

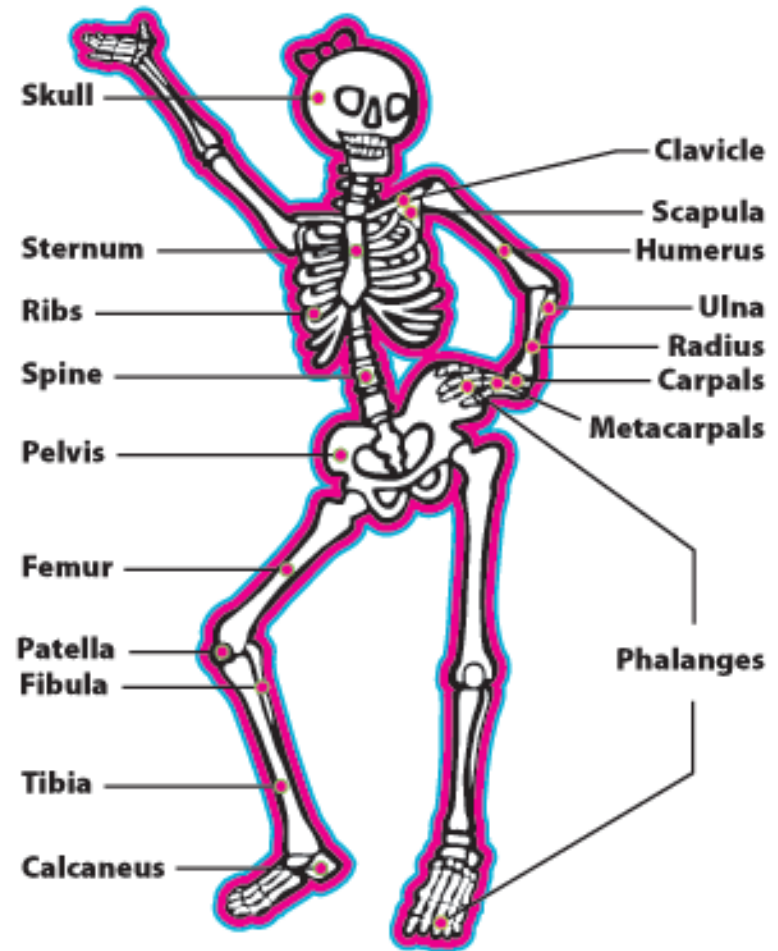
Girl's Health Focus: Calcium and Bone Health



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All About Bones...

- ▶ There are over 200 bones inside your body.
- ▶ Bones hold up your muscles and protect all your organs.
- ▶ Without bones we would just be giant blobs!!



What makes bones strong?



Bones are made of two things: *collagen* and *calcium phosphate*.

- ▶ Calcium from your foods travels through your blood stream and deposits in bones. More calcium means stronger bones!
- ▶ Vitamin D is also important to eat with calcium because it helps the calcium from your foods attach to your bones.

What happens to weak bones?

- ▶ When bones don't have enough calcium, they become weak and brittle.
- ▶ Weak bones lead to bone fractures.
- ▶ Muscles cannot become as strong when the bones that support them are weak.



Osteoporosis



- ▶ This disease is caused by weak bones that continue to weaken as you grow older.
- ▶ It can cause many problems such as:
 - Bone pain and tenderness
 - Weak muscles
 - Bone fractures
 - Neck and back pain
 - Growing shorter over time
 - Hunched Back

Old bones

- ▶ As we grow older, our bones grow old too.
- ▶ Your bones are still developing and getting stronger each day. They will continue to grow until you are just 20 years old.
- ▶ At 20 years old, your bones are the strongest they will ever be.
- ▶ Making strong bones today will help you prevent weak bones and osteoporosis in the future.



Calcium in your food

- ▶ There are many foods that contain calcium.
- ▶ Eating these foods will help you build strong bones
 - Milk
 - Plain or fruit yogurt
 - Frozen yogurt
 - Cheese
 - Broccoli
 - Kale
 - White beans
 - Almonds



What about lactose intolerance?

- ▶ Some girls have *lactose intolerance*. This means they cannot drink milk or may feel sick after eating milk products.
- ▶ Absence of the enzyme lactase means your body can't digest lactose
 - Look for milk, yogurt, and cheese products that are labeled "lactose-free."
 - Lactose-free dairy products have the same amount of calcium as regular milk products.

How much Calcium do I need?

- ▶ Girls 9–18 years old need 1,300 mg of calcium each day.
- ▶ Food labels do not show mg of calcium, they show %daily value.
 - 1,300mg = 130% Daily Value

Add your food labels each day to get all 130% of your calcium needs!!

Nutrition Facts	
Serving Size 1 Container (8 oz.)	
Amount Per Serving	
Calories 127	Calories from Fat 4
% Daily Value*	
Total Fat <1g	0%
Saturated Fat 0g	0%
Cholesterol 5mg	2%
Sodium 175mg	8%
Total Carb 17g	6%
Dietary Fiber 0g	0%
Sugars 17g	
Protein 13g	
Vitamin A 0%	Vitamin C 4%
Calcium 45%	Iron 2%

*Percent Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Suzy Q ate these two products for lunch:

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings per Container 2	
Amount Per Serving	
Calories 280	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 2mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 3g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	Vitamin C 2%
Calcium 15%	Iron 4%

*Percent Daily Values are based on a 2,000-calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Whole Milk	
Serving Size 8 fl oz (240mL)	
Servings Per Container 2	
Amount Per Serving	
Calories 150	Calories from Fat 70
% Daily Value*	
Total Fat 8g	12%
Saturated Fat 5g	25%
Cholesterol 35mg	12%
Sodium 125mg	5%
Total Carbohydrate 12g	4%
Dietary Fiber 0g	0%
Sugars 11g	
Protein 8g	
Vitamin A 6%	Vitamin C 4%
Calcium 30%	Iron 0%
	Vitamin D 25%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

- How much %Daily Value of Calcium did she eat?
- How much more should she eat in the day to consume her daily recommendation?
- What are some foods she can eat to add more calcium in the day?

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• How much %Daily Value of Calcium did she eat?

45%

• How much more should she eat in the day to consume her daily recommendation?

$130 - 45 = 85\%$

• What are some foods she can eat to add more calcium in the day?

Milk, yogurt, cheese, broccoli, almonds, etc

Things to AVOID

▶ Soda

- If you drink a lot of soda and sugary beverages you might not be getting enough calcium and vitamin D.
- Sugar in sodas can also damage your teeth.
- Try to replace soda with water, milk, or fruit juices with added calcium to build strong bones!

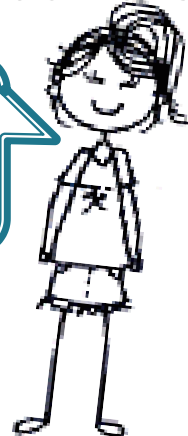


Things to AVOID



- ▶ Alcohol
 - Underage drinking can be deadly, but it also damages your bones
- ▶ Smoking
 - The toxic chemicals in cigarettes damage many of the cells in your body that help build strong bones.

To build strong bones I am alcohol and tobacco free!!



Calcium and YOU

- ▶ To have strong bones as you grow older, you must build strong bones now!
 - Bones will be their strongest at age 20, so it is important to eat enough calcium each day as a teenager.
- ▶ The choices you make today will affect your bones for life!



Discussion

- ▶ How can you prevent Osteoporosis?
 - ▶ Why is it important to eat calcium AND vitamin D?
 - ▶ What foods have you eaten today that contained calcium?
 - ▶ What foods do you like that are high in calcium and how can you add them to your diet?
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