

Nutrition News

Department of Human Nutrition



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Self-Monitoring for Better Health

Lifestyle changes can lead to improved health. According to Linda Gonder-Frederick, a University of Virginia Health Systems faculty member, a number of specific strategies have been shown to help people change their diet and activity habits. Some of these strategies include self-monitoring, stimulus control, goal setting, problem solving, stress management, contingency management and social support. Of these, many psychologists believe that self-monitoring is the most important.

Achieving consistent self-monitoring, however, is hard to do. It is difficult even for those who are highly motivated and committed. Research indicates that, at best, less than half of a group of people are likely to achieve and maintain adequate self-monitoring. If people do not self-monitor on average five or more days of each week, they are unlikely to achieve their fitness goals.

The personal challenge and choice is clear: to be with those who self-monitor or with those who don't. To help make

it a little easier, various types of monitoring activities are described below, along with a self-monitoring worksheet that can be printed off weekly to use for recording activities.

- **Body Weight:** Daily self-weighing is strongly associated with successful weight-loss maintenance.
- **Aerobic Physical Activity Diary:** A pedometer may be used to track steps and to be an environmental cue that serves as a reminder to be more active. If desired, record additional information, including environmental barriers to planned activities such as bad weather interfering with walks or runs outside, emotional or social barriers such as feeling too depressed to engage in activity, or an exercise "buddy" being unavailable that day.
- **Muscle-Strengthening Activity:** Muscle-strengthening activities make muscles do more work than

they are accustomed to doing. Resistance training, including weight training, is a familiar example of muscle-strengthening activity. Other examples include working with resistance bands, doing calisthenics that use body weight for resistance (such as push-ups, pull-ups and sit-ups), carrying heavy loads, and heavy gardening (such as digging or hoeing). Benefits include increased bone strength and muscular fitness, and maintenance of muscle mass during weight loss.

Muscle-strengthening activities count if they involve a moderate to high level of intensity or effort and work the major muscle groups of the body: the legs, hips, back, chest, abdomen, shoulders and arms. Muscle strengthening activities for all the major muscle groups should be done at least two days a week. No specific amount of time is recommended for muscle strengthening.

Muscle-strengthening exercises should be performed to the point at

which it would be difficult to do another repetition without help. When resistance training is used to enhance muscle strength, one set of 8 to 12 repetitions of each exercise is effective. Two or three sets may be more effective. Development of muscle strength and endurance is progressive over time. Increases in the amount of weight or the days a week of exercising will result in stronger muscles.

- **Physical Balance**

Activities: People who are at risk of falling are advised to do exercises that maintain or improve balance three or more days a week. Examples include backward walking, sideways walking, heel walking, toe walking and standing from a sitting position.

- **Eating Patterns:** Using techniques including remaining aware of eating each bite, taking small bites, thoroughly chewing each bite and pausing between bites can result in decreased rate of food intake, enhanced satiation or feelings of fullness, and decreased energy intake.

- **Food Diary:** To increase the likelihood of self-

monitoring, focus on recording daily consumption of foods pertaining to a specific goal. Goals may include reducing fat intake or meals eaten at fast-food restaurants, or increasing whole grains, vegetables or fruit intake. Keeping a daily food diary of all foods eaten is the most effective way to lose weight, while keeping a food diary less than half of the time may not lead to successful weight loss. In a recent study, people who kept food records six days a week lost about twice as much weight as those who kept food records one day a week.

The most consistent self-monitors lose more weight than the least consistent self-monitors, and people lose much more weight during their most consistent weeks compared with their least consistent weeks.

- **Positive comments:** Recording positive comments made during one's self-talk and those made by others can help with monitoring health and appearance.

- **Additionally:** Other aspects of health, such as blood pressure or blood sugar levels, may also be recorded and monitored.

For more information, see:

- Wing RR, et al. A self-regulation program for maintenance of weight loss. *N Eng J Med.* 2006;355(15):1563-1571.
- Department of Health and Human Services, 2008 *Physical Activity Guidelines for Americans*, Chapters 4 and 5, www.health.gov/paguidelines
- Andrade AM, Greene GW, Melanson KJ. Eating slowly led to decreases in energy intake within meals in healthy women. *J Am Diet Assoc.* 2008; 108:1186-1191
- Baker RC, Kirschenbaum DS. Weight control during the holidays: Highly consistent self-monitoring as a potentially useful coping mechanism. *Health Psych.* 1998;7:367-70
- Hollis JF, et al. Weight loss during the intensive intervention phase of the weight-loss maintenance trial. *Am J Prev Med.* 2008;35(2):118-126
- Boutelle KN, Kirschenbaum DS. Further support for consistent self-monitoring as a vital component of successful weight control. *Obesity Research.* 1998;6: 219-224

For more information about healthy eating, contact your local extension office.

The Food Assistance Program can help people of all ages with low income buy nutritious foods for a better diet.

To find out more, call toll-free 1-888-369-4777.

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