



## 2023 Summer Nutrition Club Lesson Plans

*Summer Nutrition Club Superheroes*



### Lesson 3: Dashing Dairy

#### Supplies Needed

- Lesson 3 packets (one per child)
- Markers or crayons
- Small bottle (12 ounces) of low-fat/non-fat milk, chocolate milk, Gatorade, lemonade, Coke, and Mountain Dew (or any other examples of sugar-sweetened beverages you would like to use)
- Plastic bags with the amount of sugar in each of the drink examples listed above
- Smoothie supplies and ingredients.
  - 1 blender
  - 1 extension cord
  - 1 dice (can be large inflatable dice or regular dice)
  - Measuring cups - 1 liquid measuring cup (that holds at least 1 cup/8 fluid ounces), 2-3 solid measuring cups (1 cup each)
  - 1 scraper/spatula
  - Serving trays (optional)
  - Paper cups (that hold about 5 ounces) - 1 per child
  - 2 different kinds of fresh or frozen fruit – mixed berries, mango, strawberries, etc.
  - Plain low-fat yogurt
  - 1 banana and 1 avocado
  - 2 different kinds of fresh or frozen vegetables - spinach, cauliflower, carrots, etc.
  - Oats (uncooked)
  - 2 different kinds of liquids - 100% fruit juice, almond milk, cow's milk, etc.
- Blank white aprons (1 per child)
- Fabric markers (optional)
- Table covers (optional – recommend if using fabric markers to decorate aprons)
- Post-assessment True and False questions
- Weekly Post-Class Questions
- End of SNC goodies (1 bag per child – optional) - cooking utensils, recipe cards, NutritionHub flyers, etc.

### Preparation Required

- Purchase/gather recipe ingredients and supplies
- Print lesson 3 packets
- Fill bags with amount of added sugars in sugar-sweetened beverages for added sugars activity
- Day of lesson:
  - Train adult helpers on their roles with the lesson. Recruit their help with set-up and classroom management activities, such as:
    - Handing out/collecting materials throughout lesson
    - Keeping children quiet, focused, and organized
    - Assisting younger children with BINGO activity or decorating aprons

### Objectives

By the end of the lesson, children will:

1. Be able to name at least one way dairy foods help their bodies
2. Complete a post-assessment true and false questions to analyze any changes in knowledge throughout the 3 weeks of Summer Nutrition Club lessons

### Review and Introduction (4 min)

- Welcome back to Summer Nutrition Club! Before we talk about the last superhero food group, let's review what we talked about last week.
  - What are the two different food sources we get protein from? (Animals and plants)
  - What type of meat comes from a cow? (beef) What about from a pig? (pork)
  - What are the two different types of grains? (Whole and refined)
  - How much of the grains you eat in the day should be whole grains? (half)
- Great job! Today we are going to meet our last superhero food group on MyPlate, Dashing Dairy.

### Dairy Information (12 minutes)

- Does anyone know any foods that are in the dairy food group? (Milk, cheese, yogurt, cottage cheese, ice cream etc.)
- The superpower dairy gives you is that it helps you build the bones in your body and keep your bones strong.
  - Dashing Dairy helps build strong bones and teeth through 2 nutrients: calcium and vitamin D. These nutrients both play a role in building bones in your body and in bone health.
- Does anyone know what animal dairy products come from? (Dairy cows)
  - Some people are allergic to cow's milk or get an upset stomach when they drink or eat products made from cow's milk. This can be called a milk allergy or lactose intolerance. That is why alternative dairy products were created.
  - Dairy alternatives include items made from almond, oat, soy, or rice milk instead of cow milk.
- Dashing Dairy is a cool food group because there are a ton of different dairy options for you to choose from. There are different types and flavors of milk and yogurt. There are also treats, like ice cream, that have dairy. Some dairy options though have a lot of added sugars in them.
  - Flavored milk, like chocolate milk, flavored yogurt, like strawberry yogurt, and ice cream are the dairy items that tend to have a lot of added sugar in them. While these foods are tasty, these are dairy foods that you only want to choose sometimes as treats.

- Plain and fat-free or low-fat milk, cheese, and yogurt are the dairy foods you want to incorporate into your meals every day. Fat-free, low-fat, and plain dairy products will help your body build strong bones and teeth.

Commented [SW1]: plain milk, cheese, and yogurt

## Dairy BINGO

- We are going to play dairy BINGO, so turn to page 3 in your packet and grab a crayon or marker.
- I am going to describe different dairy products and you are going to use the clues to figure out which dairy product on the BINGO board I am talking about. Once we figure out which dairy product I am talking about, you can color in that square on the board or put an X in the square. Make sure you listen to all the clues before you raise your hand to guess what the dairy product is. (Everyone will have the same BINGO board so everyone will "win" at the same time - still go through all the dairy products.)
  - Products and descriptions:
    - 1) Everyone can go ahead and color in the free space on the board.
    - 2) First up, this is a dairy product that you normally eat with a spoon, and you may eat it for breakfast. This dairy product tends to be higher in added sugar than other dairy products. **(Strawberry yogurt)**
      - a. Strawberry yogurt is a flavored dairy product and flavored dairy products tend to be higher in sugar than plain dairy products. You want to look for plain low-fat or non-fat dairy products to add into your meals and snacks every day.
    - 3) The next dairy product is one that you usually drink out of a cup or maybe eat with cereal. This dairy product is a good choice to add to your meals every day and is lower in added sugar than other dairy products. **(Fat-free milk)**
      - a. Fat free milk is also called skim milk. This type of milk usually has no added sugar but is rich in calcium and other vitamins and minerals, so it is a great dairy product to incorporate into your meals regularly.
    - 4) Up next, we have the animal that dairy products come from. **(Dairy cow)**
      - a. Dairy products are made from milk from dairy cows. These are the cows that are white and have black spots. There are also breeds of dairy cows that are brown or brown and white but black and white dairy cows are most common in the US.
    - 5) Next, this is a product that someone may use if they get an upset stomach when they have cow's milk or if they have a milk allergy. This product has vitamins and minerals like calcium added to it. **(Almond milk)**
      - a. Almond milk is a dairy alternative. Other dairy alternatives include oat milk, soy milk, and rice milk. If you see dairy-free yogurt or ice cream in the store, it is made with a dairy alternative instead of cow's milk.
    - 6) This dairy product you can eat with a spoon. It is really popular especially when it is hot outside. It is super tasty but tends to have large amounts of added sugar in it, so it is a dairy product you want to have sometimes instead of every day. **(Ice cream)**

Commented [SW2]: plain

Commented [SW3]: add

Commented [SW4]: is a good choice to add to

Commented [SW5]: come

Commented [SW6]: Fun fact: there are also other adorable breeds of dairy cows that are brown or brown & white, but holsteins (the black and white ones) are the most common in the US agriculture

- a. Ice cream is made from cows' milk, and it is one of the dairy products that you want to enjoy sometimes instead of every day.
- 7) Next up is a dairy product that is usually a topping for foods or used in cooking. You can find this dairy product sliced, shredded, cubed, or in blocks. You may have this dairy product on sandwiches, in pasta, or it may be melted and something you might dip a chip in. **(Cheese)**
  - a. Cheese is also made from cow's milk! Cheese can be used in so many different ways and just like milk and yogurt, you want to look for low-fat cheese options.
- 8) We are down to two dairy products left. This is a dairy product you typically drink, and you may get it at school. It has more added sugar in it than other dairy products that are like it. **(Chocolate milk)**
  - a. Chocolate milk is a flavored dairy product that is usually high in added sugars, so you only want to choose this milk option sometimes instead of every day. If chocolate milk is offered at your school, you could think about only choosing chocolate milk one or two days out of the week and choosing skim or low-fat milk the other days of the week!
- 9) Last up this is a dairy product that you eat with a spoon, and it may be something you eat with breakfast. It is low in added sugars, and it can be tasty to add fruit and granola to this product. **(Plain non-fat yogurt)**
  - a. We talked a lot about different dairy products today. Can someone tell me what kinds of dairy products you want to consume often? (Plain, low-fat or non-fat dairy options) What about dairy products you only want to consume sometimes? (Flavored milk or yogurt and ice cream)

#### Added Sugar Information

- Great work playing dairy BINGO and figuring out the different dairy products. I told you that some dairy products like ice cream, chocolate milk, and flavored yogurt tend to be higher in added sugars than other dairy products. Does anyone know what added sugars are?
  - Some foods have sugar that is naturally in them like fruits for example. The sugar that comes in fruit naturally is what makes fruit sweet!
  - Added sugar refers to any type of sugar that is ADDED to a food or beverage and can include things like sugar, brown sugar, or honey.
- Sugar makes food taste good and can make you feel energized for a little while, but sugar doesn't have other nutrients to give your body superpowers. Wouldn't it be bad if a superhero was trying to save someone, but they got too tired halfway through their mission because they only ate foods high in added sugars and ran out of energy?
  - Foods like fruits, vegetables, whole grains, proteins, and the low-fat and plain dairy products that we have been talking about today have a ton of different nutrients that keep you healthy and help you to feel your best. Those are foods you want to eat every day, while foods that are high in added sugars should be enjoyed some of the time instead of every day.

Commented [SW7]: give your body superpowers

Commented [SW8]: proteins and dairy too?

#### Added Sugars Activity

- Some drinks tend to have large amounts of added sugars in them. We are going to look at how much sugar is in different drinks but first, you all are going to guess which drinks have the most added sugars and which drinks have the least.
- I want everyone to stand up and go to the middle of the room. For your superhero mission this week, I am going to show you two different drinks and I want you to go to the side of the room of the drink that you think has more added sugars.
  - (Put low-fat milk example on one side of the table and chocolate milk on other side of the table.) If you think low-fat milk has more added sugars than chocolate milk, go to the left side of the room. If you think chocolate milk has more added sugars than chocolate milk, go to the right side of the room.
  - Gatorade vs. Lemonade
  - Coke vs. Mountain Dew
  - By the end of the activity, you will want to have had the children put all of the drink examples in order from what they think has the least amount of added sugars to what they think has the most amount of added sugars.
- Great job! You can sit back down now, and I am going to show you how much added sugar is in each of these drinks.
  - Turn to page 4 in your packet and as we go through them, I want you to number the drinks 1 to 6 underneath each drink. Number one will be the drink with the least amount of added sugars and number 6 will be the drink with the most added sugars.
  - Go over the correct order from least to most added sugars. Show the children the bag with the amount of added sugars for each drink as you go through them.
  - Correct order from least amount of added sugar to most added sugars (per serving for 12-ounce bottles – the exact sugar content for other products will vary, so be sure to check the Nutrition Facts label):
    - Plain low-fat milk (0 g added sugars) - #1 in packet
    - Chocolate milk (18 g added sugars) - #2 in packet
    - Gatorade (21 g added sugars) -#3 in packet
    - Lemonade (27 g added sugars) - #4 in packet
    - Coke (39 g added sugars) - #5 in packet
    - Mountain Dew (46 g added sugars) - #6 in packet
  - All of the sugar in the bag is in one of these small bottles of Mountain Dew. Do you think that people usually just drink this amount of these drinks or more?
    - Probably more! These are the small bottles of these drinks and people often drink the larger drinks or go to fast food restaurants or gas stations and get bigger cups which means there is even more added sugar than what is in these bags in the bigger servings of these drinks.
  - It is totally fine to have these drinks sometimes if you enjoy them but keep added sugar in mind and try to have drinks like water, low-fat milk, or drinks with no added sugar more often!

#### **Smoothie Making Station (12 minutes)**

- For our snack today we are all going to work together to make a smoothie that includes all of the different food groups we have talked about at Summer Nutrition Club!
  - Who has had a smoothie before? What are some foods or drinks you like to have in smoothies or what do you think would be good in a smoothie?
- We have a couple of different options of fruits, vegetables, and liquids that we are going to add into the smoothie. To decide which option of the different foods we are going to roll this big dice.
- First up, for option one we have a frozen berry blend and for option two we have a frozen mango blend (or whichever type of fruits you are using).
  - What food group are these foods from? (fruit)

- Assign one type of fruit to even numbers and the other to odd numbers. Randomly pick one child to roll the dice (whoever answers a nutrition question correctly, has the closest birthday, etc.). Add 2 cups of the fruit blend that is selected depending on if an even number is rolled or an odd number is rolled.
- Say that frozen fruits are great in smoothies because they make smoothies cold and help them to be thicker. They also add in all of the superpowers that different colors of fruits give our body.
- Next, we are going to add 1 cup of plain Greek yogurt to the smoothie.
  - What food group is Greek yogurt from? (dairy) Greek yogurt is a great non-fat dairy option!
  - Greek yogurt is also a good source of protein, so it is going to count for both our dairy and protein sources in this smoothie.
  - Yogurt helps to make a smoothie creamy.
- Now, we are going to add either a banana or an avocado to our smoothie.
  - What food group are these foods from? (Fruit)
    - Explain that many people think avocados are vegetables, but they are actually a fruit because of how they grow. Avocados are not as sweet as other fruits and can be eaten in lots of different meals and snacks, so people might think of them more like vegetables.
  - Assign the banana either even or odd numbers and the avocado the other. Randomly select one child to roll the dice and add either a whole banana or whole avocado to the blender depending on what number was rolled.
  - Say that bananas and avocados are two other foods that help make a smoothie thicker and creamier.
- We are going to add 1 cup of oats to our smoothie now.
  - What food group are oats from? (grains)
  - Grains are a food group that are often left out of smoothies, but you can add oats, cooked rice, or cooked quinoa to a smoothie to include grains! Grains also help make a smoothie thicker but do not have a super strong taste. Another option is to add granola on top of your smoothie after you make it, which helps add an extra crunch.
- Next, we are going to add either spinach or frozen cauliflower to our smoothie.
  - What food groups are these foods from? (Vegetables)
  - Assign the spinach either even or odd numbers and the cauliflower the other. Randomly select one child to roll the dice and add either 2 cups of spinach or 2 cups of cauliflower to the blender depending on what number was rolled.
  - Say that smoothies are a great way to get in your vegetables throughout the day because you can't really taste them once they are blended into the smoothie.
- Lastly, we need to add liquid to the smoothie.
  - What are some liquids you think would be good in a smoothie? (Water, milk, juice, almond milk, soy milk, etc.)
  - Today we are either going to add orange juice or unsweetened almond milk.
  - Assign the orange juice either even or odd numbers and the almond milk the other. Randomly select one child to roll the dice and add either 2 cups of orange juice or 2 cups of almond milk to the blender depending on what number was rolled.
- Now we have all of the ingredients we need in our smoothie. We are going to turn on the blender, so if you don't like loud noises you may want to cover your ears.
  - Blend the smoothie until it reaches desired consistency and there are no lumps.
  - If the smoothie is too thick, add in more liquid or water to make it thinner. If the smoothie is too thin, add in more frozen fruit, yogurt, banana/avocado, or oats to make it thicker.
- Pour small samples (approximately 4 oz) for each child to try.
  - As the smoothies are being distributed, ask the children to tell you what food in the smoothie is from each food group.

Commented [SW9]: They also add in all of the superpowers that different colors of fruits give our bodies!

#### Apron Decorating (10 minutes)

- What is something that superheroes wear often? (capes) Since you have all been such awesome nutrition superheroes this summer and have been brave and completed the superhero missions each week, we want to

give you each something you can wear as a nutrition superhero. Instead of a cape though, everyone is going to get an apron that you can decorate.

- You can decorate your apron however you want! You can write your name, write Summer Nutrition Club, use the stencils we have to draw different fruits and vegetables, or draw other pictures or designs.
- Pass out one apron per child.
  - If you are using fabric markers, make sure to put a tablecloth down and tell the children this marker will not come out of their clothes. Washable markers work great too for decorating the aprons - however, the marker will wash out if the aprons are ever washed.

#### **Post-assessment (5 minutes)**

- While children are coloring their aprons, ask the 5 post-assessment true or false questions.
- Say the statement and have the children first raise their hand if they think it is true and then have children raise their hand if they think it is false. Write down how many children got each question correct. Go over correct answers for false statements.
  - Statements and space to write down the number of correct answers are on the End of SNC Assessment Questions document.

#### **Weekly Post-Class Questions (3 minutes)**

- Ask children how many people tried the smoothie
- Ask the children to raise their hand and share if they learned anything new this week.

#### **Hand Out Bags (2 minutes)**

- We are so proud of you for all of the new things you learned about nutrition during Summer Nutrition Club and for being brave and trying out new foods. We hope that you continue to try new foods and we wanted to give you all a couple of items you can take home with you so you can keep exploring foods and learning about nutrition.
- Give each child a bag with kitchen/nutrition goodies (mini spatula, fruit and veggie stress balls, individual snacks, recipe cards, etc.)

#### **Clean Up**

- Gather and clean supplies
- Sanitize tables
- Throw trash away
- Arrange room how it was found
- Gather extra handouts