Discover Dairy
Kindergarten-1st Grade

GOAL
Students will recognize the importance of a diet rich in calcium to support bone and dental health.

OBJECTIVES
1. Students will be able to identify two dairy foods.
2. Students will be able to explain that calcium is necessary for strong bones and teeth.

NC EDUCATION AND HEALTHY LIVING STANDARDS

Healthful Living Essential Standard K.NPA.1.: Understand MyPlate as a tool for selecting nutritious foods. Recall foods and beverages beneficial to teeth and bones.

English Language Arts Essential Standard RF.K.4 c.: Read common high-frequency words by sight.

Healthful Living Essential Standard 1.NPA.1.1: Understand MyPlate as a tool for selecting nutritious foods. Select a variety of foods based on MyPlate.

ESTIMATED TIME FRAME: 30 minutes

MATERIALS NEEDED
- Discover Dairy PowerPoint presentation
- Dem Bones - Book
- Taste test supplies
- Student worksheet
- Parent handouts
- Educational incentive

INTRODUCTION/REVIEW
Hi boys and girls. Before we get started with today’s fun, let’s review what we talked about last time I was here. [Spend a few minutes reviewing MyPlate and Food Group Friends.]

[OPTIONAL: longer Grains and Protein review and/or Protein Review Quiz]

Today we are going to learn about Mary Dairy and the dairy food group.

MIND GRABBER
Let’s start by reading Dem Bones. While I’m reading, quietly listen and think to yourself about why I might be reading this book. [<2mins if reading only large font]

DISCUSSION
Mary Dairy
Now let’s meet Mary Dairy and she’ll teach us about the DAIRY food group which is colored blue on MyPlate.

- Can you say Mary Dairy?
- Let’s take a closer look at Mary Dairy.
- What is her body made of? (yogurt) What is she holding? (milk) What are her feet made of? (cheese)
- Those are clues to which foods are in the dairy food group.
• Get your thumbs ready! Thumbs up if you like any of these DAIRY foods. Remember, no ‘yucking my yum’ [click through dairy pictures]

Want to find out how Dairy group foods help our bodies?

• Repeat after me. When I eat foods from the Dairy group I give my body CALCIUM to build strong bones and teeth.

Bones and Teeth

Building the best body includes not just the parts of your body that you can see on the outside but also the parts of your body that are on the inside that you don’t see. This includes our bones. (We can see our teeth when we smile but we are going to talk about them along with the bones because they both need the same thing to be healthy. CALCIUM!)

• Can you say “Calcium”? Good! CALCIUM is something our bones and teeth need lots of. We need to feed our bodies CALCIUM so we can build strong bones and teeth. The Dairy group foods have the most Calcium for our bones.
• Your bodies have been growing bigger since the day you were born. Your BONES have also been growing and getting bigger. BUT, if you do not give them enough calcium and dairy foods every day, your bones will not grow and you won’t grow into a strong adult!
• Raise your hand if you want to guess how many bones and teeth are in our bodies. 206!

OPTIONAL Physical Activity Break

Let’s do the Wiggle Dance and move all 206 of our bones. It’s like Simon Says, Wiggle the body part I say...

- Wiggle toes
- Wiggle toes then feet
- Wiggle toes, feet, then legs
- Wiggle toes, feet, legs, then hips
- Wiggle toes, feet, legs, then hips, then rib cage
- Wiggle toes, feet, legs, hips, rib cage, then shoulders
- Wiggle toes, feet, legs, hips, rib cage, shoulders, then arms
- Wiggle toes, feet, legs, hips, rib cage, shoulders, arms, then wrists
- Wiggle toes, feet, legs, hips, rib cage, shoulders, arms, wrists, then fingers
- Wiggle toes, feet, legs, hips, rib cage, shoulders, arms, wrists, fingers, then neck, head
- One last time!!
- Wiggle toes, feet, legs, hips, rib cage, shoulders, arms, wrists, fingers, then neck, head and TEETH

Why we have bones

So, why do we have bones? Our bones help us in three main ways.

• One - Shape: We need bones to give our bodies their shape. Do you think we would be able to stand or sit up if we didn’t have any bones? NO!
• What would we be like without bones? A blob.
• Two - Movement: We also need bones to help us move. Do you think you would be able to walk/ run if you didn’t have any bones? Our leg muscles that help us walk and arm muscles that help us lift stuff are attached to our bones.
• Three - Protection: We need bones to protect other body parts that are INSIDE our body.
  - What do our rib bones protect? Organs like lungs and heart.
  - What does our head bone or skull protect? Our brain! AND... it holds our teeth inside our mouth.
• Bones are very important to protect parts of our body that keep us alive!

**Teeth**

What about our teeth? Why are they important?

• Biting and Chewing—we could not eat all the amazing healthy foods we are talking about this year without teeth. Without teeth we would have to eat like babies, just liquids and mashed up food. No more crunchy apples, yummy sandwiches or zesty pizzas.

• Talking—when we talk, our tongue and teeth help us shape our mouths to make the correct letter and word sounds. We could still talk without teeth but it would sound a little funny and be a little hard to understand.

**Healthy Bones**

The two important things we need to do every day to build and keep strong bones our whole lives:

• We need to get plenty of calcium from Dairy Foods.
• We need to get plenty of exercise by moving the big parts of our bodies.

**Physical Activity Break**

Let’s practice some exercises that will make our bones stronger!

• Reach for the ceiling if you like milk
• Pretend to swim in place if you like cereal with milk on it
• Squat down if you like cheese for a snack
• Run in place if you like to drink milk with lunch at school
• Lunge if you like cheese on crackers
• Balance on 1 leg if you like yogurt

**Where does milk come from**

Most of our dairy foods come from what animal?... [wait a second for students to call out animal name] COWS.

**Learning Spanish**

• Let’s have a little fun with Spanish and learn some words.
• Repeat after me.
• Cows make milk...
• Now in Spanish... Vacas (va-Kas)... hacen (Ah-cen)... leche...
• Cows make milk...
• Vacas hacen leche...
• Great! Muy bien!

**WRAP-UP & REVIEW**

Now that you know all about Mary Dairy and the dairy group, let’s do a quick review.

• Foods from the Dairy group have this word that starts with ‘C’ [create ‘c’ with hand and give students a second to respond] CALCIUM!
• And CALCIUM builds strong... [point to elbow/funny bone and teeth and give students time to respond] BONES and TEETH!
• And most dairy foods come from cow’s but are there other foods that give us CALCIUM and make our bones strong? [give time to respond] YES, like dark green vegetables and other milks.

**Quiz time!!**
Let’s see what we have learned.

- Raise your hand IF… Bread is in the Dairy group?
  - No. Bread is in the Grain group, see her body.
- Raise your hand IF… Yogurt is in the Dairy food group?
  - Yes. Yogurt is in the Dairy food group, see her body.
- Raise your hand IF… Dairy foods make our bones and teeth strong?
  - Yes. Dairy foods make our bones and teeth strong.

**CHALLENGE**
Today I want you to try to eat 3 high calcium foods today. [make suggestions]

*OPTIONAL: Before we get to our tasting who remember Ms._____ rule when we try foods? Right! Don’t Yuck My Yum!*

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**TASTE TEST IDEAS**
1. Smoothies
2. Cottage cheese spinach dip
3. Yogurt parfait

**ADDITIONAL ACTIVITIES AND RESOURCES**
2. **Bone Demonstration**: I’m going to show you two bones and you tell me which one looks the way you want your bones to look.
   a. **Chicken bones**: I brought in two bones today for you all to check out. Take a look at them both. One is a normal chicken bone and the other one I soaked in soda. How are these two bones different? The one that was soaked in soda is really soft and the other one is really hard. Which one do you think would hold up your body the best?
      i. The normal chicken bone is the strong bone because it has plenty of calcium in it; the soft bone is missing most of its calcium because the soda took the calcium out of the bone.
      ii. Calcium is the mineral that makes our bones strong and hard. It is important to eat or drink foods from the Dairy group everyday so our bones will look like this strong bone instead of the soft, bendy bone.
   OR
   b. **Laminated Big Bones**: I brought in two bones for you all to check out—one that has a few holes in it and one that doesn’t.

3. **DINE Discover Dairy worksheets**
4. USDA Discover MyPlate: Emergent Reader Mini Books – Dairy (English and Spanish)