



NutriNet News

Keys to Healthy Bones

A new report from the Surgeon General has drawn a lot of attention to the topic of bone health. By 2020, as the population ages, half of Americans over age 50 will be at risk for fractures from osteoporosis and low bone mass. The report calls osteoporosis a “silent” disease, because many people don’t know they have it – for every man or woman who knows they have osteoporosis, four other men or three other women have the condition but don’t know it.

Key factors that put a person at increased risk of osteoporosis include:

- Having a bone fracture as an adult
- Being unusually thin
- Smoking
- Family history of the disease
- Heavy alcohol use
- Poor diet
- Use of steroids
- Early onset of menopause
- Severe weight loss

Calcium. The best known way to prevent osteoporosis is also the easiest: get plenty of calcium. Eating and drinking foods with calcium is best, with supplements to make up the difference if someone doesn’t consume enough from food. Three servings of dairy products and a balanced diet should provide enough calcium for most people. Other foods that boost calcium in-

take are green vegetables such as broccoli, collard greens and kale, and fortified foods such as orange juice, cereal, and soy products. People who don’t or can’t eat dairy products need to pay close attention to make sure they’re getting enough calcium in their diet and may want to take a calcium supplement.



Vitamin D. Vitamin D helps the body absorb and use dietary calcium. Adequate vitamin D is also associated with improved muscle strength in the elderly. It’s difficult to get enough vitamin D from diet alone and some experts believe the standard recommended levels are too low. Some vitamin D is produced by sun exposure during the summer months in Wisconsin, but using sunscreen negates that effect. For people who don’t eat a lot of vitamin D fortified foods or spend a lot of unprotected time in the sun, a vitamin D supplement in addition to the vitamin D provided by a multivitamin is a good idea.

Physical Activity. Weight-bearing activity is key to bone strength. Weight-bearing activity refers to any activity done in a full standing upright position, such as walking, running, free weights, walking-type exercise machines, gardening, climbing stairs, and Tai Chi. Activities like swimming and biking are not weight-bearing activities, although they are good for building strength and cardiovascular fitness. Adults should try for at least 30 minutes of physical activity each day, including some weight bearing activity, while kids should get at least 60 minutes of activity each day.

Bone health is an important issue for kids and teens because bone mass is deposited early in life. Research has shown that teens drink less milk and become more sedentary during the years they are growing fastest – a bad coincidence for future bone health.

For further reading:

Keys to Healthy Bones, *Tufts University Health & Nutrition Letter*, January 2005.

EN’s Complete Guide to Keeping Bones Strong and Healthy. *Environmental Nutrition*, September 2004.

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Wisconsin Nutrition Education Network

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Nutrition and Health Characteristics of Older Adults from Low-income Households

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Nutrition and health characteristics of older adults (ages 60+) were analyzed by Nancy Cole and Mary Kay Fox from Abt Associates, with support from USDA's Economic Research Service. They used data from the Third National Health and Nutrition Examination Survey (NHANES-III, 1988-94) for comparisons among older adults from households with incomes below 130% of poverty (lowest income), 131-185% of poverty (low income), and above 185% of poverty (higher income). Following are some of the results that are most relevant to our nutrition education campaigns.

Physical activity. Older adults in the lowest income group were less likely than older adults in the higher income group to report engaging in physical activity five or more times per week (32% vs. 48%).

Body weight. Older adults had a mean BMI of 26.7 (BMI > 25 is considered overweight). Those in the lowest income group had greater mean Body Mass Index (BMI) than the higher income group (27.3 vs. 26.5). Older women from the lowest

income group were more likely to be obese than higher income women (30% vs. 21%), but older low-income men were more likely to be *underweight* than older men from the higher income group (4% vs. 1%).

Healthy Eating Index (HEI) scores.

Older adults in the lowest income group had lower HEI scores than older adults in either of the other income groups (64.3 vs. 67.0 and 70.0). Based on HEI scores, the lowest income older adults were more likely to have "poor" diets than the other two income groups (19% vs. 13% and 9%).

Meals. 76% of older adults consumed at least 3 meals per day. Older adults in the lowest income group were less likely to consume 3 meals per day and less likely to eat breakfast than older adults in the higher income group (67% vs. 80% and 78% vs. 84%, respectively).

Energy and nutrients. Average energy intake was lower for the lowest income group than the higher income group (73% of the 1989 Recommended Energy Allowance vs. 86%). The lowest income older adults were less likely to have adequate usual intakes of vitamin C (66% met Estimated Average Requirements vs.

76%) and zinc (57% met EARs vs. 77%). Mean calcium intakes were lower for the lowest income older adults (53% of the Adequate Intake levels vs. 64%). Sodium intakes were also lower for the lowest income group (mean intakes of 2,438 mg. vs. 2,984 mg. per day).

Low red blood cell folate and serum B-12.

Low RBC folate levels were more common in the lowest income older adults than the higher income group (9% vs. 3%). Five percent of older adults had low serum B-12, but there were no overall differences for B-12 between income groups.

Bone density. Older adults in the lowest-income group were more likely than older adults in the other two income groups to have severely reduced bone density, or osteoporosis (21% vs. 14% for the other groups).

For more information on these findings and other health comparisons such as dental health and intakes of fat and saturated fat, see Cole N, Fox MK. Nutrition and health characteristics of low-income populations, volume IV, older adults. E-FAN-04-014-4. Economic Research Service, 2004. Available online: <http://www.ers.usda.gov/publications/efan04014-4/>.

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The 2004 Surgeon General's Report on Bone Health and Osteoporosis: What it Means to You and other information on this topic is available at: <http://www.surgeongeneral.gov/library/bonehealth/>
Fact sheets: <http://www.surgeongeneral.gov/library/bonehealth/factsheet.html>

UWExtension publications on calcium and osteoporosis:

- Bone up on Calcium (B3707-1)
- Preventing Osteoporosis (B3707-2)
- What is Lactose Intolerance? (B3707-3)

<http://cecommerce.uwex.edu/showcat.asp?id=19>

A good handout on weight-bearing activity: <http://ag.arizona.edu/maricopa/fcs/bb/bonebuildingactivities.PDF>



Tips for Working with Older Adults (continued from page 3)

Our thanks to WNEP Coordinators Wilma Johnson of Washburn County, Donna Peterson of Iowa County, and Judy Arneson of Portage County for their contributions.

Original article: Chaya Gordon, MPH and Sandra Maldague, MPH. 2004. Tips for Working with Older Adults in Nutrition Programs. San Francisco: American Society on Aging.

Tips for Working With Older Adults in Nutrition Programs

The American Society on Aging provided a list of tips for working with older adults in a recent GN Newsletter, a publication of the American Dietetic Association's Gerontological Nutritionists practice group. We asked some Wisconsin educators who work with older adults to comment on the list of tips and share their advice for implementing them.

Tips for Working with Older Adults in Nutrition Programs

Older adults are not a homogeneous group. A roomful of older adults may include a wide range of ages, cultures, races, religions, languages, incomes, education, physical and cognitive abilities, health conditions, and many other factors. Food is part of everyone's cultural identity. Learn as much as you can about the participants in your group.

Be aware of ageist attitudes. Society represents aging as a time of loss – loss of physical ability, loved ones, income, social status. While it is important to acknowledge loss, promote the positive side of aging.

Older adult? Senior? Elderly? Address elders as Mr./Mrs./Miss/Ms. unless they invite you to call them by their first name. "Elder" and "older adult" seem neutral and respectful but may not be received the same way by all cultures. An underlying respect for the people you work with will speak volumes.

Be inclusive and non-judgemental. Use eye contact to involve everyone. Try to acknowledge and validate everyone's contributions to the discussion while keeping the conversation focused on the day's topic.

Be aware of communication difficulties. Low vision, hearing difficulties, and low literacy often contribute to communication difficulties. Make sure everyone in the group can see and hear you before you start the session. For print materials, use white paper, a large, plain font and a clear, simple layout. Large size visual aids with pictures and minimal text may be helpful for everyone including those with low literacy.

Be aware of fears. Many older adults are afraid of becoming dependant. Counter this by supporting ways they can remain active and involved in their community.

Encourage social interaction. Encourage peer education, sharing, and interaction among participants in and out of class.

Learn from elders – they're the experts! Acknowledge that elders have seen much change and conflict in nutrition recommendations over the years. Keep your messages simple and use examples that are relevant to your specific audience.

Words from the Wise

Is there anything you'd add to these tips?

WJ: If possible, eat with them before or after your presentation. This allows them to ask questions or visit one-on-one about their particular experience without having to speak up during a formal presentation. Allow adequate time.

Know your audience. I have yet to run across two senior centers where I can do the same lesson in the same way without adapting it for the particular culture of that center. Seniors like games but be prepared for some to not be cognitively able to do some things. Have a prize for everyone.

DP: When you take all of these tips into account, you'll gain their respect, but you also need to add *time*. Sit down and eat with them, become part of their activity. Once you have proved you are trustworthy and you respect them, they will respect you and be more open to listening to you and participating in your activities.

JA: Construct your evaluations so there is more circling answers and less writing for participants to do. Read evaluations to those who can't see or don't read well.

Do you have any examples of how you've implemented these tips?

WJ: I make handouts with a larger font and everyone appreciates it, even those without low vision.

DP: I am very aware of the communication barriers at the senior sites I go to. I write out my main points for the day in large print and choose low literacy materials for handouts. I try to speak loudly and clearly and circulate around the room when presenting.

JA: At large sites, we use a microphone and at smaller sites we try to sit with our

audience. We keep lessons short (15 minutes) and come early to visit so people get to know us.

How is working with older adults different from working with families?

WJ: Bringing in their experiences and their history can be an important part of being successful with this age group. Recently when we were talking about the holidays, they told me about food during the depression, rationing during WWII and how that affected what they ate. When we did a 5 A Day lesson we talked about fruits and vegetables grown in our local area, both past and present. That brought out some lively discussion and still allowed me to talk about 5 A Day. When we talk about calcium, I ask who took cod liver oil when they were younger and that is something they have not forgotten! They may never have known why they needed it but it lets me talk about why both calcium and vitamin D are important.

Seniors don't always like to talk about fiber and its effects around mealtime; it's important to be sensitive to that.

DP: Older adults have had a lot more years of preparing food and eating, and can be more set in their ways.

JA: Seniors like lessons in the format of TV game shows (Jeopardy, Price is Right, Tic-tac-toe). They also keep up with the news and educators need to remember not to talk down to them.

Any tips for inspiring older adults to make nutrition and physical activity changes?

JA: Seniors are less likely to move beyond pre-contemplation unless an age adjusted suggestion is made.

DP: A lot of older adults have a dietary restriction, and that makes them more willing to read labels and pay attention to portion sizes. Repeating why it's important to stay active is always a good reminder.

WJ: Older adults want something easy, just like the rest of us! They like check-off sheets, and lists with simple, specific directions. Anything too simple is insulting, though. They want to know how changes will help them with aches, pains and memory and being able to continue to live as independently as possible.

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Our Mission

The Wisconsin Nutrition Education Network facilitates collaborative planning of nutrition education programs at the state and local levels. We promote healthful and enjoyable eating so that Wisconsin's low income individuals and families receive consistent, positive, relevant, accurate, and effective nutrition messages.

Nutri-Net News is published quarterly. It is available on the web or by mail.

Update: Stepping Up to a Healthy Lifestyle 2005

The *Stepping Up to a Healthy Lifestyle* 2005 campaign is about to begin. During September, 52 teams with over 200 partners registered to conduct the 2005 campaign.

In October, we conducted our first-ever Wisline Web training with 42 county teams participating. Your evaluations of the Wisline Web training were positive. The quick turnaround results showed that 96% of the sites reported the training to be very or somewhat helpful; 89% thought the walk through the new website was very or somewhat helpful; 93% found the explanation of the evaluation activities very or somewhat helpful and 85% said "Wisline WEB is wonderful, let's do it again."

The Wisconsin Nutrition Education Network staff has worked diligently to get all the lessons on our website. Lessons for youth age 8-11 and teens age 12-17 include parent involvement features. Most lessons include an interactive homework assignment that teachers can use to reinforce the message of your lesson, integrate it with classroom work, and involve parents. Lessons for younger kids also include a reference, where applicable, to the *Healthy Habits for Healthy Kids* booklets distributed by DPI and WIC so parents and kids can take the lesson a step further as a family.

This year, the lesson, evaluation, tally and hand-out are all in one file. Lessons can be taught in 15-20 minutes, or a nutrition and physical activity lesson can be combined for a 30-45 minute session. Lessons are flexible to meet the needs of your audience. Lessons used in a series will be most effective. Remember nutrition messages and physical activity are most effective when taught together.

Spanish translations of the lesson hand-outs, evaluations, tipsheet and display will be available on the website for you to download and print on your own.

There were many requests for a beverage display. It has arrived—"What's in Your Drink? It's on the Label." There is also a choice of activities to go along with the display so you can choose the one that suits your audience and setting.

Our thanks to everyone who picked up their materials in Madison, or who helped get materials to others around the state. The money we save on UPS charges can be used for other, better things!

A new research article demonstrates the need for health education such as our *Stepping Up to a Healthy Lifestyle* campaign. Daily activity reports from over 7,000 American adults in 1992-94 were scored for duration and intensity. Leisure

time physical activity contributed an average of only 5% of total energy expenditure. Aside from sleeping, the largest contributors to energy expenditure were driving car, office work, watching TV/movies, and taking care of children. Vigorous activities like swimming and exercise/aerobics made up less than 3% of the total daily energy. Individuals were more active in the summer when leisure time physical activities accounted for an average of 6.8% of total daily energy utilization vs. 3.9% in the winter. Women had slightly lower activity levels than men and African Americans had lower total expenditures than Hispanics or non-Hispanic whites. (Source: Dong L, Block G, Mandel S. *International Journal of Behavioral Nutrition and Physical Activity*. www.ijbnpa.org/content/1/1/4)

As you are looking for more approaches to promoting physical activity, you might want to consult <http://www.thecommunityguide.org/pa/default.htm>. This website gives a strong endorsement to community-wide campaigns.

The *Stepping Up to a Healthy Lifestyle* campaign has identified and developed physical activity and nutrition lessons to help you provide behavior-oriented, educational experiences to low-income audiences. Please share with us what works and what does not work. Email your comments to Betsy Kelley or Mary Jane Getlinger and with your permission, we'll post them to the idea sharing section of the website.



Network Update