Students Bone Up On Calcium

**The Situation**
Children and teens have the best opportunity to build strong bones and prevent Osteoporosis, but instead of drinking milk, they are consuming soda pop and fruit flavored drinks.

- Kids are consuming twice as much soda as milk.
- Nine out of ten teenage girls are Not meeting their dietary calcium requirements.
- Seven out of ten teenage boys are Not meeting their dietary calcium requirements.

The calcium recommendation for individuals 4-8 years old is 800 milligrams (2-3 servings) and for individuals 9-18 years old is 1300 milligrams (4 servings) per day. It is estimated that the prevalence of thin or porous bones, osteoporosis, could increase dramatically unless children start increasing their calcium intake.

The National Osteoporosis Foundation summary states that, “a national effort is needed to educate the younger generation so they can maximize their opportunities to achieve peak bone mass, and therefore reduce the risk of osteoporotic fractures later in life.”

**Our Response**
A four-part curriculum called, “Got Calcium?” was developed to educate youth about calcium. The goals of the curriculum are for youth to learn:

- Why calcium is important in the diet.
- How calcium protects your skeleton.
- How to make nutritious high calcium snacks.
- How to identify high calcium foods from reading labels.
- The relationship between weight-bearing exercise and strong bones.

The 4 lesson curriculum titles are:
- Lesson 1 – Bone-Up On Calcium
- Lesson 2 – Making and Keeping Bones Strong
- Lesson 3 – Hunt for Calcium in Meals and Snacks
- Lesson 4 – Boost Your Calcium Intake

Students completing Sticky Note Activity from Lesson II
**Program Outcomes**

The results from 1,170 Pre/Post survey indicate a significant (p<0.05) increase in knowledge.

- **Question:** Most of the calcium in the body is found in bones and teeth
  - Pre (% correct) – 89
  - Post (% correct) – 97
  - P < 0.05

- **Question:** If you don’t eat enough calcium, your bones will have small holes in them.
  - Pre (% correct) - 42
  - Post (% correct) – 52
  - P < 0.05

- **Question:** Grown ups do not have to eat calcium rich foods every day.
  - Pre (% correct) – 81
  - Post (% correct) – 86
  - P < 0.05

- **Question:** Milk has more calcium than oranges.
  - Pre (% correct) – 76
  - Post (% correct) – 87
  - P < 0.05

- **Question:** Your daily value of calcium should add up to 50%.
  - Pre (% correct) – 35
  - Post (% correct) – 78
  - P < 0.05

- **Question:** Exercise makes bones strong
  - (Pre % correct) – 93
  - Post (% correct) – 97
  - P < 0.05

Evaluation comments:

- “The best outside program we have ever had in the school!” Vice-Principal, Burley Elementary School

- “The teachers were so impressed with the curriculum they scheduled us for the next year. They used it in their Math, Science, and Spelling activities.” Nutrition Advisor, Extension Nutrition Program

- Migrant Children and the teacher at the Newcomers School were impressed with the curriculum and the students could not wait for the “dairy ladies” to come.” Nutrition Advisor, Extension Nutrition Program

**For More Information**

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