



February 2011  
Volume 49 Number 1  
Article Number 1TOT5

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# Behavior Change Strategies for Successful Long-Term Weight Loss: Focusing on Dietary and Physical Activity Adherence, Not Weight Loss

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**Abstract:** This article helps Extension professionals guide individuals in a successful long-term weight loss program. A program should focus on behavioral changes (improving eating habits and physical activity), not just weight loss. In order to do this, Extension professionals should implement behavior change strategies that motivate individuals to initiate and maintain healthy behaviors that fit their lifestyle in approachable and convenient ways. Behavior change strategies demonstrated here (self-efficacy and self management strategies) are examples that can be incorporated into a weight loss program and could help to maintain those healthy habits even after a program ends.

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## Introduction

Obesity is a major risk factor for cardiovascular disease and health problems (Mertens & Van Gaal, 2000; Pi-Sunyer, 1998). People in the U.S. are spending \$50 billion a year on weight loss products and services (Weiss, Galuska, Khan, & Serdula, 2006). Despite these expenses, most of their lost weight will be regained (Wing & Phelan, 2005). Public health guidelines recommend a combination of reduced food intake and increased physical activity, as effective approaches to achieve long-term weight loss in adults (Shay, Shobert, Seibert, & Thomas, 2009). How can Extension professionals give support for long-term weight loss? How can we educate individuals to achieve healthy lifestyle changes and maintain them even after our program ends?

## What Extension Professionals Can Do

To lose weight and maintain healthy weight, individuals must not only be motivated and make a commitment to lose weight and maintain being healthy (eat balanced meals and physically active), but also understand what to expect during three different stages in behavioral changes (initial, improvement, maintenance condition stages). Simply giving participants information on a healthy diet and an exercise prescription, and offering a walking program is not enough (Morgan, 2006). Extension professionals need to know how to use behavior change strategies (Gordon, 2002) and help participants to develop their own plans. This will facilitate incorporation of health recommendations into their daily lives and make them adhere to them in the long run.

## Key Behavior Change Strategies

We can use *self-efficacy*, which is the core element of social cognitive theory (Bandura, 2004), and *self-management* strategies (Karoly & Kanfer, 1982) to maintain their control on behavior changes. These strategies can be applied to Extension programs and maximize the effectiveness of changing individuals' behaviors and long-term weight loss.

### Self-Efficacy Strategies

Self-efficacy can be defined as an individual's personal judgment of his or her ability to succeed in reaching a specific goal or outcomes. Self-efficacy is one of the most important determinants of whether behavioral change takes place (initial condition), because, unless people believe that they can produce desired effects by their actions, they have little incentive to act for behavioral change. Self-efficacy also affects whether people mobilize the motivation and perseverance needed to succeed (improvement condition), and finally, their ability to recover from failures and relapses, and how well they continue their behavior changes once their goals have been achieved (maintenance condition).

Extension professionals can help to enhance self-efficacy by a) setting goals and expected outcomes that are important for focusing on activities in group lessons and prompting increased efforts and b) establishing strategies for overcoming barriers to prevent participants from interrupting healthy lifestyle practices by providing social support from teams in group exercise classes or offer sessions before or after regular programs participants are already attending.

### Goals and Expected Outcomes

Use the S.M.A.R.T. (Specific, Measurable, Achievable, Realistic, Timely) principle to come up their own goals for each behavioral change stage; initial condition stage (4-6 weeks), improvement condition stage (12-20 weeks), and for maintenance conditioning stage (6 months and beyond). Higher outcome expectations are stronger motivators; however, unrealistic, unattainable outcome expectations may discourage participants to continue (Dalle Grave et al., 2005).

*Example:* "I will walk an extra 1 mile (2,000 steps) 3-4 times per week for the next 4 weeks." The goal is specific, measureable, and achievable using a current resource (have a pedometer), realistic, and timely (deadline for your goal â 4 weeks).

## Overcoming Barriers

All participants will face barriers to maintain their committed behavioral changes sooner or later in your program. Personal, social, and environmental barriers vary from person to person; however, Extension professionals could list common barriers and discuss solutions for effectively overcoming these barriers in a group. Participants who have more positive attitudes can share their outlook with other participants who may have the same goals and barriers.

*Example:* "I don't have time to exercise." Time constraint is the most frequent barrier to regular physical activity.

*Solution:* Have participants 1) make daily activity chartsâ example: 15-minute walk during lunch break, 2) choose activities they enjoy, 3) create a buddy system, 4) set time frame for when the goal should be reached by, 5) get a reward when the goal is reached, and 6) prepare for a new barrierâ example: in case of rain, play bowling.

## Self-Management Strategies

Key features of self-management strategies include goal setting, peer support networks, *self-monitoring* (ongoing follow-up), and *self-reinforcement*.

### Self-Monitoring (Ongoing Follow-Up)

After participants have set their goals and expected outcomes, Extension professionals can introduce a self-monitoring system in which participants can evaluate their own progress weekly or monthly. Their progress, whether they are meeting or failing to meet the established goals, serves as a motivator for continuing adherence to their behavioral change.

### Self-Reinforcement

Reinforcement (rewards) work as good motivators for changing behaviors. There are intrinsic motivators (stimulation that drives an individual to adopt or change a behaviorâ examples: enjoyment or satisfaction) and extrinsic motivators or external incentives (money, new outfit). Both are useful for positive reinforcement in behavioral changes, especially in the early stage of change. For a long-term weight control, an individual's intrinsic motivations for regular physical activity play a more important role than focusing on changes in body weight and diet-related changes (Teixeira et al., 2006).

## Conclusions

Long-term weight loss is a difficult task. Most individuals who start with good intentions and commit to change their behavior fail to continue. Extension professionals can use behavior change strategies to enhance participants' motivation and adherence to regular physical activity and healthy diet, rather than only focusing on weight changes. We also need to be creative and develop a fun activity. A good example is the milk taste challenge: Ask participants to taste samples of milk (whole, 2%, 1%, and fat free), and ask them if they can taste the difference. Participants learn about the health benefits of fat free-milk and may switch from whole milk to reduced fat milk.

It is important that Extension professionals empower individuals and provide them with the most effective behavior change strategies.

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