

impact

of the College of Agriculture and Life Sciences



Healthy, Well Nourished Population Bone Builders

Issue

It is estimated that one out of every two women over 50 will develop osteoporosis. Older men have also been identified as possibly at risk. This silent disease weakens bones, eventually causing fractures, disability and loss of quality of life for millions of people, especially the elderly. It is the number two reason for women's admissions into nursing homes. More than 28 million Americans who have osteoporosis or at high risk because of low bone mass; eighty percent of those affected are women. Although osteoporosis is both treatable and preventable, studies show that awareness is quite low among the U.S. population. Simple changes in diet and exercise can improve calcium levels in the body and strengthen bones before osteoporosis occurs. With the large baby boom generation now moving into the beginning life stage susceptible to osteoporosis, education and prevention is more important than ever.

What has been done?

A collaborative program called "Bone Builders" was developed as part of the University of Arizona partnership between Cooperative Extension in the College of Agriculture and Life Sciences and the UA College of Public Health.

Funding

UA Cooperative Extension
UA College of Public Health
County Department of Public Health Services
Dairy Council of Arizona
Arizona Osteoporosis Coalition
Banner Health Arizona
Phoenix Center for Clinical Research
Arizona Department of Health Services
St. Luke's Health Initiative
Arizona Nutrition Network

Contact

Sharon Hoelscher Day, Extension Educator
University of Arizona, Maricopa County Cooperative Extension
4341 E. Broadway, Phoenix, AZ 85040-8807
Telephone: (602) 470-8086, ext. 332 FAX: (602) 470-8092
Email: shday@ag.arizona.edu

The program brings together several public and private partners to reduce risk for osteoporosis statewide among women over 25 and men over 65 by increasing their awareness of the risks of osteoporosis and ways to prevent it from developing. The program recruits and retains community peer educators who teach local, community classes, and seeks to identify high risk women in each community and encourage them to get basic x-ray or ultrasound screening for bone density. In fall 2001, new funding allowed Bone Builders to concentrate more time teaching food stamp eligible women. An updated web site, was developed. Bone Builders displays were featured at health fairs, community fairs, health spas, statewide conferences and community libraries.

Impact

Bone Builders partners screened 1143 women in 2000 with ultrasound technology on a volunteer basis. Over the 3 years of funding, more than 198 volunteers and staff were trained in eight counties. Eight county projects taught 40,000 people from July 1999 - July 2001 in 400 classes and 288 health fairs. A total of one million people were reached with education, materials, displays and media. A sample of 1513

class participants statewide rated their class as 4.5 (out of 5 point schedule with 5 excellent). They rated their knowledge 2.7 before the class and 4.3 as a result of the class, a 55 percent increase in knowledge regarding bone health.

Counties completed 4 -6 month follow-up phone surveys with class participants. Preliminary data from a statewide sample of 211 community class participants found that 48% had a family history of osteoporosis, 21% were age 44 and younger, 40% were 65 or older, 71% took calcium supplements, only 16% did some weight-bearing exercise, 38% had a scan before or at the class and 40% of those who had a bone density had below normal results. Yet 79% intended to make changes as a result of the class. When called 4-6 months later, 39% said they actually increased their calcium consumption as a result of the Bone Builders classes; even 15 people who had not planned to make any changes at the time of the class increased their calcium intake; 19% of the group started taking supplements; 36% had increased their weight-bearing exercise; 22% went on to get a bone density scan because of attending the class. More surveys and analyses are underway.