



Nutrition for Family Living

Susan Nitzke, Nutrition Specialist; susan.nitzke@ces.uwex.edu
Sherry Tanumihardjo, Nutrition Specialist; sherry.tan@ces.uwex.edu
Amy Rettammel, Outreach Specialist; arettamm@facstaff.wisc.edu
Betsy Kelley, Outreach Specialist; kelley@nutrisci.wisc.edu

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New Recommendations to Prevent High Blood Pressure Advise Lifestyle Approaches

The National High Blood Pressure Education Program (NHBPEP) has updated its recommendations for preventing hypertension (high blood pressure). The new recommendations have two main approaches: a population-based approach, to reduce the average blood pressure in the general population, and an intensive targeted strategy, to reduce blood pressure even more in people who are at high risk of developing hypertension.

High blood pressure (systolic blood pressure at or above 140 mmHg or diastolic blood pressure at or above 90 mmHg) is associated with an increased risk of death and disability from heart disease, stroke, congestive heart failure, and end-stage renal disease. Fifty million adults in the United States — including more than half of adults over the age of 60 — have high blood pressure, according to the National Center for Health Statistics. Furthermore, data from the National Heart, Lung and Blood Institute's (NHLBI) landmark Framingham Heart Study suggest that middle-aged and elderly individuals face a 90 percent risk of developing hypertension during their remaining years.

Published in the October 16 issue of *The Journal of the American Medical Association*, the report points out that proven behavioral changes can lower one's blood pressure and reduce the risk of a cardiovascular event. In a coordinated effort between the population-based approach and the intensive-targeted approach, the report recommends the following lifestyle interventions for reducing the risk of hypertension:

Get regular, aerobic physical activity. The report cites a study that found that people with normal blood pressure levels who increased their regular physical activity lowered their systolic blood pressure by more than 4 mmHg.

Maintain normal body weight for adults (BMI 18.5-24.9 kg/m²). In another study, overweight participants with normal blood pressure levels significantly lowered their systolic blood pressure by losing weight (fewer than 8 lbs); in addition, the percentage of participants in this group who had high blood pressure seven years later was less than half of the percentage of the control group which remained overweight.

Consume a diet rich in fruits and vegetables, and in low-fat dairy products, and limit dietary fat and saturated fat. The clinical trial known as Dietary Approaches to Stop Hypertension, or DASH, has demonstrated the critical role of nutrition in controlling blood pressure. Based on the



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results of DASH, the NHBPEP now recommends an eating plan that is rich in fruits, vegetables, and low-fat dairy products and that has limited saturated and total fat.

Limit daily dietary sodium intake to less than 2,400 mg of sodium (about 1 teaspoon of salt) per day. In one study, older patients with hypertension significantly lowered their systolic blood pressure and decreased their need for medications by moderately reducing the amount of sodium they consumed. The advisory highlights that although it is important to limit the amount of salt added during cooking and at the table, three-fourths of the average person's total intake of salt and sodium comes from sodium added during processing and manufacturing. Therefore, NHBPEP urges food manufacturers to lower the amount of sodium in the food supply — and to offer lower-sodium products at equitable prices.

Get enough dietary potassium. Consuming at least 3,500 mg of dietary potassium per day is especially important for people with high sodium intakes. A diet rich in fruits and vegetables that follows the Food Guide Pyramid should provide adequate dietary potassium.

Limit alcohol consumption to no more than 1 ounce of ethanol (e.g., 24 oz beer, 10 oz wine, or 2 oz 100-proof whiskey) per day for most men and to no more than 0.5 ounce per day for women.

This report cautions that there is limited proof that some popular approaches are effective. Fish oil (omega-3 polyunsaturated fatty acids) and calcium supplements lower blood pressure only slightly in individuals with hypertension. In addition, the ability of herbal and botanical supplements to safely lower blood pressure is unproven, and these products — which do not undergo the same stringent regulatory approval process as drugs — can interact with medications.

The report advises that efforts to prevent blood pressure from rising in children are also important. These lifestyle factors are also essential for seniors and others who are more likely to develop high blood pressure, such as those with high-normal blood pressure or a family history of hypertension; those who are African American, overweight or obese, or inactive; and those who consume more than the recommended amounts of dietary sodium or alcohol, or insufficient amounts of potassium.

What does this mean for Extension educators? While few Extension educators will do programs with the specific topic of reducing blood pressure, many of our audience members are concerned about this prevalent problem. This new expert report contains recommendations that are consistent with our current Extension and WNEP nutrition resources.

To learn more, visit the NHLBI Web site at www.nhlbi.nih.gov. Click on Special Web Pages and Interactive Applications, then High Blood Pressure for interactive quizzes and tools, such as a body mass index calculator; tips, recipes and real-life examples to help control blood pressure; and other educational materials for consumers and clinicians.

NHLBI is part of the National Institutes of Health (NIH) in Bethesda, Maryland. NIH is an agency of the U.S. Department of Health and Human Services.

Whelton, PK et al. Primary Prevention of Hypertension: Clinical and public health advisory from the National High Blood Pressure Education Program. *JAMA*. 2002; 288:1882-1888.



Reaffirming The Value of Milk for Children

A commentary article from the October 2002 issue of *Pediatrics* states: "A rational look at the risks and benefits of consuming milk and milk products suggests that the current guidelines to insure adequate calcium intake are grounded in strong science. Calcium intake is already insufficient in the United States, where osteoporosis is a major and rapidly growing public health problem. Although it does not seem reasonable to insist that children who do not want to drink milk be required to take it anyway, milk should be available to all who choose it and efforts to promote consumption among school-aged children should continue. The argument that milk consumption in childhood "causes" type 1 diabetes is equivocal at best. The claim that milk causes children to suffer discomfort so severe that it disrupts their ability to learn is exaggerated... Although it is possible to consume adequate dietary calcium without dairy products, to do so requires acceptance of careful planning and monitoring by parents and caregivers and consumption of large amounts of foods that are typically not a regular part of the diets of most children in the United States. Such a major shift in food consumption patterns seems unlikely."

This full article is at <http://www.pediatrics.org/current.shtml#COMMENTARY> or Goldberg J, Folta S. Milk: Can a "Good" Food Be So Bad? *Pediatrics* 2002;110(4):826-832.

For more information, UWEX has a series of easy-to-read fact sheets on *Getting Enough Calcium* (B3707-1,2,3) and you will find great materials at the National Institutes of Health's *Milk Matters* campaign website: http://www.nichd.nih.gov/milk/milk_facts.htm.



Gardening Influences Kids' Views on Veggies

Researchers at Texas A&M University found that when 4- and 5-year-olds spent around 30 minutes per week planting and tending to a garden, they became less likely to refuse vegetables when offered them. The children also increased their preference for green beans over other vegetables after spending 8 weeks in a garden that included green beans. The findings were presented at the 85th Annual Meeting of the American Dietetic Association.

Young children often think that food comes from a grocery store. Beyond seeing where vegetables come from, working in a garden lets kids become attached to the foods, which may make the vegetables they grew themselves even more appealing than those they buy. The hope is that they would be more likely to consume food they grow.

During the study, the researchers brought 22 children, age 4 and 5 years, to gardening plots for 30 minutes per week for 8 weeks. The children planted green beans, bell peppers, radishes and cherry tomatoes. After planting the vegetables, the children watered the gardens each week, weeded the land and got involved in composting.

The children tasted the four types they later planted plus two others that were not included in the gardens. The researcher noted that after spending 8 weeks gardening, the children became less likely to refuse the four types of vegetables they had grown, and also ranked green beans higher in order of preference than they had at the beginning of the study.

Bringing young children to gardens may be an easy way to get them to like vegetables, and they may also become more willing to try unfamiliar types. Involving parents in the process--perhaps by starting a garden at home--may help kids like vegetables even more. Furthermore, the gardens used in the current study were quite small, so even schools in an urban environment can use the activity to foster their young students' appreciation for vegetables.

Press release courtesy of Reuters and the Food and Nutrition Information Center of the National Agricultural Library.

The Healthy School Meals Resource System (HSMRS) provides information to persons working in USDA's Child Nutrition Programs. It is developed by the [National Agricultural Library's](#) Food and Nutrition Information Center and the [University of Maryland](#) Department of [Nutrition and Food Science](#) in collaboration with [USDA's](#) Food and Nutrition Service.

Farm to School and School Gardening section.

<http://schoolmeals.nal.usda.gov/Resource/farmentoschool.htm>



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NutriNet News is now online

The October 2002 issue of *NutriNet News*, a publication of the Wisconsin Nutrition Education Network, is available on the web at: www.nutrisci.wisc.edu/nutrinet/. The Network's webpage has been revamped to kick off the 2003 *Walk, Dance, Play... Be Active Every Day!* Campaign.

Featured in the current issue:

Developing Physical Activity Programs and Events

New Dietary Reference Intakes Include Physical Activity Recommendations

Dane County Adults Make Progress on Eating 5 A Day

Hunger in Wisconsin: Observing World Food Day

Network Update: Network Prepares for Spring 2003 Campaign