



# DAIRY

2<sup>nd</sup> Grade Lesson Plan

<b>Goal:</b>	The goal is to for students to recognize the importance of a diet rich in calcium to support bone and dental health.	
<b>Objectives:</b>	<ol style="list-style-type: none"> <li>1. Students will state that calcium is necessary for strong bones and teeth</li> <li>2. Students will be able to recognize milk, cheese, and yogurt as the healthiest choices in the dairy group.</li> <li>3. Students will be able to name at least three high calcium foods, including at least one non-dairy product.</li> </ol>	
<b>Materials:</b>	<input type="checkbox"/> PowerPoint slides or printed images <input type="checkbox"/> Food and equipment for taste test <input type="checkbox"/> MyPlate plate or poster <input type="checkbox"/> Student and parent handouts <input type="checkbox"/> Educational incentive – Activity Books	
<b>Lesson</b>		
	<b>Talking Points</b>	<b>Materials/Activities/Notes</b>
<b>Review</b>	<ul style="list-style-type: none"> <li>• Who remembers which MyPlate Characters we talked about last time? Reggie Veggie and Farrah Fruit!             <ul style="list-style-type: none"> <li>• They are from the vegetable and fruit groups. Who can share some of our favorite vegetables and fruits? (click through food cards)</li> <li>• Who remembers what two important nutrients fruits and veggies give our body to support body functions, like eyesight, memory, and heart health. Starts with 'V' and 'M' (make 'V' and 'M' with arms) Vitamins and Minerals! And because each color does something a little different for our bodies, we need to eat all the colors, Eat a Rainbow!</li> </ul> </li> </ul>	<p>Click through food cards.</p> <p>Make 'V' and 'M' with arms.</p>
<b>Mind Grabber</b>	<ul style="list-style-type: none"> <li>• Today we are going to talk about taking care of our bones and teeth.             <ul style="list-style-type: none"> <li>○ Who can tell me how many bones we have in our bodies? 206!</li> <li>○ I'm going to show you two bones and you tell me which one looks the way you want your bones to look.</li> </ul> </li> <li>• <b>Laminated Bones:</b> Here are two for you all to check out. Take a look at them both. How are these two bones different? Which one do you think would hold up your body the best?             <ul style="list-style-type: none"> <li>○ The solid bone to the right is the strong bone because it has plenty of calcium in it;</li> <li>○ The left bone is missing most of its calcium- that's why it has big holes.</li> </ul> </li> </ul>	<p>Show students the laminated big bones—one with holes and one without holes.</p>

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<ul style="list-style-type: none"> <li>• 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 bone with all the holes.</li> </ul>	
<p><b>Discussion</b></p> <ul style="list-style-type: none"> <li>• The food group we are going to talk about today is the Dairy group. These foods are grouped together because they have a lot of calcium in them. <ul style="list-style-type: none"> <li>• The Dairy group is the blue group on MyPlate.</li> <li>• Can anybody name some of the foods in the dairy group?</li> </ul> </li> <li>• Meet Mary Dairy. She is here to help us remember the dairy group. <ul style="list-style-type: none"> <li>• What is Mary Dairy made of? Body – Yogurt, shoes – cheese, and holding – milk. That’s kind of silly!</li> <li>• Here are food cards from the dairy group.</li> </ul> </li> <li>• Now that we know what foods are found in the dairy group, does anybody know why the foods in the dairy group are so important for our bodies? We touched on it earlier when we were talking about bones and teeth. <ul style="list-style-type: none"> <li>• Milk and the other foods made from milk in the dairy group have many important nutrients, things our bodies need to stay healthy. However, we are only going to talk about one of the nutrients today. Dairy foods, like milk, give us: Mighty Mineral – one of our Nutrient Superheroes.</li> </ul> </li> <li>• Mighty Mineral has 21 special gadgets, kind of like other superheroes like Batman and Spiderman, but Mighty Mineral’s special gadgets are minerals (nutrients found in our food that helps our bodies be strong). And each of the 21 minerals does something amazing in our bodies – we need all these minerals everyday! <ul style="list-style-type: none"> <li>• We are going to talk about one of those special gadgets (or minerals) today – CALCIUM! Calcium is found in the foods in the dairy group.</li> </ul> </li> <li>• The Mighty Mineral, calcium, helps build and keep our bones and teeth strong. Why do you think it is important for us to have strong bones and teeth? What do we need bones for?</li> </ul> <p>We need bones for 3 main reasons:</p> <ol style="list-style-type: none"> <li><u>1. Support:</u> We need bones to support our bodies. Do you think we would be able to stand or sit up if we didn’t have any bones?</li> <li><u>2. Protection:</u> We also need bones to protect other parts of our bodies. <ul style="list-style-type: none"> <li>▪ What do our rib bones protect? Organs like lungs and heart.</li> <li>▪ What does our vertebrae bones (back bone) protect? Our spinal cord.</li> <li>▪ What does our cranium or skull bone protect? Brain!</li> <li>▪ Bones are very important to protect parts of our body that keep us alive!</li> </ul> </li> <li><u>3. Movement:</u> And finally, we also need bones to help us move. Do you think you would be able to run if you didn’t have any bones? <ul style="list-style-type: none"> <li>• Wiggle – Energizer Activity</li> </ul> </li> </ol> <ul style="list-style-type: none"> <li>• How do we build strong bones and teeth?</li> <li>• There are two important things we need to do every day to build and keep strong bones our whole lives: <ol style="list-style-type: none"> <li>1. We need to get plenty of calcium from what we eat and drink.</li> <li>2. We need to get plenty of exercise by moving the big parts of our bodies.</li> </ol> </li> <li>• Remember the hard and soft bones from the beginning of the lesson?</li> </ul>	<p>Allow students to name some dairy foods.</p> <p>Click through dairy food cards.</p> <p>Optional Wiggle Energizer</p>

- Our bones aren't always hard and strong. A baby's bones are soft. Feel the tip of your nose or your ears. Notice how they are kind of soft and moveable. This is similar to what a baby's bones are like at birth.
- When babies are born, they only have a little bit of calcium in their bones (that's one reason why they are soft). As you grow bigger, your bones have more and more calcium.
- What do babies drink when they are born (milk)? What is in the milk that makes their bones strong (calcium)?
- 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 every day from the foods you eat and drink your bones will not grow strong! Right now, your body is building bone but my bones are no longer getting bigger and stronger.
- You will only build bone until you are about 25. After that, the best you can do is to keep your bones as strong as you built them. Does that mean I don't need to give my body calcium anymore? NO!
- Our bones are like a calcium piggy bank for the body.
  - You see, our bodies use calcium for other things besides keeping our bones and teeth strong. Calcium is used every time a muscle works in your body and every time a nerve works in your body.
  - If you are not giving your body enough calcium from the foods you eat, where can your body go to get the calcium for your muscles and nerves to work? From your Bones. So we want to make sure that we are eating enough calcium so our body isn't taking that calcium from our bones.
- What kind of dairy foods are BEST for our bodies? Remember Mary Dairy and the different dairy food cards?
  - Foods from the Dairy group have lots of calcium in them so eating them is a great way to make and keep your bones strong. Let's look at what are the best choices from the dairy group.
- The 3 best choices of foods from the dairy group for our bodies are milk, cheese, and yogurt.
- What about the foods from the dairy group that aren't quite as healthy for our bodies?
  - The less healthy choices, ones that we might choose only sometimes are ice cream, milkshakes, chocolate and strawberry milk. Why do you think they are sometimes dairy foods? Right, they have a lot of sugar.
  - Remind me what can happen with too much sugar? Cavities in teeth, stomach ache, energy crash, etc.
- Let's take a look at how the different milks are made, so that we can understand why some are healthier than others.
  - Most milk comes from a cow. What color is it? White. In schools and stores there's plain white skim (purple container) or low fat milk (light blue container).
  - Let's move to strawberry milk. How do you think it was made? Are there strawberry cows? Does strawberry milk have ANY whole strawberries in it? How do we make it taste like strawberry? A lot of sugar and some red strawberry flavoring are added to white milk to make it have a strawberry flavor.



<ul style="list-style-type: none"> <li>• What about chocolate milk? Do we have a chocolate cow? No! Chocolate milk is made by adding chocolate syrup (which has lots of sugar in it) to skim white milk.</li> </ul> <p><b>Other Sources of Calcium</b></p> <ul style="list-style-type: none"> <li>• Do you know anyone who cannot drink milk? <ul style="list-style-type: none"> <li>• What if you are allergic to foods in the dairy group or plain just don't like them?</li> </ul> </li> <li>• Most of our dairy foods come from cow's milk, but some people can't digest milk correctly and it makes them get an upset stomach – this is called "lactose intolerance". <ul style="list-style-type: none"> <li>• There are also some things people with lactose intolerance can do to tolerate dairy products better. <ul style="list-style-type: none"> <li>▪ Eating and drinking smaller amounts of dairy foods at a time</li> <li>▪ Drinking milk with meals or snacks</li> <li>▪ Eating hard cheeses and yogurt instead of other dairy foods.</li> </ul> </li> <li>• Sometimes if they still can't eat cow dairy, there are other options.</li> </ul> </li> <li>• For those people who are allergic to milk or for those people who do not like milk, there are foods in other food groups that are good sources of calcium to build and keep strong bones. <ul style="list-style-type: none"> <li>• There are special milks called lactose-free milk. Some of these milks are made from cow's milk and some are made from plant sources such as rice, almonds or soybeans.</li> <li>• Fortified foods like cereal and juice.</li> <li>• Dark green vegetables</li> <li>• Dried beans and canned sardines with bones are high in calcium.</li> </ul> </li> </ul>	
<b>Wrap-Up</b>	
<ul style="list-style-type: none"> <li>• Now that you know all about the dairy group, let's do a quick review. <ul style="list-style-type: none"> <li>○ Foods from dairy group have calcium</li> <li>○ Calcium builds strong bones and teeth</li> <li>○ The 3 best choices from the dairy group are milk, cheese, and yogurt. Choose ones that don't have added sugar.</li> </ul> </li> <li>• Quick Quiz – Answer using thumbs up for true, thumbs down for false. <ul style="list-style-type: none"> <li>○ Eggs are an example of a food found in the dairy group? <ul style="list-style-type: none"> <li>▪ False. Eggs are an example of a food in the PROTEIN group.</li> </ul> </li> <li>○ Calcium, that makes our bones and teeth strong, is only found in milk? <ul style="list-style-type: none"> <li>▪ False. Calcium can be found in dark green vegetables and fortified foods like soy/almond milk and cereals.</li> </ul> </li> <li>○ Ice cream is a really healthy choice in the dairy group? <ul style="list-style-type: none"> <li>▪ False. Ice cream is a less healthy food in the dairy group due to added sugars.</li> </ul> </li> </ul> </li> </ul>	<p>Click through quiz slides, reminding students thumbs up for true, thumbs down for false,</p>
<b>Challenge</b>	
<ul style="list-style-type: none"> <li>• Every week we'll have a challenge I would like for you to work on until the next time I see you. <ul style="list-style-type: none"> <li>○ This week eat 3 high calcium foods each day!</li> </ul> </li> </ul>	<p>Time permitted – ask students to share how they would accomplish challenge.</p>



<b>Taste Test Ideas</b>	
<ul style="list-style-type: none"> <li>Smoothies, parmesan dip, cottage cheese spinach dip</li> </ul>	
<b>Additional Activities</b>	
<p><b>Wiggles – Energizer Physical Activity</b></p> <p>Students stand at deck. Students being to wiggles all parts of their body (reiterating that all these body parts have bones that help us move and support them). Start from toes repeating and working way up to head; “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 and head Lastly wiggles everyone together!!”</p>	
<b>Student Handouts</b>	
<p>Good Nutrition Starts With MyPlate workbook</p> <ul style="list-style-type: none"> <li>Dairy pages – 10 and 11</li> </ul>	Activity book
<b>Parent Handouts</b>	
Today in Nutrition Class...Dairy (English & Spanish)	
<b>Lesson Roadmap</b>	
<ul style="list-style-type: none"> <li>Review last class</li> <li>Mind Grabber: Who many bones in the body?</li> <li>Discussion: Dairy <ul style="list-style-type: none"> <li>Mary Dairy – Dairy Foods</li> <li>Might Mineral - Calcium</li> <li>Why strong bones? <ul style="list-style-type: none"> <li>Support</li> <li>Protection</li> <li>Movement <ul style="list-style-type: none"> <li>Optional Wiggle Energizer</li> </ul> </li> </ul> </li> <li>How to build strong bones</li> <li>Sources of Dairy <ul style="list-style-type: none"> <li>Non-dairy calcium sources</li> </ul> </li> </ul> </li> <li>Quiz review</li> <li>Challenge</li> <li>Food tasting</li> </ul>	



• Workbook

