



Nutrition for Family Living

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November, 2004 Topics

WINPAW and Other Healthy Weight Coalition Activities in WI

Since you asked...

The Original Functional Food in the United States: What is new in Cranberry Research?

High energy density and large portion sizes both contribute to overeating

Osteoporosis prevention gets a boost from the U.S. Surgeon General

WINPAW and Other Healthy Weight Coalition Activities in WI

The WI Department of Health and Family Services has a capacity-building grant from the Centers for Disease Control and Prevention (CDC) to support WINPAW and related activities. *WINPAW* stands for “*WI Nutrition and Physical Activity Workgroup*.” Its mission, “to improve the health of all WI residents by decreasing overweight and obesity rates,” will be accomplished through improved nutrition and increased physical activity. The current grant is effective from July 1, 2003 – June 30, 2008. The goals of the grant are:

- Develop a statewide nutrition and physical activity infrastructure
- Collaborate and coordinate with public and partners in the development of the state plan
- Develop a nutrition and physical activity state plan
- Define and monitor the burden of obesity
- Implement and evaluate a nutrition and physical activity intervention
- Develop an evaluation plan for the state plan

WINPAW is in its final stages of assembling its draft nutrition and physical activity state plan, with input from representatives of UW-Extension, UW-Madison, state and local public health departments, WI Department of Public Instruction, local school districts and school boards, Governor Doyle’s office, hospitals and clinics, insurance companies, Health Maintenance Organizations, Mount Mary College, WI Medical Society, WAHPERD (WI Association for Health, Physical Education, Recreation and Dance), WI Dietetic Association, WI Council on Children and Families, WI Department of Transportation, WI State Assembly and Senate, Hunger Task Force of Milwaukee, Wisconsin Walks, Bicycle Federation of Wisconsin, 1000 Friends of Wisconsin, American Cancer Society, American Heart Association, Children’s Health Alliance of Wisconsin, Ellyn Satter Associates, WI Restaurant Association, WI Soft Drink Association, WI Food Service Association, and WI Milk Marketing Board.

The six WINPAW subcommittees that developed major sections of the draft state plan are:

- Environmental Change and Strategies
- School Based Strategies (with Mary Jane Getlinger representing Extension/FL)
- Families and Communities (with Amy Rettammel representing Extension/FL)
- Business and Industry
- Healthcare
- Surveillance (with Susan Nitzke representing Extension/FL)

Many Extension educators are part of the 30 or more local coalitions that are promoting nutrition and physical activity with support from DHFS via WINPAW and this CDC grant. WINPAW has



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provided or plans to provide the following resources to support coalition work as part of the grant requirements for capacity building:

- a WINPAW listserv – this is for connecting local coalitions with each other and it is also open to any professionals working to address obesity in Wisconsin. UW-Extension is hosting the listserv. To subscribe, visit <http://lists.uwex.edu/mailman/listinfo/winpaw> and to send a message, use winpaw@lists.uwex.edu. For Family Living, this listserv will be most appropriate for FL Agents and WNEP Coordinators who are working on obesity issues in their communities.
- a survey of coalitions to collect descriptive information as well as coalition activities – in development
- a website to connect coalitions with resources, data, best practices, and information about each other – in development
- help with coalition building/sustaining, either through connecting with resources or workshops or both
- development of a *5 A Day Garden Toolkit* to help create gardens in schools, communities, and daycare settings

The *Eating Well and Being Active* team plan includes resources for planning and reporting your educational programs and coalition work in this topic area. Key resources include:

- “Weight and Health” – an issues and demographics fact sheet that is accompanied by a PowerPoint presentation. <http://www.uwex.edu/ces/flp/demographics/weight.cfm>
- “Families on the Move” – a press release series from the Eating Well and Being Active team. <http://www.uwex.edu/ces/flp/demographics/weight.cfm>
- “Children and Weight – what communities can do” – a coalition-building kit from California Cooperative Extension. Available to borrow from media collection; local WIC colleagues may also have a copy. Also available to purchase (\$100) at <http://anrcatalog.ucdavis.edu/merchant.ihml?id=349&step=2>
- The Center for Weight and Health at University of California - Berkeley <http://nature.berkeley.edu/cwh/index.html>
- “Pediatric Overweight Practice Guidelines – Implications for Extension Educators” by Sharon Robinson. Appears in the June 2004 issue of Journal of Extension <http://www.joe.org/joe/2004june/tt4.shtml>

The *WI Action for Healthy Kids* coalition is working with the WINPAW school based strategies subcommittee to sponsor a statewide summit in Madison on December 1, 2004 with the theme “Turning Ideas into Action: Nutrition and Fitness.” In addition, a new report from the national Action for Healthy Kids coalition will be useful to schools and other organizations that are looking for evidence on the value of promoting better nutrition and physical activity. For more information, go to <http://www.actionforhealthykids.org> and click on the Wisconsin state team’s link for a summit brochure or click on the special reports link for the *Learning Connection: The Value of Improving Nutrition and Physical Activity in Our Schools* report.

As part of the Governor's *KidsFirst* initiative, Governor Jim Doyle and First Lady Jessica Doyle are promoting "Healthy Habits for Healthy Kids," an educational nutrition and physical activity guide for children and their parents. Blue Cross Blue Shield of Wisconsin donated about 510,000 copies of the educational guide for distribution statewide through schools, WIC clinics and doctors’ offices. The educational guide includes sections entitled: Get your entire family involved; Set healthy realistic goals; Make the most of family mealtime; Make sure your child eats a balanced, healthy diet; and Get active. The guide is printed in both English and Spanish and is also available free online at <http://www.bluecrosswisconsin.com/body.cfm?id=303>.



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Since you asked...

Q: “What do you want to learn about nutrition?” Almost everywhere we ask this question in our county, people say they want to learn about eating low-carb. How can we handle this? We don’t want to turn potential learners away, but we want to teach research-based information.

A: There are ways to build a conversational bridge between “low-carb” and topics that have better research behind them, so that learners feel like their interest is being satisfied, and you feel like you’re sharing some needed information.

Some aspects of popular low-carb diets can be helpful for anyone who wants to eat more healthfully. For example, most low-carb diets recommend leafy green vegetables and other deeply and brightly colored vegetables, so people should make sure they are including plenty of those foods. Some of the diets promote whole grains, which are very important in reducing the risk of coronary heart disease. The 2005 Dietary Guidelines Advisory Committee report recommends 3 servings of whole grains per day (to *replace*, not be in addition to, refined grains).

Approaching the low-carb topic this way allows you to branch off to a positive, action-oriented discussion with a sound research base, such as:

- How to identify whole grains
- Tips for selecting, preparing, or storing a variety of different vegetables
- Reading labels for calories. This is important because total calories, rather than calories from any nutrient alone, contribute to weight gain
- Learning to identify and choose foods with less added sugars
- Serving sizes from the Pyramid food groups (addresses misconceptions about how many carbohydrates are actually recommended)
- Planning meals that include nuts, legumes, and other choices from the meat group that are lower in fat or saturated fat
- Sources of calcium and vitamin D for bone health

Earlier this year we asked you for examples of challenging Pyramid questions that you receive from learners. The number one theme of these questions was that the Pyramid was too high in carbohydrates. We also asked you for responses to this type of question that have worked for you. Those are listed starting at the bottom of page 4 in the February 2004 Nutrition for Family Living <http://www.uwex.edu/ces/wnep/specialist/nfl/mmpdfs/0402.pdf#page=4>.

The need for carbohydrates is part of basic human physiology. The 2005 Dietary Guidelines advisory committee report states: “Carbohydrates are required in order to provide the brain with an adequate supply of glucose. Glucose is the only energy source for red blood cells and the preferred energy source for the brain, central nervous system, placenta, and fetus. If glucose is not provided in the diet and the body's storage form of glucose is depleted, the body will break down protein in muscles to maintain glucose blood levels and supply glucose to the brain.”

Bottom line: emphasize the benefits of diets rich in whole grains, vegetables, fruits, and low-fat choices from the Milk and Meat groups. These benefits include reduced risk of coronary heart disease, stroke, type 2 diabetes, osteoporosis, and certain cancers, as well as possible help with weight control.



The Original Functional Food in the United States: What is new in Cranberry Research?

An update by Sherry Tanumihardjo

In celebration of cranberry month, on October 20-21, 2004, the Cranberry Institute and Wisconsin Cranberry Board, Inc., convened a meeting of cranberry researchers, educators and company representatives from throughout the U.S. and Canada in Lake Geneva, WI. Both published and unpublished research was shared along with current marketing strategies and promotional activities. Intervention, mechanistic and epidemiologic studies are still needed in order to validate diet and health relationships. While there is not an approved health claim, the following statement has been used by cranberry juice manufacturers, "Research suggests that consumption of a 27% cranberry juice can maintain a healthy urinary tract."



Is there adequate research to substantiate the claim? Two mechanisms have been proposed to explain how drinking cranberry juice might prevent urinary tract infection (UTI): 1) cranberry juice components may help the body eliminate UTI bacteria by reducing their ability to cling to the walls of the urinary tract and 2) cranberry prevents the growth of the most potent bacteria in the body. Compared to other fruit juices, cranberry is the only one that works to prevent bacterial adhesion. Many of these studies use an *ex vivo* model, meaning the tests have been done outside of the body by feeding cranberry juice and collecting urine to use in laboratory tests. Therefore, the components of the juice have been processed by the body as opposed to an *in vitro* model where the cranberry components are used directly in the lab tests without being processed by the body.

Comparing current results of various cranberry studies is difficult because the cranberry products used are not standardized. The National Center for Complementary and Alternative Medicine (NCCAM), National Institutes of Health has funded 9 new studies on cranberry health benefits, particularly for UTI, using the same type of product in all 9 studies.

Is cranberry juice good for a healthy heart? Cranberry juice inhibits low density lipoprotein oxidation (a more harmful form of the "bad" cholesterol). One small study showed that total blood cholesterol decreased with low-calorie cranberry juice consumption. Another study in individuals with high blood cholesterol found an increase in high density lipoprotein (HDL or "good" cholesterol) with no difference in total cholesterol, and that study used sweetened cranberry juice.

Can cranberries prevent cancer? Other preliminary results were discussed concerning cranberry components and cancer prevention. Cranberry compounds inhibit promoters of cancers and tumor growth in the laboratory, but it is too early to know the practical significance of those findings.

How much do you have to eat? The clinical research seems to support a beneficial effect if 8-10 ounces of cranberry juice, 1 ½ ounces of sweetened dried cranberries or ½ cup of sauce is consumed. Frozen and sweetened dried cranberries have similar amounts of antioxidant potential per serving, while sauce and juice have less. Dried cranberries have higher antioxidants than dried plums, apricots and raisins. Of the top twenty consumed fruits, cranberry is by far the



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highest in antioxidant potential. One serving of cranberries provides more antioxidants than all the other fruits combined!

Where else will we be seeing cranberries? One of the newest applications for cranberry products is dental floss or mouthwash. Recent research shows that cranberry may have some utility in the prevention of the buildup of the film that covers teeth and promotes diseases of the gums and teeth. Products are also being formulated to include cranberries in personal care and cosmetic products, animal feed, dietary supplements and other functional foods. Cranberry oil has beneficial lipid components (vitamin E and a unique ratio of omega-3 and omega-6 fatty acids), each of which have their own nutritional benefits. Because Wisconsin is the leading producer of cranberries in the United States, the alternative uses of cranberry could be an economic boost to the state.

“Cranberry as a functional food has a long past and a great future!” Marge Leahy, PhD, Ocean Spray.

High energy density and large portion sizes both contribute to overeating

Barbara Rolls and her colleagues at the Laboratory for the Study of Human Ingestive Behavior at The Pennsylvania State University have published several studies showing that packing a lot of calories into a small portion and serving large portions of food can cause adults and older children to eat more than they would otherwise. Two of their most recent studies in this area are summarized below.

A group of 39 women was served three meals a day, once a week for 6 weeks. The lunch had a high-energy-dense and a low-energy-dense version and each was served in medium, larger, and still larger portions. The women ate 56% more calories when they were given the largest portion of the high-energy-dense entrée than when served the smallest portion of the entrée that was lower in energy density (more volume for the same amount of calories). Furthermore, eating more calories at lunch did not result in lower calorie intake at dinner and there were no consistent differences in ratings of hunger/fullness. Thus, eating foods with high energy density (typically foods with lots of fat and/or sugar packed into a small amount or volume) and being served large portion sizes BOTH contribute to overconsumption. Source: Kral TV, Roe LS, Rolls BJ. *Am J Clin Nutr.* 2004;79:962-8.

In another study by Dr. Rolls and others, consuming a large green salad at the start of a meal enhanced satiety and reduced energy/calorie intake from the rest of the meal (*J Am Diet Assoc.* 2004;1570-1576). Compared with having no first course, 42 women who ate large, low-energy-dense salads (salads with low fat dressing and little or no fatty components like cheese) reduced their overall intake of a pasta lunch by 17%. On the other hand, when the same subjects ate a small salad that was high in calories, the calories in their total lunch increased by 8%.

Implications for Extension educators: To maximize feelings of fullness with fewer calories, it generally helps to eat bulky foods (foods that are high in fiber and water such as a leafy green salad or a broth-based vegetable soup). Conversely, foods that have the same amount of calories in a smaller volume (foods that are high in fat and/or sugar and low in water and fiber such as candy, cookies, or a creamy pasta salad) do not tend to be as “filling” on a calorie-per-calorie basis.

Caveat: an article from last month’s *Nutrition for Family Living* has an important factor to consider in deciding whether a salad that is very low in fat is always the best choice. Remember that a small amount of fat in some part of that meal (not necessarily the salad course) will



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increase your body's ability to absorb the salad's healthful carotenoids
(<http://www.uwex.edu/ces/wnep/specialist/nfl/mmpdfs/0410.pdf>).

Osteoporosis prevention gets a boost from the U.S. Surgeon General

By 2020, half of all American citizens older than 50 will be at risk for fractures from osteoporosis and low bone mass if no immediate action is taken by individuals at risk, doctors, health systems, and policymakers. The U.S. Surgeon General's new report, *Bone Health and Osteoporosis: A Report of the Surgeon General*, says that 10 million Americans over the age of 50 have osteoporosis, the most common bone disease, while another 34 million are at risk for developing osteoporosis. And each year, roughly 1.5 million people suffer a bone fracture related to osteoporosis.

The Surgeon General's recommendations include:

- Getting the recommended amounts of calcium and vitamin D. High levels of calcium can be found in milk, leafy green vegetables, soybeans, yogurt and cheese. Vitamin D is produced in the skin by exposure to the sun and is found in fortified milk and other foods. For individuals who are not getting enough calcium and vitamin D in the diet, supplements may be helpful. The average adult under 50 needs about 1000mg of calcium per day and 200 International Units (IU) of Vitamin D (one cup of vitamin D fortified milk provides 302 mg of calcium and 50 IU of Vitamin D).
- Maintaining a healthy weight and being physically active at least 30 minutes a day for adults and 60 minutes a day for children, including weight-bearing activities to improve strength and balance.
- Taking steps to minimize the risk of falls by removing items that might cause tripping, improving lighting, and encouraging regular exercise and vision tests to improve balance and coordination.

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/>.