

# IMPACT



Family and Consumer Sciences, University of Idaho, Moscow, ID 83844-3188; 208-885-6545; Fax: 208-885-5751

## Osteoporosis Prevention and Treatment: Your Bones, Your Body

### *The Situation*

The National Osteoporosis Foundation defines osteoporosis, or porous bone, to be a disease characterized by low bone mass and structural deterioration of bone tissue. It can lead to bone fragility and an increased susceptibility to fractures, especially of the hip, spine and wrist, although any bone can be affected.

In the U.S. today, 10 million individuals are estimated to already have the disease and almost 34 million more are estimated to have low bone mass, placing them at increased risk for osteoporosis. Of the 10 million Americans estimated to have osteoporosis, eight million are women and 2 million are men.

In October 2004, the Surgeon General issued the first report on osteoporosis which stated that by 2020, one in two Americans over the age of 50 will be at risk for fractures from osteoporosis or low bone mass.

### *Our Response*

A four-lesson curriculum called Osteoporosis Prevention and Treatment: Your Bones, Your Body was developed for adults. It was piloted, revised and then tested on 158 subjects. The final curriculum was peer-reviewed and published by Educational Communications in October 2003.

### **Lessons:**

- Lesson 1: Incidence, Development, and Prevention of Osteoporosis
- Lesson 2: Bone Up on Calcium
- Lesson 3: The Hunt for Calcium in the Supermarket
- Lesson 4: Boost Your Calcium Intake

**Methodology:** The four lessons were taught weekly to 158 participants. Activities completed by participants included:

- pre and post tests that measured knowledge of calcium, osteoporosis, and physical activity,
- calculating current calcium intake and %Daily Value of calcium,
- setting calcium and physical activity goals,
- planning meals and snacks high in calcium using food labels,
- changing low calcium meals to high calcium meals, and
- incorporating calcium-rich recipes into their diet.

### *Program Outcomes*

1. Increase in knowledge: Results from the pre and post surveys and activities indicated that participants significantly ( $p < 0.01$ ) increased their knowledge of:
  - osteoporosis causes and risk factors,
  - bone health,
  - how to use food labels to plan meals and snacks high in calcium.

2. Increase in calcium consumption: Participants increased their calcium consumption by:
  - using recipes high in calcium,
  - purchasing foods naturally high in calcium, and
  - purchasing calcium-fortified products.
3. Changes in Physical activity: Physical activity logs indicated that the most popular way participants improved their level of physical activity was by:
  - increasing the amount of time they spent walking and/or gardening.
4. Extension Educators found these classes were useful for individuals who either did not have access to a health care setting where this information is usually dispensed or those who needed simplified information on this topic.

The project was funded by the College of Agricultural and Life Sciences at the University of Idaho.

### ***For More Information***

Martha Raidl, PhD, RD, Extension Nutrition  
Education Specialist  
800 Park Blvd, Suite 200  
Boise, ID 83712  
208-364-4056  
Fax: 208-364-4035  
Email: [mraidl@uidaho.edu](mailto:mraidl@uidaho.edu)

Rhea Lanting, MS, Extension Educator  
Twin Falls County Extension  
246 3<sup>rd</sup> Avenue  
Twin Falls, ID 83301-6251  
208-734-9590  
Fax: 208-733-9645  
Email: [rhlantin@uidaho.edu](mailto:rhlantin@uidaho.edu)

46-04mraidl-osteo.doc  
12/04

