



## Weeks 5 & 6

### Low-Fat Dairy

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#### During this 2-week segment:

Make sure each participant has all the materials necessary for this lesson (Calcium Assessment Questionnaire, Power of 3 Planner, and Wanted Stronger Bones handout), and email each participant at least 2 messages each week related to low-fat dairy.

#### Introduction to the Low-Fat Dairy PowerPoint:

This presentation focuses on the benefits of including low-fat dairy in your diet. The new MyPyramid has renamed some of the food groups and the Dairy Group is now referred to as the Milk Group, but the benefits of eating and drinking from this food group are still the same. Consuming the recommended 2-3 cups from the milk group each day can lead to a reduced risk of many chronic diseases including hypertension (high blood pressure), obesity, some types of cancer, stroke, and dental caries (cavities).

Foods from the milk group provide nutrients in a unique combination that helps maintain bone health, reducing the risk of osteoporosis later in life. Why is this important? Over 10 million Americans are living with osteoporosis and an additional 18 million Americans have low bone mass, which could lead to osteoporosis.

Studies also suggest that consuming a diet rich in foods from the milk group could assist in weight loss and the maintenance of a healthy weight. Researchers say that the unique combination of calcium and protein found in dairy foods may improve metabolism and burn body fat when consumed as part of a balanced, reduced-calorie meal plan.

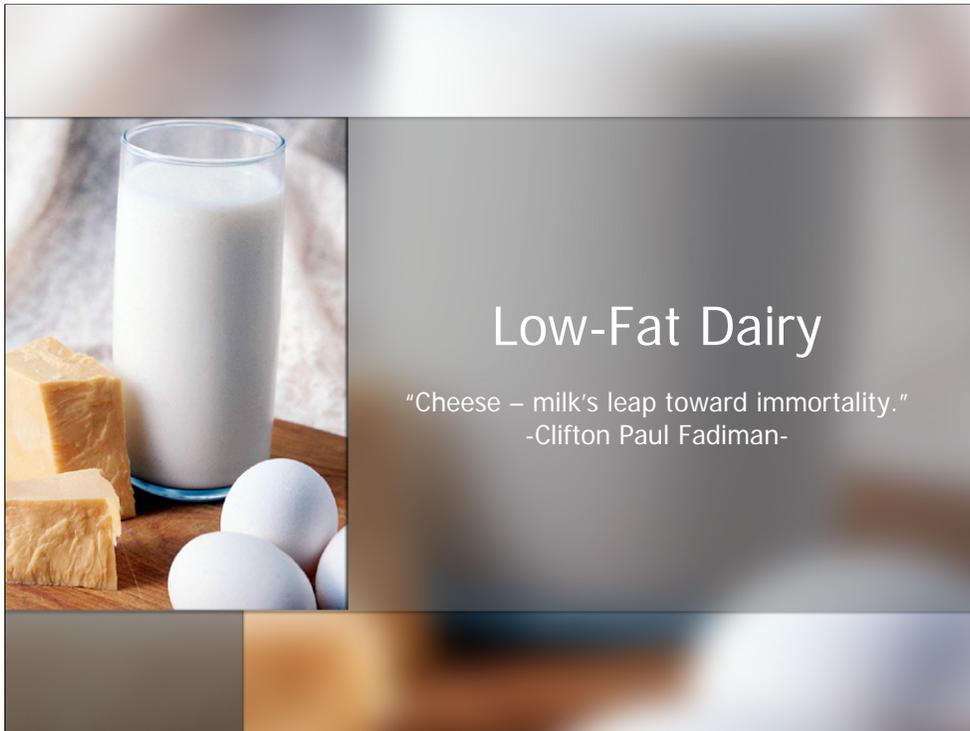


## Suggested Enhancement Activities:

- Get your school and community involved by hosting a “Dairy Dazzling Calcium Carnival.” Instructions for this event are included on the Participant Materials CD, but can also be accessed at:  
[http://www.midwestdairy.com/files/PDF/DairyDazzling\\_sm1.pdf](http://www.midwestdairy.com/files/PDF/DairyDazzling_sm1.pdf).
- Several handouts and worksheets are provided for this section (Calcium Assessment Questionnaire, Power of 3 Planner, and Wanted Stronger Bones handout), as time permits, you may choose to include these worksheets in your presentation.
- Direct participants to the American Heart Association website where they can access “Tips for Eating Out” for all kinds of different types of cuisine. Start with the Tops for Eating at Family Restaurants:  
<http://www.americanheart.org/presenter.jhtml?identifier=1091>. From there, use the menu on the left to view tips for healthier eating at other types of restaurants. These tips may be used to start a discussion about the importance of making healthy choices when dining out. Solicit responses and suggestions from your audience about dining out.

## Messages to send to participants for the Low-Fat Dairy segment:

- Eating too much may add up to more food energy (calories) than your body needs. Remember extra calories become body fat! Be aware of portion size, especially if you make a selection from the milk group that is not low fat like cheese or ice cream.
- Research shows that parents who drink more milk have kids that drink more milk.
- Being active helps you relax and feel less stress.
- Use food labels to make informed food choices. Are you a label reader? Labels provide information on calories, as well as the vitamins and minerals in a food. Reading labels can help you get the nutrients you need. Look at the % Daily Value of the nutrients on a food label to determine if a food is low or high in a given nutrient (5% or less of the % Daily Value is low; 20% or more of the % Daily Value is high).
- Learn to try new unfamiliar foods! Stores and restaurants are full of foods you’ve never tried. Trying new low-fat dairy products can be fun, exciting and interesting. You may even find some foods to include in your regular meals and snacks.
- You already know that regular physical activity can do great things for your health and well-being. When you pair that with good nutrition, your body is sure to thank you! Often it seems like getting started is the hardest part. Like any change in your life, knowing where you are and where you’re going is important. Look at your goals... are you on-track?
- “Try to establish good eating behaviors that will last a lifetime. It makes no sense to go on a diet for six weeks. Instead, you need to establish routines that will help you keep the weight off for the long term.” From *The RealAge® Makeover* Michael F. Roizen, M.D.



## Low-Fat Dairy

"Cheese – milk's leap toward immortality."  
-Clifton Paul Fadiman-



## MyPyramid: The Milk Group

- What is included in the milk group?
- All fluid milk products and many foods made from milk are considered part of the milk group.
- Foods made from milk that do not retain their calcium content are excluded from the milk group.



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\*this slide is animated to reveal just one bullet per click of the mouse\*

- What kinds of foods are included in the milk group? What makes a food a “milk group” food? (Wait for answers)
- The milk group consists of all fluid milk products and many foods made from milk.
- Excluded from the milk group are foods made from milk that do not retain their calcium content. These excluded foods include butter, cream, and cream cheese.



## How Much is Enough?

- It is recommended that adult men and women consume 3 cups from the milk group daily.
- Most milk group choices should be fat-free or low-fat.

Daily Recommendation		
Children	2-3 years old	2 cups
	4-8 years old	2 cups
Girls	9-13 years old	3 cups
	14-18 years old	3 cups
Boys	9-13 years old	3 cups
	14-18 years old	3 cups
Women	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	3 cups
Men	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	3 cups

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- The USDA's MyPyramid recommends that both men and women over the age of 19 consume 3 cups from the milk group daily. This could be in the form of fluid milk, yogurt, cheese or milk-based desserts like pudding or frozen yogurt.
- Most of your choices from the milk group should be fat-free or low-fat.



## Why Low-Fat Dairy?

- If you currently drink whole or 2% milk, switch to 1% or skim to reduce both fat and calories.
- Provides the same nutrients, and helps to maintain a healthy weight.



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•If you currently drink whole milk or 2% milk, try gradually working your way down to 1% (low-fat) milk or skim (fat-free). While a lot of people seem to notice a difference between 1% and skim milk, few can recognize taste differences between 2% and 1% milk... why not make the switch to a lower-fat milk?

•Low-fat dairy products provide the same great nutrients but with less calories and fat. This helps to maintain a healthy weight which reduces the risk for a number of diseases like heart disease, and other chronic diseases such as diabetes and hypertension.



## Health Benefits

- Helps reduce the risk of many chronic diseases/disorders including:



- Hypertension
- Insulin resistance and type 2 diabetes
- Some types of cancer
- Obesity
- Heart disease and stroke
- Dental caries

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• There are a number of health benefits associated with consuming the recommended amounts from the milk group. Diets that include low-fat dairy products tend to have a higher overall nutritional quality. Studies suggest that getting optimal intakes of calcium-rich foods, 3-4 servings as recommended by the USDA's MyPyramid, leads to a number of health benefits including a reduced risk of many chronic diseases and disorders.

• This includes hypertension (high blood pressure), obesity, insulin resistance and type 2 diabetes, heart disease and stroke, some cancers (colon and breast), and dental caries (cavities).

• Studies have connected the health benefits of a calcium-rich diet to these chronic diseases, and resulting costs for treatment. These studies found that if the US population consumed the optimal amount of calcium-rich foods, it could lead to a healthcare cost savings of \$26 billion in the first year and more than \$200 billion over 5 years. That's an impressive cost savings for such a relatively easy lifestyle change!



## Milk and Bone Health

- The right combination of nutrients:
  - Calcium
  - Phosphorous
  - Magnesium
  - Zinc
  - Vitamin D
  - Protein



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Milk contains calcium which is known to help build and strengthen bones and teeth. Diets rich in milk and milk products have been found to help build and maintain bone mass throughout the lifecycle. This may reduce the risk of osteoporosis. Besides calcium, milk also provides a number of nutrients that help maintain bone density. Milk contains phosphorous, which helps strengthen bones, magnesium, which is found in bones and teeth, and zinc, which helps keep skin, bones and hair healthy. Milk also provides vitamin D which helps the body absorb calcium.

Milk is also a good source of protein, one of the body's essential nutrients. Protein contributes to a number of essential functions in the body, including building and repairing tissues. As you can see, milk provides nutrients in the correct combinations to maximize the absorption of calcium, support healthy bones, and keep other parts of the body, like skin and hair, healthy.



## Why is Bone Health Important?

- Over 10 million Americans have osteoporosis.
- 18 million Americans have low bone mass.
- Women are four times more likely to get osteoporosis, but men suffer from the disease as well.



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•Osteoporosis is a condition in which bones become increasingly porous and susceptible to injury. Over 10 million Americans are living with this disease. An additional 18 million individuals are living with low bone mass, which could lead to osteoporosis.

•There are a number of risk factors for osteoporosis that are considered “non-modifiable,” meaning that there is nothing that a person can do to change his or her risk. Non-modifiable risk factors for osteoporosis include: gender (females are 4 times more likely to get osteoporosis than men), a small frame/build, age (the older you are, the greater your risk), and being of Caucasian or Asian descent. There are, however, risk factors that are affected by lifestyle changes and health behaviors, called “modifiable” risk factors. Modifiable risk factors for osteoporosis include a low-calcium diet (a diet rich in calcium reduces your risk), little or no weight-bearing physical activity (engaging in moderate-levels of weight-bearing physical activity, like walking, can reduce your risk), and smoking.



## Tips to Include More Milk and Milk Products in Your Diet:

- Include low-fat or fat-free milk as a beverage at meals.
- Have a low-fat yogurt as a snack.
- Make pudding using fat-free or low-fat milk.
- Add fat-free or low-fat milk instead of water to oatmeal or hot cereal.



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- There are many ways to get more milk and milk products into your diet. Try having a glass of low-fat (1%) or fat-free (skim) milk with meals.
- Milk products make great snacks: low-fat yogurt, pudding made from fat-free or low-fat milk and cheeses made from skim or low-fat milk are all great choices for easy, healthy snacks.
- Have your morning coffee with fat-free milk rather than cream or whole milk.
- And use fat-free or low-fat milk instead of water when making oatmeal or hot cereal.



## More Tips...

- Use flavored low-fat yogurt to make fruit smoothies or as a topping to cut-up fruit.
- Top a baked potato with plain, low-fat or fat-free yogurt.
- Sprinkle low-fat shredded cheese on casseroles, vegetables, pasta or soup for an easy calcium boost.

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- Flavored low-fat yogurt can be used to make fruit smoothies or served over cut-up fruit.
- Plain low-fat or fat-free yogurt can top a baked potato.
- Sprinkle some low-fat shredded cheese over casseroles, vegetables, pasta or soup for an easy calcium boost.



## Weight Loss Benefits

- Unique combination of calcium and protein in milk may:
  - Improve metabolism
  - Help burn body fat
- Consume the recommended 3 cups of milk daily as part of a balanced, reduced-calorie meal plan.



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•Drinking 3 cups of milk each day is a good way to consume the calcium you need for strong bones and teeth. In addition, new research indicates consumption of dairy products may aid in weight loss! One study found that participants who consumed a diet high in milk and milk products lost more weight and body fat than participants who followed a diet low in foods from the milk group.

•Why? Researchers say that the unique combination of calcium and protein in dairy foods may improve metabolism and burn body fat when consumed as part of a balanced, reduced-calorie meal plan.



## If You Cannot Consume Milk Products...

- Choose lactose-free, lactose-reduced or low-lactose alternatives within the milk group.
- Some individuals take an enzyme called lactase before consuming milk products.
- Try calcium-fortified juices, cereals, breads, soy beverages or rice beverages.

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There are many individuals who are unable to consume milk products because of lactose intolerance and there are a number of milk products that are specifically targeted at these individuals: milk, cheeses and yogurt labeled as “lactose free”, “lactose reduced” or “low lactose.” A label of “lactose-reduced means that it contains about 70% less lactose than the regular version; “lactose-free” means that the product is 100% lactose-reduced. Some individuals choose to take an enzyme called lactase before consuming milk products which helps their body digest the lactose from milk products.

There are also individuals who choose to not consume milk products for other reasons such as a vegan diet (vegan diets exclude all animal products). These individuals can get their calcium through other sources including calcium-fortified juices, cereals, breads, or through soy or rice beverages. Soybeans and other soy products as well as some dried beans and leafy greens also provide calcium. If you do not consume milk or milk products, consulting with a physician or dietitian can ensure that you are getting the recommended amounts of calcium in your diet.



## RealAge® Benefits

- Consuming the recommended amount of calcium each day...
  - Helps to slow arterial aging.
  - Helps keep your bones “young.”



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Consuming the recommended amount of calcium each day helps to slow the rate of arterial aging. Additionally, the calcium in low-fat dairy helps to keep your bones “young,” reducing a person’s risk for osteoporosis and the subsequent risk of bone fractures later in life.



## Handling Milk Products:

- Milk and milk products should be stored at 40° F or less.
- Protect milk from exposure to strong light; it can effect the riboflavin content of the milk.
- Look for “sell by” or “pull” dates. If refrigerated properly, milk is good for 2 to 3 days after this date.



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- Milk and milk products should be stored at 40 degrees Fahrenheit. Milk should not be frozen. Freezing milk can cause unwanted changes in texture and appearance.
- Protect milk from strong light to maintain the riboflavin content; look for milk packaged in opaque containers to ensure adequate riboflavin levels. Riboflavin is a B vitamin that is a key player in many body functions including the breakdown of food, maintenance of body tissues, and production of hormones.
- Look for the “sell by” or “pull” dates on milk and milk products. Milk is good for 2 to 3 days after this date. Some dairy processors will guarantee their product for a certain length of time after the “sell by” date, so check with your grocer for more specific timeframes.



## What can I do?

- Set a goal to consume 3 cups from the milk group each day for the next two weeks.
- Make the change to low-fat and fat-free milk and milk products.
- Try “skim supreme” or “skim deluxe” milk to make the transition from higher-fat milk products easier.



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- There are a number of ways that you can benefit from consuming foods and beverages from the milk group. Set a goal for yourself to try to meet the recommended daily amount from the milk group for the next 2 weeks of the Power Panther Professionals program. For most adults, that comes out to 3 cups each day. These 3 cups could come from fluid milk, low-fat yogurt, low-fat cheeses or frozen yogurt. Look for ways that you can add milk and milk products to your diet. Try sprinkling some low-fat cheddar cheese on top of a salad, a dollop of low-fat or fat-free yogurt on top of breakfast waffles, or a fruit smoothie with low-fat or fat-free yogurt and fresh fruit.
- Remember that most of the milk products you consume should be fat-free or low-fat. If you currently drink whole or 2% milk, gradually step down to 1% and fat-free (skim) milk.
- Some skim milks with labels like “skim supreme” or “skim deluxe” are designed to look like and have the “mouth feel” of 2% milk. This is the result of the addition of some dietary fiber back into the milk. Some individuals who don’t like skim milk will drink “skim supreme” or “skim deluxe” milk.



## Be a Healthy Role-Model

- Set a good example by eating breakfast and/or lunch with students. Make low-fat or fat-free milk your beverage of choice.
- Encourage parents to bring low-fat yogurt, pudding or low-fat string cheese for class parties and celebrations.

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The best way to encourage a healthy lifestyle in children is to live a healthy lifestyle yourself. Leading by example is one of the most effective ways to encourage healthier behaviors in children. Set a good example for your students by eating breakfast and/or lunch with your students. Make low-fat or fat-free milk your beverage of choice. If children ask about your selection, take the opportunity to discuss with them the health benefits of milk and foods from the milk group.

Encourage parents to bring low-fat yogurt, pudding or low-fat string cheese for class parties and celebrations. Don't make healthy food seem like a punishment for students. Talk about the great things that these healthy snacks are doing to their bodies. If parents have questions about the newly recommended (or in some schools, required) healthier snacks for classroom parties, direct them to [www.powerpanther.org](http://www.powerpanther.org). There, you can find information about healthier class party and snack ideas.



## Power Panther Professionals School-Wide:

- Get students involved by:
  - Doing a class project or lesson about the milk group.
  - Creating a bulletin board with information about the milk group for students to read.
  - Encouraging students to evaluate their own breakfast and/or lunch to see if they can choose more often from the milk group.



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### Optional last slide:

If Power Panther Professionals is a competition in your school, award “bonus points” to teachers who choose to learn about milk and milk products as a class lesson, do a tasting activity with their students involving milk or milk products (yogurt, pudding, string cheese, fruit with yogurt dip, etc.), etc. Get students involved by creating a bulletin board with information about the milk group for students to read and encouraging students to choose more often from the milk group.