



Nutrition for Family Living

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June, 2005 Topics

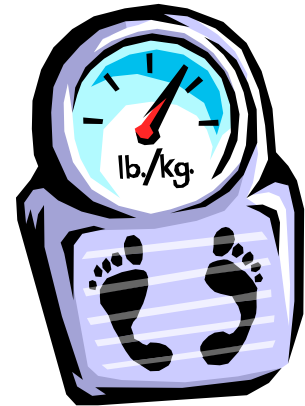
Weighing in on Mortality Risk

Making it Happen! School Nutrition Success Stories: A New Resource

Weighing in on Mortality Risk

By Leah Whigham and Sherry A. Tanumihardjo

Background: A recent article in the Journal of the American Medical Association (JAMA) caused quite a stir in the nutrition community as well as in the general press. Written by scientists at the Center for Disease Control and Prevention (CDC) and the National Cancer Institute, this article estimated the relative risks of mortality associated with different levels of body mass index (BMI). BMI is a weight for height indicator and is equal to your weight in kilograms divided by the square of your height (kg/m^2). While obesity ($\text{BMI} > 30$) was associated with increased mortality, overweight ($\text{BMI} 25$ to 30) was associated with lower mortality rates than normal weight ($\text{BMI} 18$ to 25). Although several studies have estimated an increase in mortality at BMI levels > 30 , the estimates from this study are much lower (about 112,000 annual deaths compared to 280,000 to 414,000 in other studies). The authors explain that some of this difference is due to differences in the mathematical methods used to analyze the data and their methods should provide better estimates. However, the authors also explain that the largest differences between their calculations and previously published numbers are due to inclusion of more recent data. Possibly improvements in medical care, especially for cardiovascular health (a leading cause of death in obese people), have resulted in decreased mortality rates associated with obesity (although not all research would support this).



Factors to consider: Despite this seemingly positive news regarding the risks of being overweight or obese, there are several things we should keep in mind. First of all, when trying to interpret scientific research for applied purposes, it is best to consider the body of evidence as a whole rather than an individual report. Much of the data published to date still supports recommendations for healthy weight in the BMI range of 18-25. Secondly, factors other than weight for height play an important role in setting weight goals. For example, a person with high blood pressure and diabetes at a BMI of 29 is at a much greater health risk than a person with the same BMI but no other disease conditions. Other individual factors that can make a difference are the age at onset of obesity and the number of years a person has been obese. A person who does not become obese until the age of 50 is likely to have lower health risk than a person who has been obese since the age of 25. When we consider the alarming rate that overweight and obesity is increasing in our children (for example, doubling in 4- and 5-year olds from 1976 to 2000), our health problems as a society regarding obesity may just be beginning. At UW Hospitals, Dr. Aaron Carrel, Department of Pediatric Endocrinology and Diabetes, estimates that the number of type-2 diabetes cases has increased from 6-8 in the past to over 20 new cases per year in Madison, and that the number of new obese pediatric patients they see (without diabetes) is 6-10 per week.



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How does this affect you? What you do as an individual affects your health. For example, 30 minutes of brisk walking each day will improve your health overall (all other factors remaining the same). Similarly, eating a healthy diet, such as one with plenty of fruits, vegetables, low-fat milk and whole grains is still beneficial, regardless of body weight. Also keep in mind that BMI is serving as a surrogate marker for health recommendations. The indicator that is more telling of health risk is percent body fat, especially abdominal body fat. Since these values require much more sophisticated equipment to measure, most of us rely on weight for height. However, if you are a person who is very muscular, your BMI may indicate you are overweight or obese, but your percent body fat may still be in a healthy range. Similarly, if you tend to carry your weight around your hips rather than your waist, you will be at a lower health risk than a person with the same BMI but larger waist circumference. Generally, a waist circumference greater than 35 inches for women and 40 inches for men is considered an independent risk factor for type-2 diabetes and cardiovascular disease.

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This article is part of a 4-year project supported by the National Research Initiative of the USDA Cooperative State Research, Education and Extension Service, grant number 2003-35200-05377 to Tanumihardjo entitled "Promotion of high vegetable consumption as a weight-loss strategy and general well-being."





Making it Happen! School Nutrition Success Stories: A New Resource

By Heather Harvey

Making it Happen! School Nutrition Success Stories was recently released by the Food and Nutrition Service of the U.S. Department of Agriculture and the Division of Adolescent Health at the U.S. Centers for Disease Control and Prevention. It is a collection of 32 success stories from schools and school districts located around the country that improved the quality of the foods and beverages served at their school(s). These 32 schools share their strategies, successes, challenges, future plans as well as some of their resources in *Making It Happen!*.

Making it Happen! focuses on six strategies that schools have utilized to build an environment that supports healthy eating at the school:

1. Establish nutrition standards for competitive foods.
2. Influence food and beverage contracts.
3. Make more healthful foods and beverages available.
4. Adopt marketing techniques to promote healthful choices
5. Limit student access to competitive foods.
6. Use fundraising activities and rewards that support student health.

Competitive foods are those foods sold outside of the school meal program. They can be foods served or sold in a la carte, in vending machines, in school stores, at meetings, or in classrooms as rewards or party treats. Some schools set limits around the time certain foods can be sold, the location foods where foods can be sold, the types of food that can be served and/or portion sizes. A number of schools have adopted healthier standards for the foods offered on their campuses, both through increasing the availability of healthier foods and decreasing the availability of less nutritious foods. For example, some schools have mandated that healthier choices be made available in vending machines along with less healthy choices, while others have banned soda pop and sweetened drinks from vending machines.

Many schools have contracts with food and beverage companies that provide them with cash and non-cash benefits for selling the company's product in their school. Schools can influence these contracts in a few ways. They can opt not to sign a new contract, they can cancel or not renew their current contract, or they can negotiate for healthier alternatives to be offered by the company. Some schools now have vending machines operated by the school food service, as opposed to outside companies, letting the school decide what is offered in the vending machine.

Many schools have chosen to make healthier foods and beverages more available on their campuses. Increasing the availability of healthier foods makes it easier for students to choose these foods and creates an environment where healthy foods are the norm. Healthier foods can be made more accessible in a la carte lines, vending machines, school stores, school fundraising, classrooms and at meetings. Healthier choices that are being encouraged include foods and beverages lower in fat and added sugar. Some examples are fruits and vegetables, water, 100% fruit juice, popcorn and pretzels.



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One of the more creative ways schools are encouraging students to consume healthier foods is through marketing techniques. Using the concepts of product, price, placement and promotion, schools are positioning healthier foods as the popular choice. Schools will often let students try out new, healthier choices to determine which products they enjoy most. Some schools price healthier choices lower than other items. Schools will also place healthier items at eye level in vending machines and in a la carte lines so that students see these items first. Finally, some schools have promoted healthier options through signs, banners, flyers, coupons and advertisements. Evidence suggests that students will eat healthier items if they are easily available, appealing, lower priced and packaged nicely.

Fundraising activities need not focus on food items that are high in added sugar or fat. While many schools choose to sell candy, cookies, or cakes, other schools are turning to more nutritious or non-food items to raise money for their school. Alternatives include activity-related events such as walk-a-thons and fun runs, wrapping paper, greeting cards, smoothies, fruit or garden seeds.

The main themes or lessons learned from the 32 success stories presented in *Making it Happen!* include:

1. Finding a champion to lead the change process
2. Setting achievable goals and taking a series of small steps
3. Assessing the current nutrition environment before devising a “plan”
4. Paying attention to the change process to help sustain the change
5. Documenting the impact of these changes
6. Making changes at many levels (school, district, state and national)

The fifth point is especially important and easily overlooked. Currently there is very little research-based evidence to support any one specific type of change. There is some evidence that multiple changes to the school environment can promote healthier choices, but this is limited. The strongest evidence exists for increasing the availability of healthier foods on school campuses. Because there is little research to inform which strategies to use, it is important to document the impact of changes that are made and share our findings with others. Incorporating an evaluation component into any initiative is an important part of the process and should be included when working with schools on these issues.

Implications for Extension Educators

It is important that a variety of stakeholders are involved in the discussions when school nutrition environments are concerned. Stakeholders include parents, students, teachers, school administrators, food service staff, and others. Assessing the current school nutrition environment and deciding on realistic, attainable goals of what people want the school nutrition environment to look like is key. Designing a plan around evidence-based initiatives, such as those outlined in *Making It Happen!* and evaluating the outcomes is integral to the success of future initiatives. It is important to educate students and teachers on making healthy food choices, in addition to making healthier choices more accessible, so that students can practice what is being taught in the classroom. A combination of education and environmental change increases the likelihood of success when trying to improve people’s nutrition choices. An email order form for a free copy of the *Making It Happen!* report and downloadable PDF chapters are available from Team Nutrition at <http://www.fns.usda.gov/tn/Resources/makingithappen.html>.



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For those colleagues interested in discussion school nutrition policies, there will be a WisLine on Monday, June 13th from 1-2pm to discuss School Wellness Policies and how Extension faculty and staff can be involved in these. More information is available at <http://www.fns.usda.gov/tn/Resources/makingithappen.html>.

There is a list of resources available on School Wellness Policies on the Eating Well Being Active team site <https://www.uwex.edu/ces/flp/apps/flrc/team/eating/resource/wellness.cfm>.