



Nutrition for Family Living

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January, 2005 Topics

The Effect of Parent-Child Feeding Strategies on Children's Eating and Weight – what do we know?

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New booklets from FDA on using food labels and choosing dietary supplements

Physical Activity Initiatives

The Effect of Parent-Child Feeding Strategies on Children's Eating and Weight – what do we know?

Family Living professionals with programs in nutrition, parenting and other related areas have a strong interest in the dynamics at play between parents and children, including feeding dynamics. Dr. Susan Johnson, Director of the Children's Eating Laboratory at the University of Colorado Health Sciences Center, was a keynote speaker at the November 2003 Family Living conference, where she talked about the role that parent-child feeding strategies may play in children's eating and weight. A number of Nutrition for Family Living articles in recent years have been devoted to the topic of parents' roles in feeding their children. Susan Nitzke and Gayle Coleman are offering a half-day district professional development program for Family Living educators and their colleagues in 4H/Youth Development and other program areas on "Helping families address child overweight/obesity issues."

The evidence base for parent/child feeding recommendations is summarized in a review article (Faith et al., "Parent-Child Feeding Strategies and Their Relationships to Child Eating and Weight Status," *Obesity Research* 2004;12(11):1711-1722). The article covers 22 studies that were published before June 2003.

What research methods are currently being used?

- Among studies using participant reports, a Child Feeding Questionnaire (CFQ or Revised CFQ) was commonly used. Although there were fewer observational studies, they also tended to use a common instrument (BATMAN or Revised BATMAN).
- Most studies used cross-sectional rather than prospective designs.
- Sociodemographic data was reported inconsistently across studies.
- Ethnicity was reported in 17 of the 22 studies, and 10 of the 17 included more than one ethnic group (6 sampled Whites only and 1 sampled African Americans only).
- Most studies measured either weight status or eating behavior as the outcome; a minority of studies measured both.
- Many of the studies came from a small number of different investigators and sample populations.



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What is the state of the evidence of associations between parent-child feeding strategies and child eating or weight status?

- The majority of studies showed at least one statistically significant association.
- The feeding strategy that seemed to be generally associated with increased child energy intake and body weight was feeding restriction – as opposed to other feeding strategies like using food to calm children, providing structure during feeding, emotional feeding, or prompting to eat.
- Some study findings were contradictory. For example, despite the findings regarding restriction of food, studies looking at parental discouragement of eating showed inconsistent associations – some showed that parental discouragement of eating was associated with lower child weights or energy intakes, and some showed the opposite. This is possibly explained through different study methodologies – parental report vs. observation - or differences in how the methodologies themselves are carried out.

What does this say about future research in this area?

- There is a need for prospective studies to provide reliable information on whether and how differences in child feeding strategies actually cause changes in children's weight. Prospective studies could also clarify whether a child's weight affects the way parents and other adults provide food and allow them to eat.
- Future studies need to address the role of ethnic and cultural differences and how they modify the effects of parental feeding styles.
- Future research should address the practical implications of study findings. Here the authors comment on the current obesity prevention environment:

“To the extent that feeding restriction promotes overeating and overweight in children, this has practical implications for obesity prevention or treatment in terms of identifying an ‘appropriate’ level of parental control. On the one hand, a certain level of parental control is necessary to bring children's diets in line with professional and U.S. Department of Agriculture recommendations. Reduction of total energy intake is also central to the behavioral treatment of childhood obesity, and enthusiasm is mounting in many schools to restrict access to vending machines. On the other hand, excessive control of child feeding may be counterproductive, at least in the short term, by increasing children's preference for restricted foods, compromising children's ability to self-regulate intake, increasing the rate at which children eat during a meal, and/or focusing children on external cues to hunger and satiety. Depriving intake of palatable foods may also increase the reinforcing properties of those very foods.”

Implications for Extension educators

Our ability to plan effective educational programs that improve child nutrition is hindered by limitations in our scientific understanding of parent-child feeding dynamics. We have solid evidence to support a recommendation that mothers should not try to force children to refrain from eating when they are hungry. We acknowledge that parents and other adults have a responsibility to provide nutritious food to children and guide them in making appropriate food choices. It is our goal to help parents and other adults find the proper level of guidance that lies between the extremes that Susan Johnson referred to as “overly permissive” and “authoritarian.”



The Tanumihardjo Lab Challenge: Add Walking to Your New Year's Resolutions



Walking intentionally for fitness is beneficial for many reasons:

- Cardiovascular and muscular health maintenance
- Calorie burning and blood sugar control
- Stress relief and as an energy booster to reduce fatigue

Walking is an activity that almost everybody can incorporate into their daily routine – young or old, obese or thin, short or tall. Walking is associated with fewer sports-related injuries than running or jogging, does not require specialized equipment and most of all, it is free!

What has research shown?

The latest studies on walking continue to show clear and consistent benefits to those who engage in this activity. In the Harvard-based long-term study of male health professionals commonly called the Health Professional's Follow-up Study, at the 14-year mark, walkers with diabetes were 30-40% less likely to have had a heart attack, stroke or to have died from heart disease. Moreover, 3-5 hours of brisk walking per week was inversely associated with total mortality and faster walking was inversely associated with cardiovascular disease and mortality. Thus, the more and quicker you walk, the greater the benefits.

Even after the age of 65 years, when women began walking only a mile or so per day they were half as likely as inactive women to die of heart disease, cancer, or other causes. Moreover, in the ongoing Women's Health Study, women who walked at least 2.5 hours a week were 30% less likely to have died from heart disease and stroke over a six-year period. In that study, the brisker the walking pace, the greater protection achieved.

Other studies show that walking can lower the death rate among people with diabetes and prediabetes. When inactive women who were at risk for type 2 diabetes increased the number of steps from 5,000 to 10,000 per day, beneficial changes were seen in blood sugar and blood pressure.

How do you get started?

While adding walking to your daily routine (e.g. taking the stairs more often, parking further away from your destination) is beneficial, walking for fitness adds extra benefits and will help you reach your weight maintenance and health goals. Here are a few things to keep in mind:

- Dress appropriately. Wear comfortable clothing made of a breathable fabric. In cooler weather, layer your clothing so that you can remove one layer at a time as you warm up.
- Good shoes are necessary to prevent injury. Wear comfortable athletic shoes, such as a running shoe. The sole should be flexible and flat. You should only wear shoes for about 500 miles; or, if you have had the shoes for more than a year, you should consider buying a new pair.
- Stretching is also recommended to prevent injury. Stretching at the beginning of the workout is designed to help you warm up. Start by walking at an easy pace for 5 minutes. Never stretch cold muscles. Warm-up exercises should gently help you increase your mobility. At the end of the workout, a deeper stretch is more appropriate and can be aimed at increasing flexibility.
- Choose an appropriate speed. Walk quickly enough that your breathing rate has increased, but not so hard that you are unable to talk.



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The bottom line: Think about how many minutes are sometimes wasted doing things that result in few calories burned or no added health benefits. Even two 15-minute walking sessions spaced throughout the day can make a big difference in our daily energy expenditure and disease risk. You could start with as little as a 10 minute walk and then slowly increase your time. While most of us can start walking today, if you are under the care of a physician for any chronic disease please check with them before starting any new physical activity program in your daily routine.

Resources used:

Tanasescu, M, et al. (2003) Physical activity in relation to cardiovascular disease and total mortality among men with type 2 diabetes. *Circulation* 107: 2435-9.

Swartz, AM, et al. (2003) Increasing daily walking improves glucose tolerance in overweight women. *Preventive Medicine* 37: 356-62.

Harvard Heart Letter (Sept. 2003) Walk away from diabetes and heart disease. Accessed December 15, 2004: <http://www.health.harvard.edu>.

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."



New booklets from FDA on using food labels and choosing dietary supplements

"How to Understand and Use the Nutrition Facts Label" has been updated and improved. It has information on how to make quick, informed food choices that contribute to a healthy diet. The new version has an updated approach to the percent daily value, a general guide to calories, and help with added sugars. A Spanish translation will be available in the near future.

"What Dietary Supplements Are You Taking: Does Your Health Care Provider Know? - It Matters and Here's Why" is the name of a new educational brochure targeted towards consumers who are taking or considering taking dietary supplements. The brochure encourages consumers to talk with their doctor or other health care provider to sort reliable from questionable information about dietary supplements.

To access the new food label resource, go to <http://www.cfsan.fda.gov/~dms/foodlab.html>. The supplements booklet is still being finalized. We expect it to be posted soon at <http://www.cfsan.fda.gov/~dms/supplmnt.html>.



Physical Activity Initiatives

In the last couple of years there have been a number of free or low-cost initiatives that support increased physical activity and/or weight loss and can be accessed on-line. The programs range in cost, focus (whether they count steps, minutes of activity, or activity points), duration and method of tracking. Each program requires you to register, set a goal and then track your progress towards this goal, whether it is increased physical activity or weight loss.

These resources are a fun and easy way to motivate yourself or others around you to meet personal activity goals and role model healthy behaviors. As educators who often highlight the virtues of physical activity in our communities, these initiatives can complement your efforts to increase active lifestyles. Think about enrolling your Extension office as a team, or one of the healthy lifestyle coalitions you might be involved with. Talk to teachers at a school or senior center that you work with and encourage them to get their staff to participate. These resources may even be useful for some of your participants if they have computer access and enjoy working online. There are a number of ways to use these resources to promote increased activity and healthy lifestyles that emphasize Extension's commitment to more active lifestyles. Three of the initiatives are described below, along with a fourth that is geared more for individuals. At the end a table provides an "at-a-glance" view of all four.

Lighten Up Wisconsin

http://www.badgerstategames.org/health/index.php?category_id=983

Lighten Up Wisconsin is a five-month team challenge organized by the Wisconsin Sports Development Corporation that encourages team members to make small, realistic and permanent changes in their dietary and exercise habits that will last a lifetime. Team competition will recognize achievement in two areas, weight loss due to healthy eating and physical activity and accumulated activity. This is a team challenge that runs from January 10 – June 10, 2005.

Team captains register their team (2-10 members) and submit the entry fee of \$10/person for the silver package or \$15/person for the gold package. Each package includes a t-shirt, a 2005 handbook and weekly wellness tips. In addition, the gold package includes a pedometer.

For the weight loss category each member of the team submits an anonymous 'honor' weight to the team captain. 'Honor' weigh-ins will be repeated in March (mid-point) and June (final). Winning teams are those that lose the highest percentage of weight over the five-month program. For the accumulated activity category, teams track miles based on the activity performed. Participants track their activity on paper forms and convert all activities into steps using a conversion chart that includes 20 different activities. Winning teams are those that log the most miles per team member over the five-month program.

Medals will be awarded to the top three teams in each category and winning teams will be recognized at the Badger State Games.



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The Wisconsin Governor's Challenge and the President's Challenge

<http://www.wisconsinchallenge.org>

This initiative was highlighted in the April, 2004 Nutrition for Family Living Newsletter. Following up on the success of the President's Challenge, the Wisconsin Governor's Challenge focuses on improving the health of people statewide. The goal is simple: get active for 30 minutes a day (or 60 minutes if you're younger than 18), five days a week, for six weeks. The program started April 19, 2004, but people can register at any point in time and take part in the six-week program.

You can register online at <http://www.wisconsinchallenge.org/> as an individual, worksite, school or community group. Registration is free and confidential. Once you are registered you can track your daily activity online, in any of 100 different activities. The Active Lifestyle program encourages people to become active for 30 minutes, 5 days a week. There are also two other programs offered through the President's Challenge, which you can access through the Wisconsin Governor's website for those already active. The Presidential Champions program is for people already active 5 days a week, and an Advanced Performance Program is for people who train at advanced levels.

There are free awards for meeting your goals that can be ordered, as well as a chance to compare yourself to others in your age range, state, city etc. There are resources for groups to help with promotion, motivation and tracking.

America On The Move (AOM)

<http://www.americaonthemove.org/>

America On the Move is a national initiative dedicated to helping individuals and communities across the country make positive changes to improve health and quality of life. AOM strives to support healthy eating and active living habits by individuals and communities. AOM encourages registrants to take 2000 more steps a day and consume 100 fewer calories, however, individuals can set their own goals based on either weight loss or increased activity.

Like the Wisconsin Governor's Challenge, AOM is also free, however, there is an opportunity to purchase a step counter and program guide (\$22.45) to help individuals in meeting their goals. Once you are registered at www.americaonthemove.org, you will get your own homepage and be able to track your progress online. You can record your steps for the day or the number of minutes you were active in any of 65 activities. Your steps or minutes of activity are then converted to miles and tracked along historic American routes, such as the Louis and Clark Trail or the Alaskan Highway.

There are additional resources to aid in healthier eating, goal setting, activity living and others. While registration is confidential, you can allow others to see your progress if you would like. This is a useful feature for groups, as it allows group members or the coordinator to view the progress of the group or other group members' progress individually. Finally, registrants can sign up for daily emails to keep them motivated and on track. There are also resources for groups to help with promotion, motivation and tracking.



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Strong Women

<http://www.strongwomen.com/index.stm>

The Strong Women website highlights four fitness programs developed by Dr. Miriam Nelson, who directs the Center for Physical Activity and Nutrition at the Friedman School of Nutrition Science and Policy at Tufts University. For the past 15 years, Dr. Nelson has been principal investigator of studies on exercise and nutrition for older adults. Dr. Nelson conducted a pre-conference seminar about her programs at the recent National Extension Association of Family and Consumer Sciences conference in Nashville in October 2004.

The fitness programs highlighted on the website are: Strong Women-Includes three separate, targeted programs addressing “Staying Slim,” “Vibrant Aging,” and “Strong Bones;” and Growing Stronger-a strength training program for older adults developed with the Centers for Disease Control and Prevention (CDC). Specific at-home workout regimes for each program are provided on the site. The workouts involve little or no equipment, and log sheets are available online. The website resources also include books, newsletters, and recipes.

There is no charge for participation in the program through the website.



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Physical Activity Initiatives

Initiative and web address	Location	Duration	Goal	Focus	Fee	Online tracking	Ind.	Team	Notes
<i>Lighten Up Wisconsin</i> http://www.badgerstatgames.org/health/index.php?category_id=983	Wisconsin	5 months (Jan. 10 to June 10)	Weight loss OR total activity	Fitness and a little bit of nutrition	Yes -\$10 or \$15 (\$15 includes a pedometer)	No	No	Yes	-needs a committed group captain -3 teams with largest weight loss or most activity get medals -free award incentives -has 100 activities to choose from
<i>Wisconsin Governor's Challenge</i> http://www.wisconsinchallenge.org/	Combination Wisconsin and National	6 weeks	30 min/5 days a wk	Fitness	No	Yes	Yes	Yes	-see above -allows people already active to set goals to become more active
<i>The President's Challenge</i> http://www.presidentschallenge.com/	National	Flexible	Increased activity	Fitness	No	Yes	Yes	Yes	-will convert 65 different activities to miles and tracks -group tracking possible -optional daily emails
<i>America On The Move</i> http://www.americaonthemove.org/	National	6 weeks for 1 st goal	1. increase 2000 steps/d 2. decrease 100kcal/d	Fitness and Nutrition	No -optional \$22.45 for book and step counter	Yes	Yes	No	This is an individualized, research based fitness program to build strong bones, stay slim, and age vibrantly. It provides other types of support in newsletters, books, Q&A, etc.
<i>Strong Women Growing Stronger</i> http://www.strongwomen.com/	National	Flexible to reach your goals	Building strong bones, staying slim, vibrant aging	Fitness and some nutrition	No Optional: Books and fitness items	No, but personal log sheets are available to download	Yes	No	