



NutriNet News

Pedometers and Physical Activity Goals

Campaign 2005 will include a number of options from which educators can choose to help people be more active. One option will be a series of lessons that make use of pedometers to encourage walking.

Pedometers have become a popular tool for measuring daily physical activity and setting activity goals. Studies have shown that wearing a pedometer is a simple, effective way for people to become more aware of their daily activity level, and increase their physical activity (Rooney, 2003). A recent study from Gundersen Lutheran Medical Center in LaCrosse found that among the 400 women who participated in an 8-week intervention, the most successful participants set daily step goals, kept a log of steps walked, and wore the pedometer all day.

Experts caution against emphasizing one particular number of steps per day for everyone. The Surgeon General's Report recommends at least 30 minutes of moderate intensity physical activity most days of the week. It's impossible to translate this recommendation into a number of steps that would be appropriate for all age groups and levels of fitness. Research continues to show that a 30-minute, brisk walk each day is important for health, not whether the daily

step count reaches 10,000.

Pedometers can't account for the intensity or duration of physical activity. Greater benefit comes from activity that is sustained for at least ten minutes. Also, the Surgeon General's Report specifically recommends moderate intensity physical activity, such as



brisk walking. Pedometers can be used to help people meet the recommendations by aiming for 100-150 steps per minute, for at least 10 continuous minutes, for a total of at least 30 minutes per day.

Many educational programs that use pedometers encourage participants to increase their daily steps by a certain number of steps per day. Again, promoting a single number for all participants doesn't address issues of age, health or previous level of activity, nor does it consider intensity or duration. If 30 minutes of brisk walking is equivalent to be-

tween 3,200 and 4,000 steps, some population groups may need to work gradually toward this goal, while others may be ready for more challenging goals. (Le Masurier)

The LaCrosse study showed the importance of goal setting and tracking in helping people increase their daily physical activity. A fact sheet developed by Rutgers Cooperative Extension (www.rce.rutgers.edu) has the following advice for helping people set goals and make plans for change.

- **Priorities:** Which changes are most important? Chances of success are greater if people don't try to take on too much at once.
- **Set specific, measurable goals:** How will you know if you accomplished what you wanted? "I will take the dog for a 20-minute walk every weeknight after supper" is the kind of goal that can be measured.
- **Develop an action plan.** What exactly will you do?
- **Be realistic.** Revise your goal or plan for alternatives as needed. Will you walk the dog in bad weather?
- **Record progress.** Make a simple method for giving yourself credit. A checkmark or a sticker on your calendar can be a reward and a motivator.

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Wisconsin Nutrition Education Network

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Beverages and Kids

With increased activity and warmer weather, beverages become more important for adults and kids. Summer is a good time to talk to parents and kids about making good choices.

What are kids drinking? Age, race and gender influence kids' and teens' beverage choices. Analysis of USDA's Continuing Survey of Food Intake by Individuals 1994-1996 (Forshee & Storey) showed important differences among subgroups of the population. Young children of all ethnicities drink more milk than any other beverage, but African-American children drink less milk than white or Hispanic children. 13% of African-American children report never drinking milk. Soft drinks are the second or third choice of young children, depending on race; on average, young children drink about 6 ounces of soft drinks per day.

During adolescence, milk consumption falls to second place behind carbonated soft drinks. Adolescent boys drink more of everything (soft drinks, milk, and fruit drinks), and white adolescent boys drink more soft drinks than black or Hispanic boys – almost 2 cans per day. However, this study found no relationship between the amount of regular soft drinks consumed and obesity.

The authors comment that there is no standard for the percent of daily calories that should come from beverages, but for most subgroups in this study, the average amount of calories contributed was within reasonable limits assuming the individual gets a moderate amount of physical activity. They add that promoting milk, especially by parental modeling, will be more



effective in influencing beverage choices than strictly prohibiting soft drinks and fruit drinks.

Moms model milk. Parental modeling was important in young girls' milk consumption and bone mineral status in a study conducted at Penn State (Fisher, 2004). Girls were followed from age 5 to 9 and 24-hour recalls were used to measure mothers' and daughters' consumption of different beverages.

Girls who met calcium recommendations were served milk more often, had mothers who drank more milk, and drank fewer sweetened beverages than girls who didn't meet recommendations. Girls who didn't meet calcium recommendations decreased their milk consumption during the years of the study, with girls who drank the most sweetened beverages showing greater decreases in the amount of milk they drank. The study did not show that sweetened beverages displaced milk in girls' diets, but that girls who drank a lot of sweetened beverages decreased their milk consumption the most.

Having milk available at meals and snacks was the most important influence on the milk consumption of young girls. Mothers who drank milk made milk more available to their daughters. Girls' calcium intake from ages 5 to 9 predicted their bone mineral status at age 9. This study suggests that one simple parental behavior – making milk available – can have an important role in calcium intake and bone mineral status. Efforts to increase girls' calcium intakes need to begin early in childhood and focus on ways to make milk and calcium rich foods routinely available at a time when good habits are being formed.

What about water? Earlier this year, the National Academy of Science released general intake recommendations for water. Most Americans get adequate water from the beverages they drink and the foods they eat simply by letting thirst

regulate their intake. About 80% of people's fluid intake comes from beverages, including caffeinated beverages, and 20% from food. Prolonged physical activity and hot weather increase people's fluid needs. The panel determined that caffeinated beverages may have a transient but not significant diuretic effect, so caffeinated beverages do

contribute positively toward a person's fluid intake. No specific recommendation for a certain number of glasses of water has been made for adults, or for children.

Moderate physical activities, the type recommended by the *Walk, Dance, Play* campaign, do not increase most people's fluid needs as much as strenuous physical exercise. A child playing in a soccer tournament on a summer day has greater fluid needs than an adult walking around the block after supper, and children often don't tolerate temperature extremes as well as adults. The American Dietetic Association's position paper on nutrition and athletic performance (JADA, 2000) comments that plain water is the best and most economical source of fluid for young athletes. Diluted fruit drinks or sports drinks can also be appropriate fluid choices if they help children drink more when they need it. For active adults and children, it's important to drink before, during, and after physical activity to replace water lost.

The Nutrition Education Network's 2005 campaign will feature a nutrition lesson about beverages that can be combined with other lessons about physical activity.

References:

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One simple parental behavior - making milk available - can have an important role in calcium intake and bone mineral status

Words from the Wise: Partnering

How did you approach partnering for *Walk, Dance, Play*?

Yvonne Greer, Milwaukee Health Dept.: I brainstormed a list of potential partners from community based organizations that work with families and children and that have a nutrition emphasis and/or a family outreach component. Some contacts provided other names, and about half had been involved in previous campaigns. For our team, the Health Dept. organized the campaign and distributed the materials but each partner did their own teaching and events.

Jackie Carattini, UWEx, Wood County: The Healthy People Wood County Coalition includes all the movers and shakers in nutrition and health in Wood County. It was a great fit for *Walk, Dance, Play* (WDP) and a great source of partners.

Renee Vertin, UWEx, Washington County: We have partnering agreements through Extension with a number of agencies and I promoted WDP with the ones that seemed the best fit.

Marcia Baurichter, UWEx, Pepin and Buffalo Counties: Last year there was a health fair at one of the elementary schools and WIC and Extension approached the organizer about being involved with WDP this year.

What advice about partnering would you give someone new to this type of campaign?

YG: Plan early! Ask your partners to tell you how they plan to use the materials before they order them. Make sure the number of partners is manageable; it's good to follow up with them during the campaign to make sure everything is going as planned. The hardest thing for partners is the evaluation questions, because many are used to tracking numbers of participants but not evaluating behavior change.

JC: Look for existing groups and coalitions. People are amazed that materials and campaigns like these exist, and that they fit the purpose so well.

RV: Partners like creative approaches that are easy to work with! Sell the campaign by telling them "your clients will enjoy this." Find out how willing they are to be involved in follow up and evaluation.

Partners like creative approaches that are easy to work with.

Do you have any WDP successes to report, or "new and different" ideas about partnering for Campaign 2005?

JC: Next year the two big healthy lifestyle coalitions in our area are planning specific themes, like bicycling, and we'll try to tie in somehow with every event they hold. We partnered with Girl Scouts, and used WDP materials at some of their monthly meetings.

RV: Most partners in this area have already been involved in one of the campaigns, but next year I may focus more on seniors. Changing the content but keeping some continuity helps keep partners interested.

MB: National Honor Society students did their volunteer hours with the Nutrition Coalition at the elementary school health fair. The whole community got involved.

YG: I presented about WDP at an inservice day for Head Start staff this year.

This article is the first in a series that will look at topics related to conducting a Network campaign. Next issue: coordinating activities among the members of your team.

Pedometers and Physical Activity Goals (cont. from page 1)

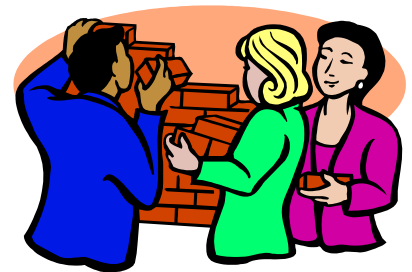
- Reward yourself. Don't forget smaller rewards along the way as you continue to make progress.

Summary: The Network's 2005 Campaign will offer an option for using pedometers along with a series of lessons to help people increase their physical activity. Pedometers can be a useful tool to help people recognize their level of activity and increase it to meet the Surgeon General's recommendations. Rather than focusing on a particular number of steps, educators can help participants focus on

setting physical activity goals that include duration and intensity to provide maximum health benefits.

References:

- Rooney B et al. *WI Medical J.* 2003;102(4): 31-36.
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Our Mission: The Wisconsin Nutrition Education Network facilitates collaborative planning of nutrition education programs at the state and local levels. We promote healthful and enjoyable eating so that Wisconsin's low income individuals and families receive consistent, positive, relevant, accurate, and effective nutrition messages.

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Looking Ahead to 2005: Stepping Up to a Healthy Lifestyle

Walk, Dance, Play...Be Active Every Day is running strong. Remember you can schedule events through August and count the contacts for your records.

As *Walk, Dance, Play* continues we are working hard to prepare for next year. The slogan chosen for 2005 is **“Stepping Up to a Healthy Lifestyle.”** We are planning a series of ten short 10-20 minute lessons for each target age group: older adults, families with children, pregnant women, adults aged 18-64, youth aged 12-17 and youth aged 5-11. There will be five nutrition lessons and five physical activity lessons for each age group. Each lesson has a preparation section, a “what to say” section, an activity, a tip and task handout, and an evaluation. We suggest that you use both a nutrition lesson and a physical activity lesson if you have time in your sessions. If you are interested in pilot testing or reviewing the 2005 materials, please let us know.

Nutrition lessons will focus on:

- choosing foods and portion sizes according to the Food Guide Pyramid
- eating more fruits and vegetables
- eating more fiber rich foods
- eating more calcium rich foods
- choosing healthy beverages.

Physical activity lessons aim to help participants:

- understand the benefits of regular physical activity
- set new physical activity goals
- learn how to move more
- understand how physical activity improves bone health

- set new goals for reducing TV and other sedentary activities.

Our lessons are patterned after a curriculum designed as part of a study of older adults conducted by Florida International University. The Florida study used pedometers and lessons with the objectives listed above. The lessons were tested with low-income older adults in Florida and Iowa. Step activity increased by 49% over a ten week period. Researchers report that the greatest success in behavior change comes when participants have both a physical activity and a nutrition lesson or activity.



Network Update

A limited number of pedometers will be provided for use with older adults as part of our 2005 campaign. If local agencies can secure funds to purchase additional pedometers for use with other groups, it will enhance the lessons at all levels. Physical activity lessons will have options for using pedometers or alternatives to measure physical activity. Local agencies should explore ways to lend the pedometers through a school or community library. Generally people are interested in

finding out how much they walk and they will know by the end of ten weeks how much they are walking and how much they should be walking.

What is the optimum number of educational contacts necessary to help someone make a behavior change? A discussion on the FNSPEC listserv generated many different opinions: 8 monthly 20-30 minute lessons; 5-6 contacts; 3-5 lessons with a pre-test and post-test; five 45-minute lessons; and 10 lessons. Generally, consensus was that the more lessons you can present as a series, the better your results will be.

The goal of our campaign and the primary goal of the Wisconsin Nutrition Network is to promote regular physical activity and healthy eating habits to Food Stamp eligible individuals and families. A second important goal of the Network is to form new or stronger partnerships and networks in your county. Now is the time to plan who you will partner with for the 2005 campaign. The application forms for 2005 will be out in early August. We recommend teams of three or more partners who will conduct activities in at least three different educational settings.

The Network website will soon have a little different look. Past campaign materials will still be available so that you can retrieve and use them. The **“Stepping Up to a Healthy Lifestyle”** materials, when developed, will be password protected. Only participating teams will be able to use these great new lessons during the 2005 campaign.