strategies for making choices based on their values that promote personal and collective safety and well-being.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS


- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food safety Supplies
- Are you hydrated urine color chart
- Cones or markers to create a race course
- Water bottles (one for each team)
- Cups of varying sizes (small, medium, large)
- Pitchers of water (one for each team)
- Signs or flashcards with different hydration-related scenarios (e.g., "Hot Day," "Exercise," "Sitting in Class")
- Stopwatch or timer

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Brain Function:**
 - Brain function refers to all the things your brain does to help you think, learn, and move.
- **Constipation:**
 - Constipation is a condition where it's difficult to have regular bowel movements
- **Climate:**
 - The average weather conditions in a place over a long period of time.
- **Digestion:**
 - Digestion is the process your body uses to break down the food you eat into smaller parts that it can use.
- **Nutrients:**
 - Nutrients are special substances in food that help our bodies grow, stay healthy, and have energy.
- **Perspiration:**
 - Perspiration, also known as sweating, is when your body releases a liquid through your skin to help keep you cool.
- **Hydrated:**
 - Being hydrated means that your body has enough water to work properly.



Click on the
words for
pronunciations!

HOOK

- Discussion: Have students answer the following questions.
 - How many glasses of water do you think we should drink each day?
- Possible Answers:
 - *The general recommendation for our daily water intake is around 8 glasses for most people.*
 - *However, individual water needs can be different based on age, gender, activity level, climate, and overall health.*

PREVIOUS LESSON REVIEW

- Last week, we discussed how vitamins and minerals work to make our body function properly and efficiently.
- Some foods can be enriched to give us more vitamins and minerals in our diet.
- It's important that we make a special effort to consume all of our vitamins and minerals to optimize our health!

TEACH

- Did you know that your brain is 75% water?
 - Staying hydrated can improve your focus and memory!
- Water has a very important role in our body. This is why it is so important that we stay hydrated.
 - Water helps with digestion and prevents constipation
 - It keeps our skin healthy and smooth.
 - Aids in transporting nutrients and oxygen in the blood.
 - Maintains body temperature.
 - Supports brain function and energy levels.
 - Helps muscles work better.
- We can reap the benefits of water by making sure that we consume the daily recommended intake
 - The amount of water a person should drink is different depending on their age, sex, weight, activity level, and climate
- Lets review the general guidelines for daily water intake:
 - Infants (0-12 months):
 - Typically get enough fluids from breast milk or formula. Water is usually introduced after 6 months.
 - Children (1-8 years):
 - 1-3 years: About 4 cups (32 ounces) of total fluids per day.
 - 4-8 years: About 5 cups (40 ounces) of total fluids per day.
 - Boys and Girls (9-13 years):
 - Boys: About 7 cups (56 ounces) of total fluids per day.
 - Girls: About 7 cups (56 ounces) of total fluids per day.
 - Teens (14-18 years):
 - Boys: About 8-11 cups (64-88 ounces) of total fluids per day.
 - Girls: About 8-9 cups (64-72 ounces) of total fluids per day.
 - Adults
 - Men: About 13 cups (104 ounces) of total fluids per day.
 - Women: About 9 cups (72 ounces) of total fluids per day.
- Your main source of hydration should be water, however it is important to also eat water-rich foods like fruits such as watermelon, oranges and vegetables (e.g., cucumber, lettuce).

TEACH

- Practice healthy hydration habits such as drinking water regularly throughout the day.
- Choose water over sugary drinks.
- Carry a water bottle with you.
- Drink extra water when exercising or in hot weather.
- Listen to Your Body: Thirst is a good indicator that you need to drink more water.
- Monitor Urine Color: Pale yellow urine generally indicates good hydration, while dark yellow urine suggests you need more fluids.
- Share Box (1 min)
- How can you tell if your body needs a drink of water? What are some signs that might show you need to drink more water?"
- Let's review the dehydration chart on the next page.

SHARE

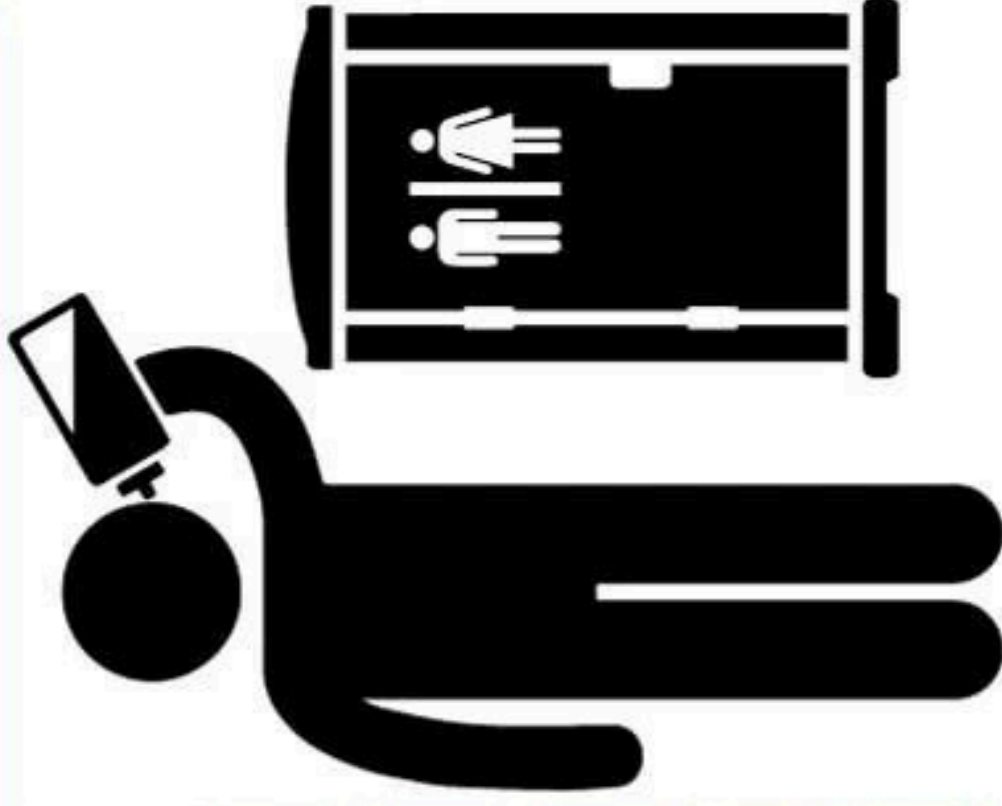
- How can you tell if your body needs a drink of water?
- What are some signs that might show you need to drink more water?

Possible Answers:

- *Feeling Thirsty: If you feel thirsty, it's a good sign that your body needs more water.*
- *Dry Mouth or Lips: A dry mouth or cracked lips can mean you need to drink water.*
- *Dark Yellow Urine: If your pee is dark yellow instead of light yellow, it might be a sign that you need more water.*
- *Feeling Tired or Dizzy: If you feel tired or dizzy, it could be because you're not getting enough water.*
- *Headaches: Sometimes, a headache can be a sign that you need to drink more water.*

ARE YOU HYDRATED?

Urine Color Chart



NO COLOR. TRANSPARENT

You're drinking a lot of water



PALE STRAW COLOR

You're normal & well hydrated



TRANSPARENT YELLOW

Normal



DARK YELLOW

You need to drink some water soon



AMBER OR HONEY

Your body isn't getting enough water



SYRUP OR BROWN ALE

You need to drink water. NOW & A LOT!

INDEPENDENT/GROUP PRACTICE

- Hydration Relay Race
 - We will learn about the importance of hydration and how different factors can affect how much water they need.
 - Materials:
 - Cones or markers to create a race course
 - Water bottles (one for each team)
 - Cups of varying sizes (small, medium, large)
 - Pitchers of water (one for each team)
 - Signs or flashcards with different hydration-related scenarios (e.g., "Hot Day," "Exercise," "Sitting in Class")
 - Stopwatch or timer
 - Instructions:
 - As we discussed in our lesson, staying hydrated is important because it keeps our bodies working well and keeps us feeling happy and healthy all day long!
 - Different activities or environmental factors can increase our need for water.
 - During this activity's relay race, you will experience different scenarios that will require you to adjust your water intake.
 - Setting Up the Relay
 - Students will be divided into teams of 4-5.
 - Set up a race course with cones or markers at one end of the space.
 - At the start line, provide each team with a pitcher of water, a water bottle, and three different-sized cups.
 - Hydration Scenarios
 - At the race course's start, have a stack of flashcards or signs with different scenarios written on them. Each team draws a card before each round of the relay.
 - Examples of scenarios:
 - "Hot Day: Drink more water" (use the large cup)
 - "Exercise: Drink extra water" (use the medium cup)
 - "Sitting in Class: Normal water intake" (use the small cup)
 - The Relay Race
 - The first player on each team picks a scenario card and then pours water from the pitcher into the appropriate cup.
 - They must then run to the other end of the race course and pour the water into their team's water bottle.
 - Once they return to the start line, the next player repeats the process.
 - The relay continues until all team members have had a turn, or until a team's water bottle is full.

SHARE

- How did the different scenarios affect how much water you drank?
- Why do you think it's important to adjust your water intake based on what you are doing?
- How can you remind yourself to drink water throughout the day?
- *Possible Answers:*
 - *It's important to adjust your water intake based on what you're doing because different activities and environments make your body use more water. For example, when you exercise or it's hot outside, you sweat more and need extra water to stay hydrated and keep your body functioning properly.*
 - *You can remind yourself to drink water throughout the day by setting a timer or alarm, using a fun water bottle that you enjoy drinking from, or making it a habit to drink water before each meal and after activities like playing or studying.*

LINK

- Water is essential for every part of your body to work properly.
- Drinking water helps you feel better, think better, and play better.
- Include hydrating foods: Foods with high water content, such as fruits and vegetables, contribute to overall hydration.
- Staying hydrated is important, especially when it is hot or when you are active.
- When we don't drink enough water, our bodies can become dehydrated, which can cause a variety of problems.
 - Dehydration can lead to headaches, dizziness, and tiredness because our brain needs water to function well
 - Our skin might become dry and less elastic, and we could experience constipation as well

EXIT TICKET

- In their journal have students answer the following question:

"How can I make sure that I am drinking enough water every day to keep myself healthy?"

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

LESSON 5

Metabolism

LEARNING OBJECTIVES

- Understand what metabolism is and how it helps the body turn food into energy.
- Learn the difference between breaking down food for energy (catabolism) and building up molecules for growth and repair (anabolism).
- Learn how digestion helps metabolism by breaking down food in the body.
- Identify which foods provide steady energy for the body.
- Understand how metabolism helps with different activities like exercise and thinking, and why it's important for overall health and energy levels.

SEL BENCHMARK

- 3B. 3b. As part of decision-making, consider strategies for making choices based on their values that promote personal and collective safety and well-being.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS


- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food safety supplies
- Different foods handout
- Digestive System handout
- Graham Crackers
- Colored tokens or small objects to represent nutrients
- Cones or markers to set up stations
- Stopwatch or timer (optional)

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Anabolism:**
 - Anabolism is the process where your body builds up new cells and tissues using energy and nutrients from the food you eat. It's like putting together pieces to build something new.
- **Catabolism:**
 - Catabolism is the process where your body breaks down food and other substances to release energy. It's like taking apart a toy to use its pieces for something else.
- **Calories:**
 - Calories are a measure of energy that comes from the food and drinks we eat. They are used by our bodies for all activities, from breathing to running. In short, calories provide the fuel our bodies need to function and stay active.
- **Digestive System:**
 - The digestive system is the group of organs that work together to break down food, absorb nutrients, and remove waste from the body.
- **Empty Calories:**
 - Empty calories are calories from foods or drinks that provide energy but little to no essential nutrients, like vitamins, minerals, or fiber. These are often found in sugary snacks, sodas, and junk food. Eating too many empty calories can lead to weight gain and poor nutrition.
- **Refined Sugars:**
 - Refined sugars are sugars that have been processed to remove their natural nutrients. They are often added to foods and drinks to make them sweeter but provide little nutritional value.
- **Vitamins:**
 - Vitamins are tiny nutrients that our bodies need to stay healthy and grow.
- **Metabolism:**
 - Metabolism is how your body changes the food you eat into energy and other things it needs to stay healthy and active.
- **Unhealthy Fats:**
 - Unhealthy fats are fats that can be bad for your body if you eat too much of them. They are often found in things like chips, cookies, and fast food.
- **Minerals:**
 - Minerals are special nutrients that our bodies need to stay healthy and work well. We get these important nutrients from the foods we eat, and they help with things like building strong bones and keeping our hearts healthy.



Click on the words for pronunciations!

HOOK

- Discussion: Have students answer the following questions.
 - What happens to the food we eat after we finish our meal?
- Possible Answers:
 - *After you finish your meal, your body works hard to break down the food, absorb the nutrients, and get rid of the waste.*
 - *This whole process helps you get the energy and nutrients you need to stay healthy and active!*

PREVIOUS LESSON REVIEW

- Water is essential for every part of your body to work properly.
- Drinking water helps you feel better, think better, and play better.
- Include hydrating foods: Foods with high water content, such as fruits and vegetables, contribute to overall hydration.
- Staying hydrated is important, especially when it is hot or when you are active.
- When we don't drink enough water, our bodies can become dehydrated, which can cause a variety of problems.
 - Dehydration can lead to headaches, dizziness, and tiredness because our brain needs water to function well
 - Our skin might become dry and less elastic, and we could experience constipation as well

TEACH

- Metabolism is like the body's engine that turns the food we eat into energy we need to move, think, and grow.
 - Let's break down the term: "Meta" means change, and "bolism" relates to building up or breaking down. So, metabolism means changing food into energy!
- When we eat, our body breaks down food into tiny pieces, and our metabolism turns those pieces into energy.
- This energy helps us do everything from playing sports to thinking in class.
- How Metabolism Works
 - Let's take a look at this diagram of the digestive system (next page).
Metabolism involves two main parts:
 - Catabolism: This is the breaking down of food into smaller molecules, which releases energy. Think of it like breaking down a Lego structure to use the pieces for something else.
 - Anabolism: This is the building up of molecules to make new cells and tissues, similar to using Lego pieces to build a new structure.
 - I will pass out Graham crackers . When you eat it, your bodies will break them down into energy through metabolism.
 - Let's also watch this video that shows how digestion breaks down food and how that energy is used by the body.
 - [Digestive system](#) Please show this video providing a detailed explanation of the digestive system. Duration (3.46min)
- Why Metabolism is Important
 - Discuss the Benefits:
 - Metabolism helps us stay active, repair our bodies, and grow. It's important for everyone, not just athletes or people who want to build muscle.
 - Having a healthy metabolism helps us maintain a balanced weight and feel good.
 - Different activities (like running, studying, or sleeping) use energy and metabolism helps with that.
 - Fun fact: Some people have faster metabolisms, which means they burn energy faster, while others have slower metabolisms.



TEACH

SHARE

- Let's take a look at these different food items
 - Which foods might give the most valuable energy?
 - *Possible Answers*
 - *Grapefruit, coconut, apples, grapes, avocados, blueberries, bananas, tomatoes, spinach*
-
- Foods that gives us steady energy include:
 - **Complex Carbohydrates:** Whole grains like oatmeal and brown rice provide lasting energy.
 - **Lean Proteins:** Chicken, turkey, fish, and beans help keep your energy up.
 - **Healthy Fats:** Avocados, nuts, and olive oil give long-lasting energy.
 - **Fruits and Vegetables:** Bananas, berries, and leafy greens support overall energy with important vitamins and minerals.
 - **Hydrating Foods:** Foods like cucumbers and watermelon keep you hydrated, which helps maintain energy.
 - **Foods like doughnuts** don't give steady energy because they have lots of sugar and unhealthy fats, and they lack important nutrients. This can make you feel tired.

INDEPENDENT/GROUP PRACTICE

- Metabolism in Motion Challenge
 - We are going to learn about metabolism by having a relay race where you will pretend to be the different steps in digestion and energy use. It's a fun way to see how our bodies turn food into energy!
- Materials Needed:
 - Colored tokens or small objects to represent nutrients
 - Cones or markers to set up stations
 - Stopwatch or timer (optional)
- Setup:
 - Create Stations: Set up four stations, each representing a step in the metabolic process:
 - Digestion Station: Kids "digest" by pretending to eat food.
 - Absorption Station: Kids pick up colored tokens representing nutrients.
 - Energy Station: Kids perform a quick exercise (like jumping jacks).
 - Waste Station: Kids dispose of the tokens (pretend waste) before finishing.
- Designate Relay Path: Arrange the stations in a sequence, creating a path for the relay.
- How to Play:
 - Form Teams: Split into teams and line up at the starting point.
 - Start the Race: The first player runs to the Digestion Station, pretends to eat, and then moves to the Absorption Station.
 - Absorb Nutrients: At the Absorption Station, they grab tokens and carry them to the Energy Station.
 - Generate Energy: At the Energy Station, they do an exercise to "use up" the energy from the tokens.
 - Dispose of Waste: Then, they go to the Waste Station, drop off the tokens, and tag the next player.
 - Repeat: Each team member does the same thing until everyone has had a turn.

SHARE

- How does this game imitate the metabolic process: eating (digestion), absorbing nutrients, using energy, and eliminating waste?
- *Possible Answers:*
 - *The metabolic relay race imitates the metabolic process by:*
 - *Eating (Digestion): Players pretend to eat at the first station.*
 - *Absorbing Nutrients: They collect tokens at the second station, like absorbing nutrients.*
 - *Using Energy: They do an exercise at the third station, similar to using energy.*
 - *Eliminating Waste: They drop off the tokens at the last station, like getting rid of waste.*

LINK

- Today, we learned that metabolism is how our bodies turn food into energy and get rid of waste.
 - Just like in our relay race, our bodies "digest" food, "absorb" nutrients, "use" energy, and then "dispose" of waste.
 - Eating a mix of healthy foods helps our bodies work well and stay full of energy. Great job everyone!

EXIT TICKET

- In their journal have students answer the following question:

"Why is it important for us to maintain a healthy metabolism?"

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
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 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
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- Have Fun!

LESSON 6

Reading a Recipe

LEARNING OBJECTIVES

- Identify and explain the key components of a recipe.
- Demonstrate the ability to accurately measure both dry and liquid ingredients according to the recipe's specifications.
- Follow a recipe's instructions in the correct order, ensuring proper food preparation and cooking techniques.
- Organize cooking tasks effectively by preparing ingredients and tools before beginning the recipe.
- Adjust the serving size of a recipe to accommodate different numbers of servings

SEL BENCHMARK

- 3B.3b. As part of decision-making, consider strategies for making choices based on their values that promote personal and collective safety and well-being.

ESSENTIAL QUESTION


- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS

- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food Safety Supplies
- Printed copies of Fluffy Homemade Pancakes recipe
- Ingredients for Lemon Parmesan Farro with Roasted Veggies

VOCABULARY

- **Recipe:**
 - A recipe is a set of instructions that explains how to prepare and cook a particular dish. It usually includes a list of ingredients, how much you need, and step-by-step directions on how to combine and cook them to create the final dish.
- **Leveling Off:**
 - Leveling off in measuring means using a flat edge, like a knife or spatula, to remove any excess ingredient from the top of a measuring cup or spoon, making the ingredient even with the rim. This ensures an accurate measurement.
- **Meniscus:**
 - A meniscus is the curved surface of a liquid in a container. When you look at a liquid like water in a glass, the surface might dip down in the middle or bulge up. This curve is called the meniscus.
- **Sifting:**
 - Sifting is the process of passing dry ingredients like flour through a sieve to remove lumps and combine them evenly.
- **Serving Size:**
 - A serving size is the recommended amount of food or drink that is typically consumed in one sitting. It's used to help measure and compare the nutritional content of different foods based on a standard portion.



Click on the
words for
pronunciations!

HOOK

- What is your favorite food to eat? Do you think you could make it yourself if I gave you a recipe?
- What do you think are the most important things to look for when you read a recipe?
 - *Possible Answers:*
 - *The most important things to look for in a recipe are the ingredients, the measurements, and the steps you need to follow to make the dish.*

TEACH

- In today's lesson, we'll learn how to follow a recipe. A recipe is a set of instructions that tells you how to make a dish or meal. It includes:
 - **Title:** The name of the dish.
 - **Ingredients:** A list of what you need and how much.
 - **Preparation Time:** How long it takes to get everything ready.
 - **Cooking Time:** How long it takes to cook or bake.
 - **Servings:** How many people the recipe serves.
 - **Equipment:** Any special tools you might need (optional).
 - **Instructions:** Step-by-step directions for making the dish.
- Sometimes, you will need to adjust recipes if you are cooking for more or fewer people than the recipe says. To do this, follow these steps:
 - **Find the Conversion Factor:** Divide the number of servings you need by the number of servings the recipe makes.
 - Example: If the recipe serves 4 but you need 6 servings, the conversion factor is $6 \div 4 = 1.5$.
 - **Adjust Ingredients:** Multiply each ingredient amount by the conversion factor.
 - Example: If the recipe calls for 2 cups of flour, multiply 2 cups by 1.5 to get 3 cups of flour for 6 servings.
 - This helps make sure you have the right amount of food, manage portion sizes, and reduce waste.
- Next, let's talk about measuring ingredients:
 - **Dry Ingredients** (like flour and sugar):
 - Use a dry measuring cup. Scoop the ingredient and level it off with a flat edge (like a knife).
 - Don't pack down the ingredient unless the recipe says so. Sift flour if needed for accuracy.
 - **Liquid Ingredients** (like milk and water):
 - Use a liquid measuring cup with a spout. Place it on a flat surface and pour the liquid until it reaches the correct level, checking at eye level.
 - **Sticky Ingredients** (like honey and peanut butter):
 - Use a dry measuring cup or spoon. Spray or coat it with a little oil to help the ingredient slide out easily, then use a spatula to scrape it all out.
- With these tips, you can easily follow and adjust recipes and measure ingredients correctly!

TEACH

SHARE

Why do you think it is important to follow the steps of a recipe in the correct order?

INDEPENDENT/GROUP PRACTICE

- Recipe Scavenger Hunt
 - In today's activity, we will practice reading and understanding recipes by identifying key information. We will also practice measuring different types of ingredients. Here's what you need to know:
 - Materials Needed:
 - Printed copies of two different recipes
 - Highlighters or colored pens
 - Sheets of paper
 - Ingredients for Fluffy Homemade Pancakes
 - Ingredients for Lemon Parmesan Farro with Roasted Veggies
 - Cooking equipment
 - Measuring cups and spoons
 - Instructions:
 - Recipe Distribution: I will give each group a different recipe. One group will get the Fluffy Homemade Pancakes recipe, and the other group will get the Lemon Parmesan Farro with Roasted Veggies recipe.
 - Measurement Station: We will have a measurement station set up where I will demonstrate how to measure dry, liquid, and sticky ingredients.
 - Group Tasks:
 - Step 1: Each group will write down key information from their recipe. This includes the title, ingredients, cooking time, serving size, and any special instructions (such as setting aside an ingredient).
 - Step 2: Each group will focus on different parts of the recipe. For example, one group will read and record the ingredients, while another group will focus on the preparation steps.
 - Measuring Practice: After the demonstration, each group will take turns measuring ingredients. One group will measure for the Fluffy Homemade Pancakes, and the other group will measure for the Lemon Parmesan Farro with Roasted Veggies.
 - Preparation and Voting:
 - Each group will prepare their assigned recipe.
 - We will taste the dishes and vote on which one we like best.
 - Let's get started and have fun exploring these recipes and improving our cooking skills!

FLUFFY HOMEMADE PANCAKES

PREP TIME: 15 MINUTES

COOK TIME: 25 MINUTES

SERVES: 4

INGREDIENTS:

- 1 CUP ALL-PURPOSE FLOUR
- 2 TABLESPOONS SUGAR
- 1 TABLESPOON BAKING POWDER
- 1/4 TEASPOON SALT
- 1 CUP MILK
- 1 EGG
- 2 TABLESPOONS MELTED BUTTER OR VEGETABLE OIL
- OPTIONAL: 1/2 TEASPOON VANILLA EXTRACT

INSTRUCTIONS:

- MIX DRY INGREDIENTS: IN A LARGE BOWL, WHISK TOGETHER FLOUR, SUGAR, BAKING POWDER, AND SALT.
- COMBINE WET INGREDIENTS: IN ANOTHER BOWL, BEAT THE EGG AND THEN MIX IN THE MILK, MELTED BUTTER, AND VANILLA EXTRACT (IF USING).
- COMBINE MIXTURES: POUR THE WET INGREDIENTS INTO THE DRY INGREDIENTS AND STIR UNTIL JUST COMBINED.
- TRY YOUR BEST TO WHISK IT WELL ENOUGH TO REDUCE LUMPS.
- COOK PANCAKES: HEAT A NON-STICK SKILLET OR GRIDDLE OVER MEDIUM HEAT AND LIGHTLY GREASE IT.
- POUR 1/4 CUP OF BATTER FOR EACH PANCAKE. COOK UNTIL BUBBLES FORM ON THE SURFACE, THEN FLIP AND COOK UNTIL GOLDEN BROWN ON THE OTHER SIDE.
- SERVE: SERVE WARM WITH YOUR FAVORITE TOPPINGS LIKE SYRUP, FRESH FRUIT, OR A SPRINKLE OF POWDERED SUGAR
- ENJOY YOUR PANCAKES!

LEMON PARMESAN FARRO WITH ROASTED VEGGIES

PREP TIME: 25 MINUTES

COOK TIME: 30 MINUTES

SERVES: 4

INGREDIENTS:

- 1 CUP FARRO
- 2 CUPS WATER OR LOW-SODIUM VEGETABLE BROTH
- 1/2 CUP GRATED PARMESAN CHEESE
- 1 LEMON (ZESTED AND JUICED)
- 1 TABLESPOON OLIVE OIL
- 1 TEASPOON GARLIC POWDER
- 1 CUP CHERRY TOMATOES, HALVED
- 1 CUP BROCCOLI FLORETS
- SALT AND PEPPER TO TASTE

INSTRUCTIONS:

- COOK THE FARRO: IN A MEDIUM POT, COMBINE THE FARRO AND BROTH.
- BRING TO A BOIL, THEN REDUCE HEAT AND SIMMER FOR ABOUT 20-25 MINUTES UNTIL THE FARRO IS TENDER. DRAIN ANY EXCESS LIQUID.
- SAUTE THE VEGETABLES, TOSS THE CHERRY TOMATOES AND BROCCOLI WITH OLIVE OIL, GARLIC POWDER, SALT, AND PEPPER.
- MIX TOGETHER THE COOKED FARRO, STIR IN THE PARMESAN CHEESE, LEMON ZEST, AND LEMON JUICE.
- ADD THE ROASTED VEGGIES AND MIX UNTIL EVERYTHING IS WELL COMBINED.
- SEASON: TASTE AND ADJUST WITH MORE SALT, PEPPER, OR LEMON JUICE IF NEEDED.
- SERVE WARM: PLATE THE LEMON PARMESAN FARRO AND ROASTED VEGGIES, AND WATCH EVERYONE ENJOY A BURST OF FLAVOR!

SHARE

How do the ingredients and cooking method in both recipes align with the principles of healthy eating?

LINK

- Great job today! We learned how to read a recipe by focusing on the title, ingredients, instructions, time, and serving size.
- Remember, following these steps ensures that you have everything you need and that your dish turns out just right.
- As you practice reading more recipes, you'll become more confident in the kitchen. Keep cooking and experimenting!

EXIT TICKET

- In their journal have students answer the following question:

“What other information do you think would be helpful to add on a recipe card?”

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

LESSON 7

Healthy Cooking Substitutions

LEARNING OBJECTIVES

- Understand the concept of healthy cooking substitutions.
- Identify common unhealthy ingredients and their healthier alternatives.
- Explain the benefits of using healthier substitutions in cooking.
- Apply knowledge by creating a recipe using healthy substitutions.

SEL BENCHMARK

- 3A.2b. Demonstrate knowledge of how social expectations affect decision making and actions in multiple contexts.
- 3B.4a. Generate possible solutions to challenges, anticipate potential consequences of decisions, and take intentional action toward desired outcomes.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS


- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food Safety Supplies
- Printed handouts of healthy substitutions chart

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Calories:**
 - A unit of measurement for the energy you get from food and drinks.
- **Dietary Preferences:**
 - The types of foods you like or choose to eat based on personal tastes, health needs, or beliefs.
- **Dietary Needs:**
 - Dietary needs refer to the specific nutritional requirements a person has based on their health, age, lifestyle, or medical conditions. These needs guide what kinds of foods and nutrients they should include in their diet to maintain good health or manage specific health issues.
- **Diabetes:**
 - A health condition where the body has trouble controlling blood sugar levels.
- **Heart Disease:**
 - A condition where the heart or blood vessels are damaged, often leading to problems like heart attacks or strokes.
- **High Calories:**
 - Foods or drinks that provide a lot of energy (calories) in each serving.
- **Low Calories:**
 - Foods or drinks that provide only a small amount of energy (calories) in each serving.
- **Substitutions:**
 - Replacing one ingredient in a recipe with another.
- **Nutritional Value:**
 - The amount of essential nutrients like vitamins, minerals, and energy in a food.



Click on the words for pronunciations!

HOOK

- Imagine you're about to bake your favorite cookies, but you realize you're out of butter. What will you use in place of the butter?
- *Possible Answers:*
 - *If you are out of butter, You can use one of the following substitutes:*
 - *Applesauce: A common substitute for butter, especially in softer cookies, to add moisture without the fat.*
 - *Coconut Oil: This gives a similar texture to butter and adds a slight coconut flavor, which can be nice in some cookies.*
 - *Greek Yogurt: For a healthier option, Greek yogurt can replace butter, offering creaminess and a bit of tang.*
 - *Avocado: Mashed avocado works well in many cookie recipes, providing creaminess and healthy fats.*
 - *Nut Butter: Peanut butter or almond butter can also replace butter, adding flavor and richness.*

PREVIOUS LESSON REVIEW

- Great job today! We learned how to read a recipe by focusing on the title, ingredients, instructions, time, and serving size.
- Remember, following these steps ensures that you have everything you need and that your dish turns out just right.
- As you practice reading more recipes, you'll become more confident in the kitchen. Keep cooking and experimenting!

TEACH

- Who here loves baking or cooking? What's your favorite dish to make?
- Have you ever wondered if there's a way to make your favorite dishes healthier without sacrificing taste?
- In today's lesson we will explore how to make our favorite recipes healthier by substituting certain ingredients for more nutritious options.
- Small changes in cooking can lead to important health benefits, such as reducing the risk of chronic diseases like diabetes and heart disease.
- Let's review some examples:
 - Sugar → Applesauce or Honey
 - Butter → Greek Yogurt or Avocado
 - White Flour → Whole Wheat Flour or Almond Flour
 - Sour Cream → Plain Greek Yogurt
 - Cream → Coconut Milk or Evaporated Milk
 - Ground Beef → Ground Turkey or Lentil
- Let's discuss the benefits of substitutions.
- Reducing calories:
 - Substituting high-calorie ingredients with lower-calorie options can help with weight management.
- Increasing Nutritional Value:
 - Using ingredients like whole grains or avocados can add fiber, vitamins, and healthy fats to a dish.
- Reduce Saturated Fat
 - Replacing butter or cream with alternatives like Greek yogurt or coconut milk can lower saturated fat intake, benefiting heart health.
- Let's watch this short video demonstrating a simple recipe makeover of a blueberry muffin recipe using whole wheat flour instead of white flour.
 - [Whole wheat blueberry muffin](#) (2.53 Duration)

INDEPENDENT/GROUP PRACTICE

Materials Needed

- Printouts of chocolate chip cookie recipe
- Print out of vanilla shake smoothie
- Handout with common ingredient substitutions (e.g., applesauce for butter, honey for sugar, Greek yogurt for sour cream)

Cooking Substitution Challenge

- We are going to learn about how different ingredients can be substituted in recipes to maintain taste and nutrition in this fun activity!
- In cooking, sometimes you can swap one ingredient for another and still get a tasty result.
- Substitutions might be needed because of allergies, dietary preferences, missing ingredients, or just wanting to eat healthier.
- You will divide into small groups and I will give each group a different recipe printout.
 - I will also provide you all with a substitution handout
 - Please review the recipe and use the substitution cards to make healthy or creative swaps for certain ingredients.
 - Each group will discuss and choose 2-3 substitutions from the cards to apply to their recipe.
 - Your group will then rewrite their recipe with the new substitutions on a blank recipe card.
 - Each group will present their revised recipe to the class.

SHARE

- How might substitutions change the flavor, texture, or nutritional value of the recipe?
- *Possible Answers*
 - *Different ingredients have unique tastes. For example, substituting honey for sugar can add a hint of floral sweetness. The flavor might be slightly different, but it can also enhance the overall taste.*
 - *Texture: Ingredients contribute to the texture of a dish. Replacing butter with applesauce in cookies makes them softer and chewier, while using yogurt instead of sour cream in a cake can make it lighter and fluffier.*
 - *Nutritional Value: Some substitutions can make a recipe healthier. For instance, using whole wheat flour instead of white flour increases fiber content, and swapping oil for mashed bananas reduces fat while adding vitamins.*

LINK

- Today, we explored various ways to make healthier or more accessible ingredient substitutions in recipes.
- We learned how swapping out certain ingredients can maintain or even enhance the flavor and nutritional value of our dishes.
- Remember, the key is to understand the role of each ingredient in a recipe, so you can make substitutions that work well.
- With these skills, you can customize recipes to suit lifestyle and dietary needs, improve health benefits, and even get creative in the kitchen.
- Keep experimenting and have fun with your cooking!

EXIT TICKET

- In their journal have students answer the following question:

"What is one healthier food substitution that you can start using regularly at home?"

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

LESSON 8

Cost Efficient Cooking

LEARNING OBJECTIVES

- Learn how to choose affordable ingredients without sacrificing nutrition or taste.
- Practice planning meals within a set budget, considering the cost of ingredients.
- Explore how to use basic, low-cost ingredients to create a variety of delicious and healthy meals.
- Understand the importance of minimizing food waste by using leftovers and planning meals wisely.

SEL BENCHMARK

- 3A.2b. Demonstrate knowledge of how social expectations affect decision making and actions in multiple contexts.
- 3B.4a. Generate possible solutions to challenges, anticipate potential consequences of decisions, and take intentional action toward desired outcomes.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS


- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food Safety Supplies
- Grocery Store flyers
- Handouts of cost efficient ingredients

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Budgeting:**
 - Planning how to spend your money so you don't run out.
- **Cost Efficient:**
 - Getting the most value or the best deal for your money. Ingredients: The foods or items used to make a recipe.
- **Portion Size:**
 - The amount of food you eat in one serving. Preparation: The steps you take to get food ready to cook or eat.
- **Seasonal Produce:**
 - Fruits and vegetables that are grown at a specific time of year and are often cheaper and fresher.
- **Nutritious:**
 - Good for your health and provides the vitamins and minerals your body needs.



Click on the
words for
pronunciations!

HOOK

- Imagine you are a contestant on a cooking show, but there's a twist. you only have \$10 to buy all the ingredients for a delicious, nutritious meal.
- Can you do it?

SHARE

- Why do you think it is important to cook cost efficiently?
- *Possible Answers:*
 - *Cooking cost-efficiently is important because it helps you save money while still enjoying healthy and delicious meals.*
 - *By planning meals, using affordable ingredients, and avoiding food waste, you can stretch your budget further.*
 - *This way, you can spend less on groceries, reduce unnecessary expenses, and have more money for other needs or savings.*

PREVIOUS LESSON REVIEW

- We explored various ways to make healthier or more accessible ingredient substitutions in recipes.
- We learned how swapping out certain ingredients can maintain or even enhance the flavor and nutritional value of our dishes.
- Remember, the key is to understand the role of each ingredient in a recipe, so you can make substitutions that work well.
- With these skills, you can customize recipes to suit lifestyle and dietary needs, improve health benefits, and even get creative in the kitchen.
- Keep experimenting and have fun with your cooking!

TEACH

- Today, we are going to learn how to cook like a chef on a budget, turning simple ingredients into mouth watering dishes while keeping your wallet happy. Let's dive into the world of cost-efficient cooking!
- One of the best ways to cook cost-effectively is to always have a budget.
- Budgeting helps families save money by planning how they spend it.
- When families know how much they can spend on groceries each month, they can avoid spending too much and still have money for other things they need.
 - Budgeting also helps families try different foods. By paying attention to sales, discounts, and seasonal foods, they can enjoy a variety of meals without spending too much.
 - This way, budgeting makes sure families spend their money wisely, saving more and eating well.
- Let's take a look at this sample [grocery store flyer](#)
 - Lets compare the prices of different items on this flyer and talk about how shopping smart can help save money.
- Now that we have covered the basics of budgeting, let's explore how you can make nutritious meals without breaking the bank by using cost-efficient ingredients.
 - Cost-efficient ingredients are foods that give you the most value for your money. These are ingredients that are both affordable and nutritious.
 - For example: Beans and lentils: They are inexpensive and full of protein.
 - Rice and pasta: These are low-cost and can be used in many different meals.
 - Seasonal fruits and vegetables: Buying fruits and veggies that are in season is usually cheaper.
 - Frozen Vegetables: They are often less expensive than fresh ones but still have lots of nutrients.
 - Eggs: They are a great source of protein and can be used in many different dishes.
- When you use these ingredients, you can make healthy meals without spending a lot of money.

TEACH

SHARE

- What do you think makes a meal expensive or inexpensive?
- I want a volunteer to come up to the whiteboard and write it down.

Possible Answers:

- *The cost of a meal depends on a few things:*
- *Ingredients: If a meal uses special or hard-to-find ingredients, it will cost more. Meals made with common, local ingredients are usually cheaper.*
- *Preparation: Meals that take a long time to cook or need special skills are more expensive. Simple meals that are easy to make cost less.*
- *Where You Eat: Eating at fancy restaurants or in expensive areas costs more. Cooking at home or eating in less expensive places is cheaper.*
- *Portion Size and Extras: Big meals or meals with extras like sides or delivery cost more. Smaller meals or basic ones cost less.*

INDEPENDENT/GROUP PRACTICE

- Budget-Friendly Meal Challenge.
 - We will learn to make cost-effective, nutritious choices while practicing budgeting skills in this activity.
 - Divide the Class
 - Let's start by splitting into small groups. Each group will work together to plan a meal within a set budget.
 - Provide a Budget
 - Each group will receive a hypothetical budget of \$10. Your challenge is to use this budget to buy ingredients for a nutritious meal.
 - Select Ingredients:
 - You will use printed grocery store flyers to find and price ingredients. Make sure to compare prices and look for the best deals that are also nutritious.
 - Plan a Meal:
 - With your budget and ingredient list, plan a complete meal. Think about how to balance cost with nutrition. Make sure your meal includes a protein, a vegetable, and a carbohydrate.
 - Present and Discuss:
 - Each group will present their meal plan. Explain how you stayed within your \$10 budget and describe how your choices are healthy.

SHARE

- What strategies did your group use to save money and what did you learn from the activity.?
- Possible Answers
 - *Planning Your Meals: Think of a few easy and healthy meals before you go shopping so you only buy what you need.*
 - *Using Store Flyers Correctly: Look at the store flyers to find which foods are on sale and save money.*
 - *Buying in Bulk: Get big packages of things like rice or beans because they are cheaper this way.*
 - *Choosing Generic Brands: Pick store brands instead of name brands, they cost less.*
 - *Picking Seasonal Fruits and Veggies: Buy fruits and vegetables that are in season because they're usually cheaper.*
 - *Looking for Coupons: Use any coupons or special deals to save even more money.*

LINK

- In today's lesson, we learned how to make tasty and healthy meals while staying within a budget.
- By planning our meals, using store flyers, buying in bulk, choosing generic brands, picking seasonal produce, and finding discounts, we can save money and still eat well.
- Remember, being smart about how we shop helps us get the most out of our money!

EXIT TICKET

- In their journal have students answer the following question:

"What is your favorite cost efficient food? List or sketch as many recipes you can think of using that staple ingredient."

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.

LESSON 9

Smart Snacking

LEARNING OBJECTIVES

- Students will explain the importance of choosing healthy snacks for maintaining energy and health.
- Students will distinguish between healthy and unhealthy snacks based on their nutritional content.
- Students will define and use key terms like fiber, vitamins, minerals, and protein.
- Students will create and reflect on healthy snack mixes, applying what they've learned to make smart snack decisions.

SEL BENCHMARK

- 1C.3a. Develop a plan and prioritize steps in working toward a goal.
- 3B.3b. As part of decision-making, consider strategies for making choices based on their values that promote personal and collective safety and well-being.

ESSENTIAL QUESTION

- How do the food choices we make daily influence our overall health, well-being, and ability to perform at our best physically and mentally?

LESSON MATERIALS


- Postersheets
- Pens & pencils
- Small bowls/plates
- Plastic forks and spoons
- Ingredients from Fresh Direct
- Recipe Sheet from Master Cookbook (hardcopy - one per student)
- Cooking Supplies
- Food Safety Supplies
- Labels and markers
- Small scoops or tongs for handling ingredients
- Snack samples (fruits, vegetables, whole grain crackers, etc.)
- A small basket or box for snack samples
- Various healthy snack ingredients (e.g., apple slices, carrot sticks, celery, whole grain crackers, nuts, seeds, dried fruit, yogurt, cheese cubes, etc.)
- Small bowls or containers for each ingredient
- Paper plates or plastic trays for mixing

CLASSROOM AGREEMENTS

- Be Safe
 - We don't always use knives in class, but when we do we use plastic knives and always practice knife safety.
- Wash Our Hands
 - Before we begin touching food, we wash our hands so we don't spread germs or make others sick. To properly wash hands, we must wash with soap and water for at least 20 seconds, or sing the "ABC's." Not all classrooms will have sinks so we use hand sanitizer or sani wipes to properly wash our hands.
- 1, 2, 3 Taste
 - We eat as a class. Once everyone is served the food, we count to three and taste together. Tasting works the best when we take 2 bites. It will require us to be brave and try new foods, but 2 bites will help us see if we really don't like a food that we are trying.
- The "No, Thank-you" Bite
 - We are going to be trying new foods together. As Food Explorers we are going to be practicing "No, thank-you" bites. This means that you have tried the food and it wasn't for you. You may not like everything we try together, and that is okay, but it is important to try the food.
- Don't Yuck My Yum
 - Just because you may not like something does not mean your neighbor also does not like it. Let's use positive words to describe our food, or simply say "No, thank-you".
- Don't Throw Food
 - We want to respect our surroundings and our food by not throwing food.
- Clean Up Your Space
 - It is important to leave the room like we found it. Let's practice cleaning as we go and throwing away things when our desks or spaces get too cluttered. Chef's call this "Mise en Place"--meaning, "everything has its place"
- Have Fun!

VOCABULARY

- **Snack:**
 - A small amount of food you eat between meals to keep your energy up and your tummy satisfied.
- **Fiber:**
 - A type of carbohydrate found in plants that your body can't digest. It helps regulate the body's use of sugars, helps control hunger, and supports healthy digestion by adding bulk to the stool.
- **Vitamins:**
 - Nutrients in food that help your body stay healthy and strong. They help with things like fighting off illness and keeping your skin and eyes healthy.
- **Minerals:**
 - Essential nutrients that your body needs to stay healthy, such as calcium for strong bones and iron for energy.
- **Protein:**
 - A type of nutrient found in foods like meat, beans, and nuts that helps build and repair muscles, and gives you energy.
- **Unhealthy Snacks:**
 - Foods that have lots of sugar, fat, or salt and don't provide many nutrients. They can make you feel tired or sick if you eat them too often.
- **Healthy Snacks:**
 - Foods that give your body important nutrients, like fruits, vegetables, and whole grains. They help keep you full and give you energy without lots of added sugars or fats.



Click on the
words for
pronunciations!

HOOK

- Discussion: Have students answer the following question.
- What do you like to snack on during the day? Do you prefer salty, sweet, light or savory snacking?
- *Possible Answers*
 - *Snacks that are both tasty and healthy! apple slices with peanut butter, yogurt with fruit, and crunchy veggies like carrots and cucumber.*

PREVIOUS LESSON REVIEW

- Last week, we learned how to make tasty and healthy meals while staying within a budget.
- By planning our meals, using store flyers, buying in bulk, choosing generic brands, picking seasonal produce, and finding discounts, we can save money and still eat well.
- Remember, being smart about how we shop helps us get the most out of our money!

TEACH

- You know how we eat breakfast, lunch, and dinner? Well, sometimes between these meals, we might get a little hungry or need a boost of energy. That's where snacks come in.
 - Snacks are like little mini-meals that help keep our energy up and our tummies happy until our next big meal. But here's the thing: just like we try to choose healthy foods for breakfast, lunch, and dinner, we should also be smart about the snacks we choose.
 - Imagine you are a superhero with special powers. To keep your powers strong, you need to eat the right kinds of foods. If you eat too many sugary or greasy snacks, it's like your superhero powers are running low on energy!
 - So, when we pick snacks, we want to choose ones that help us feel good and give our bodies the right kind of fuel.
 - For example, fruits and vegetables are like power-ups for our bodies because they have vitamins and minerals that keep us strong and energetic.
 - On the other hand, snacks like candy or chips might make us feel good for a little while, but they don't give us the lasting energy we need.
- So remember, just like you choose healthy foods for your big meals, try to pick smart snacks that will keep you going strong!
- Let's take a look at different snacks (both healthy and unhealthy).
 - Examples of healthy snacks include fruits, vegetables, and nuts, while unhealthy snacks might be candy, chips, and sugary drinks.
- Let's review and discuss the following images
 - [Healthy snack guide](#)
 - Mix and Match Healthy Snack Ideas image

MIX N' MATCH SNACK IDEAS

FRUIT OR VEGETABLE + PROTEIN OR FAT



TEACH

- Let's review this list of healthy snacks along with their benefits for the body:
 - Apple Slices
 - Benefit: Provide fiber for good digestion and vitamins for overall health.
 - Carrot Sticks
 - Benefit: High in vitamin A, which helps keep your eyes and skin healthy.
 - Yogurt
 - Benefit: Contains protein and probiotics that support digestion and strong bones.
 - Almonds
 - Benefit: Provide protein and healthy fats for energy and heart health.
 - Berries (e.g., strawberries, blueberries)
 - Benefit: Rich in antioxidants and vitamins that help protect your body from illnesses.
 - Whole Grain Crackers
 - Benefit: Offer fiber to help you feel full and support good digestion.
 - Banana
 - Benefit: High in potassium, which helps keep your heart and muscles healthy.
 - Cucumber Slices
 - Benefit: Hydrate your body and provide vitamins that support skin health.
 - Cheese Cubes
 - Benefit: Provide protein and calcium to strengthen your bones and muscles.
 - Sunflower Seeds
 - Benefit: Offer healthy fats and minerals like magnesium that support overall health.

SHARE

- As a group, come up with a list of "Smart Snack Tips" to put on a poster.
- *Possible Answers:*
 - *Choose fruits and vegetables.*
 - *Go for whole grains.*
 - *Drink water instead of sugary drinks.*
 - *Avoid snacks with lots of sugar or fat.*

INDEPENDENT/GROUP ACTIVITY

- Snack Mix Creation Challenge
 - Today, we are going to have fun making healthy snack choices! You will each get to create your very own tasty and nutritious snack mixes.
 - Materials:
 - Various healthy snack ingredients (e.g., apple slices, carrot sticks, celery, whole grain crackers, nuts, seeds, dried fruit, yogurt, cheese cubes, etc.)
 - Small bowls or containers for each ingredient
 - Paper plates or plastic trays for mixing
 - Labels and markers
 - Optional: small scoops or tongs for handling ingredients
 - Preparation:
 - Set Up Snack Stations:
 - Arrange the different healthy snack ingredients in small bowls or containers on a table. Label each bowl with the ingredient name.
 - Prepare Mixing Areas:
 - Provide paper plates or plastic trays for the kids to use as mixing surfaces.
 - Activity Steps:
 - You will be creating your own healthy snack mixes today.
 - Remember, choosing different healthy ingredients can help make a balanced and tasty snack.
 - Choose Ingredients:
 - You will all choose from the variety of healthy snack ingredients.
 - I encourage you all to think about different combinations you might like.
 - Create Snack Mixes :
 - Mix your chosen ingredients on your plates or trays. You can create your own unique combinations and experiment with different flavors and textures.
 - I encourage you all to think about the benefits of each ingredient you choose.
 - For example, Apples give us fiber and vitamins, and nuts provide protein.
 - Snack and Share :
 - After you are done creating your mix, taste your creations and share with the group.

SHARE

- What makes your snack healthy and how can you apply what you have learned to choose smart snacks in the future?
- *Possible Answers:*
 - *A snack is considered healthy if it has a good mix of nutrients like vitamins, minerals, protein, and fiber while being low in added sugars and unhealthy fats.*
 - *For example, a mix of nuts, fruits, and seeds provides energy and important nutrients without extra sugar.*

LINK

- Great job today, everyone! We learned that snacks are small meals that help keep us energized between our bigger meals.
- We talked about choosing smart snacks that are healthy and give our bodies the nutrients they need.
- Remember, healthy snacks like fruits, veggies, and nuts are great because they help us stay strong and full of energy!
- On the other hand, snacks like candy and chips are not as good for us because they can make us feel tired and don't give us the vitamins and minerals we need.
- So, next time you are choosing a snack, think about how you can make it a smart choice that will help you feel your best.

EXIT TICKET

- In their journal have students answer the following question:

"What are some strategies you can try to help you choose healthier snack options in the lunch room?"

Specialists: Please take a moment to complete the
[SPECIALIST LESSON FEEDBACK FORM.](#)

This will help provide us valuable feedback that we will use when updating this curriculum for the next school year.



APPENDIX

FOOD HANDLERS SAFETY TRAINING

Remember:
New Specialists must teach the
VEGETARIAN Food Explorers Curriculum
for at least 6 months before they are
eligible to take their Food Handlers
training course.

[Food Handlers Training Website Link](#)

- Select - Food Protection For Soup Kitchen and Summer Camp Workers
- Select - Register for this Class
- Select - Health Academy Training Courses
- Select - Food Protection For Soup Kitchen and Summer Camp Workers
- Complete registration information and submit.

**SUBMIT COMPLETED CERTIFICATES TO YOUR
PROGRAM DIRECTOR AND EMAIL TO
FOODEXPLOERS@NEWYORKEDGE.ORG
FOR APPROVAL.**

CHANGING YIELDED SERVINGS

Remember:
You must adjust the ingredients for the recipe to the number of students in your class.

If you neglect to adjust the amount of ingredients, you will not have the correct amount of final product to distribute to your class.

General Culinary Math:

Ingredient amount in recipe [divided by] number of servings = amount of ingredient per serving

Amount of ingredient per serving [multiplied by] the total number of students in your class = new ingredient amount.

Example:

The recipe calls for 2 bananas to yield 2 servings. We need 10 servings.

- 2 bananas [divided by] 2 servings = 1 banana per serving
- 1 banana per serving [multiplied by] 10 servings = 10 bananas.

ORDERING FROM FRESH DIRECT

REFER TO [THIS LINK](#) FOR THE
PROTOCOLS FOR ORDERING FROM
FRESH DIRECT.

Ordering Protocols

- You should carefully review the ordering and approval process, as well as the list of allowed and prohibited items.
- Also review the Payment Method information
- PMs are responsible for approving the orders and forwarding approvals to budget analysts

Note:

- To ensure that you are able to reserve your desired delivery time, please place your orders at least 5 days prior to the lesson.

LESSON TRACKER

Lesson Number	Date	Recipe #1	Recipe #2	Recipe #3	Recipe #4	Recipe #5
<i>Example: 0</i>	<i>9/12</i>	<i>Avacado Fries on 9/12</i>	<i>Brussel Sprouts on 9/13</i>	<i>Kale Chips on 9/14</i>	<i>Churros on 9/15</i>	<i>Flafel on 9/16</i>
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						



FOOD EXPLORERS SPECIALIST EVALUATION TOOL

Criteria	Yes	No
Did the specialist begin the lesson with a previous lesson review?		
Did the Specialist review the Community Agreements with students?		
Before getting started, did the specialist verify that there were no allergies to foods presented in the lesson?		
Are all students and staff wearing gloves that are being changed between foods?		
Is the specialist wearing an apron, or clothing that is not excessively baggy?		
When preparing the recipe, did the specialist review, demonstrate and encourage the bear-claw cutting method?		
Did the Specialist follow food safety protocols?		
Did the Specialist check equipment for damage prior to use?		
Did the Specialists engage the students in the lesson? Did each student participate?		
Did the Specialist struggle to teach all the content in their lesson?		
Did the Specialist utilize the aid of their assisting staff in the classroom?		
Did the Specialist end the lesson with a recap of the information covered?		
Did the Specialist confirm that all students understood the information provided and answered any questions asked by the students related to the content?		



FOOD EXPLORERS FAMILY LETTER

Welcome Food Explorers and Families!

Are you excited to begin exploring the amazing world of nutrition and cuisine? The Food Explorers Program is a 3-level curriculum that teaches students about the importance of healthy eating, while educating on proper everyday culinary skills. Students will learn in an interactive classroom setting, and then prepare a recipe under the guidance of a Food Explorers Specialist.

Here is the list of components that your child will be learning about in Level 1:

- **Balanced Meals**
- **Mindful Eating**
- **Macros and Micros (nutrients)**
- **Hydration**
- **Metabolism**
- **Reading a Recipe**
- **Healthy Cooking Substitutes**
- **Cost Efficient Cooking**
- **Smart Snacking**

Want to practice these skills with your child at home? Here are some recipes that you can make with your child!

- **AIR FRYER** - Air-Fryer Chocolate Chip Oatmeal Cookies
- **GRIDDLE** - Grilled Watermelon Salad
- **HOTPLATE/STOVETOP** - Black Bean Dip
- **BLENDER** - Cumin-Spiced Lentil Burgers

Encourage your child to read the recipe, and explain the instructions as if they were teaching you how to prepare the dish.

We are excited to learn and cook together! If you have any questions regarding the Food Explorers curriculum, please feel free to email foodexplorers@newyorkedge.org for more information.

Have a great season!
Food Explorers

Air-Fryer Chocolate Chip Oatmeal Cookies



Difficulty Level:



Serves: 2

Cook Time: 45 minutes

Ingredients

- 1 cup butter, softened
- 3/4 cup sugar
- 3/4 cup packed brown sugar
- 2 large eggs, room temperature
- 1 teaspoon vanilla extract
- 3 cups quick-cooking oats
- 1-1/2 cups all-purpose flour
- 1 package (3.4 ounces) instant vanilla pudding mix
- 1 teaspoon baking soda
- 1 teaspoon salt
- 2 cups semisweet chocolate chips

Instructions

- Preheat air fryer to 325°. In a large bowl, cream butter and sugars until light and fluffy, 5-7 minutes. Beat in eggs and vanilla.
- In another bowl, whisk oats, flour, dry pudding mix, baking soda and salt; gradually beat into creamed mixture.
- Stir in chocolate chips.
- Drop dough by tablespoonfuls onto baking sheets; flatten slightly.
- In batches, place 1 in. apart on greased tray in air-fryer basket.
- Cook until lightly browned, 8-10 minutes. Remove to wire racks to cool.

Grilled Watermelon Salad



Difficulty Level:



Serves: 8

Cook Time: 20 minutes

Ingredients

- 1 small watermelon seedless variety, if possible
- 2 ½ tablespoons olive oil divided
- 7 ounces (200g) feta cheese crumbled
- 2 cups (380g) blueberries
- 2 tablespoons orange juice
- juice from one lime
- mint leaves for garnish

Instructions

- Heat an outdoor grill to high, or heat a griddle pan on the stovetop.
- Cut the watermelon into half-inch thick wedges, remove the rind, and use 1 tablespoon of olive oil to brush onto both sides of the wedges.
- Cook watermelon on each side for 2-3 minutes until grill marks develop.
- Arrange the grilled watermelon on a serving plate and top with feta and blueberries.
- In a small bowl, mix together olive oil, lime juice, orange juice, and salt, then drizzle over the salad.
- Garnish with mint leaves and serve immediately.

Black Bean Dip



Difficulty Level:



Serves: 4

Cook Time: 15 minutes

Ingredients

- 1 tablespoon olive oil
- ½ yellow onion, chopped 2 cloves garlic, chopped
- 2 cans (15 ounces each) black beans, drained and rinsed
- ¼ cup packed fresh cilantro leaves and stems
- 1 chipotle pepper with adobo sauce (about 1 heaping tablespoon)
- 2 tablespoons fresh lime juice
- 1 teaspoon kosher salt
- 3 tablespoons water

Instructions

- Heat oil in skillet over medium heat. Add onion and garlic and cook, stirring, until softened, about 5 minutes.
- Combine onion mixture, beans, cilantro, chipotle and sauce, lime juice and salt in blender until mixture is chunky, about 30 seconds.
- Add water and continue to blend until smooth, about 30 seconds.
- If dip is too thick, blend in an extra splash or two of water.
- Taste and adjust seasoning with salt.
- Serve immediately, or store in airtight container in refrigerator for up to 1 week

Cumin-Spiced Lentil Burgers



Difficulty Level:



Instructions

- Place 2 cups of water and lentils in a large saucepan. Bring to a boil.
- Reduce heat; simmer, uncovered, until lentils are tender, 15-20 minutes, stirring occasionally.
- Remove from heat; stir in bulgur and 1 teaspoon salt. Cover and let stand until bulgur is tender and liquid is absorbed, 15-20 minutes.
- Meanwhile, in a large nonstick skillet, heat 2 tablespoons of oil over medium-high heat.
- Add onion; cook and stir until tender, 5-7 minutes.
- Add cumin and black pepper; cook 1 minute longer. Remove from heat.
- Add onion mixture to lentil mixture. Stir in egg, green onions, parsley and remaining ½ teaspoon salt, mixing lightly but thoroughly.
- If needed, add remaining ¼ cup water, 1 Tbsp. at a time, to help the mixture stay together when squeezed; shape into eight ½-in. thick patties.
- Only add 1- 2 tablespoons of water to soften if the burger mixture is too dry and does not stick together.
- In the same skillet, heat the remaining 4 tablespoons of oil over medium heat.
- Add burgers in batches; cook until golden brown, 3-5 minutes on each side.
- Serve in wraps with Sriracha mayonnaise and toppings