Do you know where your calcium is?

Instructions for creating an exhibit display

Purpose:

- To illustrate the amount of calcium in the body at various stages in the life cycle
- To convey calcium recommendations at each life stage
- Demonstrate how to meet those recommendations through food

Materials needed:

- Poster board for banner and two signs
- 6-foot table; cloth for covering table
- 10 lbs. of white flour
- Clear plastic or glass jars with lids (or plastic wrap in place of lids)
- Misc. props to represent stages in the life cycle (see examples below)

  1 year old: baby blanket, diaper, bottle, rattles, pacifier
  10 year old: trading cards (example; baseball, Yu-Gi-Oh!), doll, baseball, Game Boy
  17 year old: college catalogs, cell phone, iPod, music CD's, movie tickets
  35 year old: day planner/palm pilot, family photo, collection of credit card and tax bills, parent magazines
  Woman with osteoporosis: AARP magazine, scarf, perfume, photo or diagram of woman with osteoporosis

- Food models or pictures of calcium rich foods.

Advance Preparation:

Step 1: Make a banner that reads:

DO YOU KNOW WHERE YOUR CALCIUM IS?

Step 2: Make a sign/poster that reads:

DID YOU KNOW?

Calcium is the major ingredient in bones that makes them grow and stay hard and strong.

The best place to get calcium for your bones is through diet. The milk group supplies 77% of the calcium in our food supply.

Getting enough calcium and exercise throughout life will help maintain healthy bones.

Look in the jars to see what the amount of calcium in your bones looks like at different ages. How many servings of foods in the milk group do you need each day to reach your peak bone mass or to maintain your current bone mass?

Step 3: Make another sign/poster:

WHERE'S THE CALCIUM?

(Display food models (or pictures of foods) and list the amount of calcium in one serving of each food. If using Dairy Council food models, the calcium can be found on the food label on the back.)

Step 4: Use the props to set up five stages of the lifecycle along the length of the table. Display flour in jars next to each stage to represent calcium in bones.*

1 year – ¼ cup flour
10 years – 3 ½ cups flour
17 years – 8 ½ cups flour
35 years – 9 ½ cups flour
Woman with detectable osteoporosis – 6 ½ cups flour

Step 5: Label the stations with age and the following calcium recommendations:

- ✓ **ages 1-3**… 500 mg calcium
- ✓ **ages 4-8** … 800 mg calcium
- ✓ **ages 9-18**…1,300 mg calcium
- ✓ **ages 51+** …1,200 mg calcium

*The amount of skeletal calcium was obtained through Christiansen, C. *Skeletal Osteoporosis*. Jrnl of Bone and Mineral Research 1993; 8(suppl 3): S475-S480.