



Small Steps are Easier Together: How Changing the Work Environment Can Support Physical Activity and Healthy Eating

Research by [Dr. Carol Devine](#) in the Division of Nutritional Sciences at Cornell University demonstrates that by taking small steps and working together, people can make changes in workplace environments that make it easier to eat well and be more physically active.

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Approximately one-third of all adults and 17 percent of children in the United States are obese and more are overweight according to the 2007–2008 National Health and Nutrition Examination Survey (NHANES). Obesity increases risk for a wide range of health problems for millions of Americans.

A growing consensus among public health researchers attributes the rise in obesity to changes in our environment that promote increased food intake, unhealthful foods, and physical inactivity. Environmental changes such as larger portion sizes, easy access to high-calorie snack foods and sweetened beverages, dependence on cars, and more TV and computer ‘screen time’ have made it more challenging for people to make healthy choices. Until recently however, most efforts to combat obesity have focused on individual weight loss diets that have limited success over the long run.

Ecological approaches which take into account the interaction of individuals with the social, economic, policy and physical environments hold promise for addressing the problem. Policy and environmental change initiatives that make healthy choices in nutrition and physical activity available, affordable, and easy will likely prove more effective in combating obesity.



“Unlike other risk factors, obesity is something that is preventable”

Taking just such an approach, Cornell Division of Nutritional Sciences professor Carol Devine and her colleagues have successfully prompted rural women to walk more regularly. The initiative grew out of work being done at the Cornell Program on Breast Cancer and Environmental Risk Factors (BCERF). Obesity is a prime risk factor for breast cancer among postmenopausal women. “Unlike other risk factors, obesity is something that is preventable,” said Devine. “We came to the conclusion that we would try to help people change their environments to make it easier to be active and make healthy food choices.”



Individual Approach	Ecological Approach
Focus on changing the person	Focus on changing the community
Focus on individual behavior change	Focus on structural, social, economic or policy changes
Responsibility for change lies with the individual working with health professionals	Responsibility for change lies with community leaders, policy makers, and health professionals working with citizens
Reach people who are interested in changing	Reach everyone in the environment
Educational approach	Community development approach

A Research-Community Partnership

Partnering with Cooperative Extension Educators, Devine and her team implemented and evaluated an ecological intervention to promote walking and prevent weight gain in rural worksites. Their intervention research explored two questions:

- 1) How could professional partners in community and worksite settings work together to plan and implement environmental changes to make it easier for people to increase their activity levels and improve their food choices?
- 2) Would individual participants take advantage of those environmental changes and increase their activity levels and improve their food choices?

The original pilot research was conducted in collaboration with a community leadership coalition in two small Upstate New York villages. An environmental assessment identified intervention options and the leadership team worked with researchers to select and implement intervention strategies. Following that pilot, the project was scaled up to provide tools for professionals and worksite leaders to support and facilitate the intervention.

The integrated extension and research program, Small Steps are Easier Together, was developed from this initial research and has grown into an active collaboration between Cornell faculty, Cooperative Extension educators and worksite leadership teams across the state. Pilot studies have been conducted in 23 sites in 10 New York State counties since 2006.

How the Program Works

Interested worksites are identified by local Cooperative Extension educators. They facilitate the development of a leadership team from each worksite, including people who can identify potential worksite changes and have the authority to make them. After an initial meeting and training from Cornell faculty, the team assesses the working environment and identifies potential changes in the food and physical activity environments.

Based on their assessment, each worksite team then selects evidence-based strategies to support increased walking and improved healthy food options at work. Following a one-week baseline collection period, the selected strategies are put into place, after which a 10-week data collection period begins. Participants are encouraged to join worksite walking groups and to take advantage of changes in worksite access to healthy foods. Participants wear research quality pedometers to track daily walking steps, and record their steps and new healthy food options using a program web site. Participants were given individualized goals and receive email feedback and support.

Strategies that worksites have used include: providing healthy foods in cafeterias and vending machines, point of sale signage for healthy foods, participants saving part of their bag lunches for mid-afternoon, group walks, signs to promote walking, and footprints on the floor to mark distances.

Small Steps Do Make a Difference

The most recent analysis of the program included 188 participants in 10 rural worksites. It found that 53 percent of the women met or exceeded their goal of walking 2,000 extra steps three or more days per week, and the percentage of sedentary women had declined to 26 percent from 42 percent. Overall, 35 percent of the women moved to a higher activity level. The mean increase in steps was 1,504 per day. Sustained walking at this level could have significant health benefits.

The most common environmental changes made at the worksites were increasing vegetable and fruit options and providing fewer sugar sweetened beverages and more

Assessing your food and physical activity environments

The physical environment	What foods are available? What are the setting where food available? What is the condition/availability of sidewalks, stairways, walking trails, recreational facilities?
The policy environment	What are the rules? Who makes the rules?
The socio-cultural environment	What are the social trends, attitudes , perceptions, values and beliefs about healthy eating and active living?
Economic Environment	What does it cost to eat healthy foods and be physically active?

(Swinburn & Egger, 2002)

water. The worksites varied considerably in the number of strategies they implemented and the percentage of women at the worksite who participated.

As a follow-up to learn more about what components are most critical to project success, in 2010 the team conducted a mixed methods process evaluation, including pre- and post- surveys and self-reports of walking and eating behavior, interviews, focus groups and an intervention log. Preliminary results indicate that the sites that implemented more strategies and had greater participation were more likely to have leadership from upper management, a hands-on worksite leader, group input into choice of strategies, visible environmental strategies, and feelings of accountability among co-workers.

These studies confirm the potential of ecological worksite interventions and shed light on the factors associated with success. The research also demonstrates the important role Cooperative Extension educators can play in research-community partnerships for health promotion. By working together, people can make changes in workplace environments that make it easier to eat well and be more physically active.

Small Steps you can take to create a healthier workplace

Healthy Food Options:

- Ask about adding new healthy choices in cafeterias, vending machines or break rooms.
- Organize co-workers to take turns bringing in healthy snacks to share.

- See if your cafeteria or snack bar would offer small portion sizes such as mini bagels or muffins, and/or smaller plates.
- Celebrate special events like birthdays with fruit salad for a celebration that really brings wishes for a long and healthy life.
- Look for ways to make water easily available as an alternative to soda or other high-calorie beverages.

Adding Walking Steps:

- Start a walking group with co-workers for before or after work or on break time.
- Look around your building to see if staircases are accessible and inviting options.
- Post maps that highlight the number of steps between locations, both inside and out.
- Map an outdoor walking trail and encourage co-workers to walk with you on breaks or after work.

Resources:

Cornell NutritionWorks, a website for nutrition professionals:

<http://www.nutritionworks.cornell.edu>

CDC Division of Nutrition, Physical Activity and Obesity:

<http://www.cdc.gov/nccdphp/dnpao/index.html>

CDC LEAN Works! A free web-based workplace obesity prevention program that offers interactive tools and evidence-based resources:

<http://www.cdc.gov/leanworks/index.html>

Obesity and Breast Cancer: An Environmental Approach

<http://envirocancer.cornell.edu/BCERResearch/obesity.cfm>

Obesity and Cancer: Questions and Answers

<http://www.cancer.gov/cancertopics/factsheet/Risk/obesity>

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