



Nutrition for Family Living

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Another reason to eat your vegetables!

By Rebecca Surles and Sherry Tanumihardjo

Your mother always told you to eat your vegetables because they are good for you. And then there is the old saying that carrots are good for your eyes. Does research back up these claims?

Background: Nutritional epidemiologic studies examine how diet influences the development of a disease by focusing on how a particular nutrient, food, or group of foods may play a role in disease progression. Cataracts are very common in older people and it has been estimated that by age 80, more than half of all Americans either have a cataract or have had cataract surgery. A cataract is the clouding of the lens in the eye, affecting vision. It is thought that cataracts develop more rapidly when a person is exposed to prolonged oxidative stress (e.g., sunlight or smoking). Cataracts remain the leading cause of visual disability in the United States and about one-half of the 30 to 50 million cases of blindness throughout the world. Unless cataracts are treated, they progress from causing cloudy vision to blindness.

Epidemiological evidence suggests that a high consumption of fruits and vegetables will reduce risk of cataracts. Fruits and vegetables may prevent the onset of cataracts by their unique combination of antioxidants, micronutrients and other phytochemicals with potential health benefits. Green leafy vegetables are a good source of the carotenoids lutein and zeaxanthin, known antioxidants. These compounds are found in the macular region at the back of the eye and the lens in the front of the eye. Thus, there is good reason to believe that by consuming the recommended amounts of fruits and vegetables, the onset of eye disease may be prevented. Because lutein and zeaxanthin are concentrated in the eye, there is good biological reason to believe individuals who consume a diet high in fruit and vegetables have less risk of developing cataracts.

New Research Findings: Because we eat whole foods with a variety of nutrients, rather than single nutrients, an additive effect may occur in reducing the risk of cataracts from total fruit and vegetable intake. A recent study assessed the association of fruit and vegetable intake in 35,000 female health professionals and the development of cataracts over a 10-year period. Women were grouped into five categories according to fruit and vegetable intake with the highest averaging around 4 fruits and 7 vegetables per day and the lowest intake averaging less than 1 fruit and 1½ vegetables per day. Researchers concluded that the highest intake group, compared with the other 4 groups, had a 10-15% reduction in risk for cataracts. The authors concluded that consuming more than 3.4 servings (about 2 cups) of fruits and vegetables per day reduced the risk





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of cataracts. While this is a modest risk reduction, it adds to the health benefits of increased consumption of fruits and vegetables. Furthermore, because there is a strong biological basis for reduced risk of cataracts from high fruit and vegetable intake, the current recommendation to increase intake is still highly advisable.

Implications for Extension Educators: The 2005 USDA Dietary Guidelines for Americans recommend the consumption of 2 cups of fruit and 2½ cups of vegetables each day for a 2000 calorie diet. Particular attention to selecting a variety of vegetables from the different subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) several times a week is also suggested. Variety ensures that you will receive different disease fighting compounds from fruits and vegetables. Most Americans are not reaching these specific goals. As educators we can continue to encourage people to consume fruit and vegetables in line with these recommendations.

References:

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Review of “Super Size Me” – the educationally enhanced DVD

By Gayle Coleman and Amy Rettammel

The idea of capitalizing on popular media to teach nutrition seems like a great idea. Unfortunately the recently released, educationally enhanced “Super Size Me” DVD does not live up to our expectations. The developers of this DVD and the corresponding lessons missed teachable moments and gave limited attention to some key obesity prevention concepts.

There are several reasons why “Super Size Me” is not suitable for use in WNEP. The majority of the 24 lesson plans are out of scope for WNEP programming. Film clips used in some of the lesson plans tend to simplify the complex nature of the obesity problem in the United States. A “good food/bad food” approach appears in some of the film clips and lesson plans. Some specific brand names are identified as unhealthy.

Lessons 1-12 are designed for grades 6-8 and lessons 13-24 are designed for grades 9-12. The two sets of lessons cover the same content, just at different grade levels. Of the 24 lessons, 16 do not relate to WNEP goals. Examples of lessons that cover information that is not directly related to WNEP work include lesson 8, “Ads are kid-sized too?” which goes into understanding advertising, and lesson 24 “The first four letters of liver are live” which teaches about the liver and its function.

The basic premise of the DVD is that fast foods are responsible for the super-sizing of people. Although a steady diet of fast foods can contribute to weight gain, the obesity problem in America is multifaceted. Sedentary lifestyles, frequently eating for emotional or other reasons unrelated to hunger, and an environment that encourages the consumption of high-fat and sugary foods are other factors that contribute to obesity in America. The film communicates that Morgan, the filmmaker and star of the film, limited his physical activity to the level of an average American. However, the DVD and curriculum emphasize his exclusive intake of McDonald’s food far more than they discuss the contribution that his limited physical activity made to his weight gain. Some parts of the DVD and lessons show, but do not discuss, disordered eating behavior. For example, in one scene Morgan forces himself to finish a large (super-sized) meal despite the fact that he is obviously becoming uncomfortable and even ill from force feeding himself. This scene should not be shown in a classroom of teens without identifying the behavior as disordered eating; the DVD and curriculum do not address this clip directly. Another concern in the DVD is the reference to foods as nutritious or not nutritious. For example, in one lesson the students make lists of nutritious and not nutritious foods they saw in the video clip. This “good food/bad food” approach is too simplistic. There are good and bad overall eating patterns, but all foods can fit within these eating patterns. The good food/bad food approach also extends to specific name brands of food. As employees of a government agency, it is hardly ever appropriate for us to identify name brands of food as good or bad. For example, we can compare labels on a variety of name brand products to find products that are lower in fat or identify whether a food is whole grain. However, it is not appropriate for us to tell people not to eat brand X because it is high in fat.

Some lessons have limited information and lack support materials for educators/school teachers, which could be a problem with complex topics. For example, in one lesson students are asked to investigate eating disorders, define them and describe why they are harmful. This topic can be a delicate one to navigate, and educators/school teachers who do this lesson should have the knowledge and skills to handle the discussion.

The idea of utilizing popular media for educational purposes is a good one. Unfortunately, “Super Size Me” doesn’t measure up.



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Healthiest Wisconsin 2010: An implementation plan to improve the health of the public - implementation plan summary

By Amy Rettammel

The Bureau of Health Information and Policy in the Wisconsin Division of Public Health has released a summary of Healthiest Wisconsin 2010, Wisconsin's state health plan. Both the summary and the more detailed implementation plan may be accessed here

<http://dhfs.wisconsin.gov/statehealthplan/Implementation/index.htm>.

The summary lists the state health plan's specific objectives for each health priority, along with selected action steps that have been identified to achieve those objectives. For Extension educators and healthy weight coalition partners, the most relevant priorities are on pages 31-34 (Adequate and Appropriate Nutrition) and pages 63-66 (Overweight, Obesity and Lack of Physical Activity).



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Background information for MyPyramid and highlights from IFT

By Susan Nitzke

Following is a summary of an email from Dr. Trish Britten at USDA/CNPP to clarify information in MyPyramid, followed by a summary of some relevant information that was presented at the Institute of Food Technologists conference in New Orleans this July.

MyPyramid: USDA's Center for Nutrition Policy and Promotion (CNPP) conducted consumer research in 2002 and again in 2004 to study consumers' understanding of daily intake recommendations. They found that consumers were much more able to think of daily food recommendations in terms of cups and ounces than numbers of standard servings. Thus, MyPyramid dietary guidance is now given in household measures. In most cases, the actual daily amounts are nearly the same as in the old Food Guide Pyramid, but some changes were necessary because of nutrient content. They are:

- 1 cup of juice is roughly the same as a cup of fruit (not $\frac{3}{4}$ cup of juice counting for $\frac{1}{2}$ cup of fruit as before).
- One ounce of lean meat, poultry or fish is now roughly equivalent to $\frac{1}{4}$ cup of cooked dry beans or peas or tofu, 1 Tbsp. of peanut butter, or $\frac{1}{2}$ ounce of nuts. In other words, 1 ounce of nuts or $\frac{1}{2}$ cup of dry beans is now equivalent to a 2-ounce portion of meat, poultry or fish.

Plans are on track for USDA/CNPP and USDA/FNS to release educational materials for elementary school-aged children (grades 3-8) this fall.

MyPyramid does not provide specific dietary intake patterns for pregnant or lactating women because of their need for specialized guidance from a health care provider and/or dietitian.

Other IFT Highlights: Dr. Shanty Bowman from USDA/ARS reported findings about food label usage from CSFII, a nationwide survey of over 5000 adults from the mid 1990s. A majority of adult consumers did not understand food label information. For example, only a small percent of men (22%) and women (34%) read serving size information often and only 24% of men and women said that it was "very easy to understand information on the daily value." The Food and Drug Administration is considering changes to the food label to make the most important information (calories per standard serving and per package) more prominent.

Sheila Cohn from the National Restaurant Association reported that a new campaign called "healthydiningfinder.com" will be launched this coming January, along with an "AskUs" program to make it easier for restaurant patrons to find information on healthy menu choices.

In a symposium on the Dietary Guidelines, Dr. Connie Weaver from Purdue, a member of the Dietary Guidelines Advisory Committee, reported that in addition to calcium, magnesium and potassium content were factors in the decision to make a recommendation of 3 cups a day for practically all adults and older children. Three cups of milk provide 87% of the calcium, 28% of the potassium, 25% of the magnesium, 95% of the vitamin D, 32% of the riboflavin, and 54% of the protein needs of a 31 to 50-year-old woman.