

# Daily Weighing Helps Maintain Weight Loss

BY MITCHEL L. ZOLER

NEW YORK — Daily self-weighing helps people who have recently lost weight maintain their lower weight.

People who are trying to maintain weight loss need to “learn to use scale information [the same way] a patient with diabetes uses blood-sugar monitoring,” Rena R. Wing, Ph.D., said at a meeting sponsored by the American Diabetes Association. They then need to use the daily weight information to guide their eating and exercise, added Dr. Wing, a professor of psychiatry and human behavior at Brown University in Providence, R.I.

But just getting on a scale every day is not enough. A recently completed study enrolled 314 people who had already lost a substantial amount of weight, and randomized them to three different strategies for reduced-weight maintenance. The results showed that daily weighing was ef-



fective for maintaining reduced weight only when it was combined with an active counseling program, either through the Internet or in regular face-to-face group sessions. The control group in this study received a regular newsletter about weight maintenance but no active intervention.

Participants in the Internet and face-to-face groups were taught to detect small changes in their weight and, if it increased, to immediately implement problem-solving steps. They also submitted their weights weekly, and were sent messages about weight maintenance.

When a person's weight remained within 2 pounds of their entry weight, they were told they had stayed in the green zone, and they received a positive message along with a small gift once a month. People whose weight rose 3 or 4 pounds above their baseline level were told they had entered the yellow (caution) zone, and they were advised to implement a problem-solving strategy. Par-

ticipants whose weight rose by 5 or more pounds were told they had entered the red zone and should immediately start a new weight-loss program; they were sent a “tool box” of supplies (such as meal-replacement drinks) to help them.

After 18 months, the percentage of people who regained at least 5 pounds over their entry weight was approximately 70% among the controls (those receiving a newsletter), a significantly higher rate than the 55% rate among those in the Internet program and 46% among those in the face-to-face program, said Dr. Wing, who is also director of the weight control and diabetes research center at Miriam Hospital in Providence. The difference between the rates of high weight regain was not significant between the Internet and face-to-face intervention groups (N. Engl. J. Med. 2006;355:1563-71). However, an additional finding was that although the incidence of weight regain was statistically similar in the Internet and face-to-face groups, people who regained weight gained more if they were in the Internet group, which suggests that the most effective intervention strategy was face-to-face, group follow-up sessions.

These findings also highlighted the high risk for weight regain. The average weight loss in study participants immediately before their entry into the study was 44 pounds (about 20% of their body weight) during the 2 years preceding their entry into the study. Despite that success, about 70% of those in the control group regained a significant amount of weight during the subsequent 18 months.

The face-to-face group reported using strategies to help their weight maintenance more than the other two groups did. Strategies included setting a weight-loss goal, counting calories, and keeping a record of their food intake and exercise.



Patients need to use the daily weight information to guide their behavior.

Another strategy linked to success in keeping weight off was daily weighing. In the newsletter group, daily weighing was used by about 40% of the participants when the study began, and the rate slipped to about 30% after 18 months. In the Internet and face-to-face groups, the rate of people who weighed themselves daily was also about 40% at baseline, but rose to more than 60% by the end of the study in both groups, reaching a rate of nearly 70% in the face-to-face group.

The findings also showed that daily weighing alone was not enough, as observed in the participants who regained at least 5 pounds over the study period. In such high weight gainers in the control group, there was no significant difference between those who weighed themselves daily and those who did not. A different pattern was seen in the Internet and face-to-face groups: The subgroups who weighed themselves daily had a substantially lower percentage of high weight gainers, compared with those who did not weigh themselves daily. (See box.) ■

## Daily Weighing Plus Active Interventions Produce Less Weight Regain

Intervention	People who regained at least 5 pounds and:	
	Weighed themselves daily	Did not weigh themselves daily
Newsletter recipients (controls)	65%	72%
Internet counseling	40%*	68%
Face-to-face group meetings	26%*	58%

\*Statistically significant difference, compared with those not weighing themselves daily. Notes: Based on a study of 314 people. Weight regain, compared with weight at entry, was measured after 18 months in program.

Source: Dr. Wing

ELSEVIER GLOBAL MEDICAL NEWS

# Use of Meal Replacement Products Increases Weight Loss

BY LEANNE SULLIVAN

PHILADELPHIA — For patients trying to lose weight, meal replacement products boost the odds of success, according to Dr. Robert F. Kushner, a professor in the department of medicine at Northwestern University, Chicago.

In a recent study, the most important predictors of successful weight reduction were found to be number of physician counseling sessions attended, use of meal replacement products, and minutes of weekly activity (Obesity 2009;17:713-22).

When used to replace one or two meals per day, meal replacement products—including bars, liquid shakes, and frozen dinners—have been shown to increase weight loss (Diabetes Care 2007;30:1374-83). “If you don’t use [meal replacements], I

would encourage you to start recommending [them] because it’s evidence-based outcomes. It works,” said Dr. Kushner, president of the Obesity Society and author of two books on weight loss.

These products help patients cut caloric intake, and the key to managing obesity is “calories, calories, calories,” he said at the annual meeting of the American College of Physicians.

Any diet that restricts calories results in the same average amount of weight loss, regardless of the ratio of fat, carbohydrates, and protein (N. Engl. J. Med. 2009;360:859-73). “Any diet will work, as long as you follow the diet,” and it’s important to get that message out to patients, he said.

Weight loss is especially important for patients with diabetes or prediabetes. In one

study, a program of weight loss and exercise led to a 58% reduction in diabetes risk, compared with 31% with metformin alone (N. Engl. J. Med. 2002;346:393-403). Diabetes is improved even if patients regain weight, Dr. Kushner added, so “it’s better to have lost weight and regained it than never have lost it at all.”

Exercise alone “is not a very effective modality for weight loss,” he noted. “The amount of calories that you’d actually have to burn off in exercise is huge—much more than people actually think.”

Although adding exercise to calorie restriction does not result in significantly greater short-term weight loss (Med. Sci. Sports Exerc. 1999;31[suppl]:S547-52), it can be effective over the long term to keep weight down, especially if the patient engages in at least 200

minutes of moderately vigorous activity a week (JAMA 1999;282:1554-60). “It is one of the most effective components to keep weight off,” perhaps because it allows some “wiggle room” in calorie intake, he said.

Pharmacotherapy alone is also not very effective, yielding an additional weight loss that’s generally less than 5 kg at 1 year (Ann. Int. Med. 2005;142:525-31), and most patients will lose only 5% of their body weight on medication alone. However, that may rise to 8%-15% if they also make lifestyle changes. Patients should be counseled about the importance of combining medication with diet and exercise, Dr. Kushner said. Available drugs include phentermine, sibutramine, and orlistat.

“The last time a medication was approved in this country for obesity care was 10 years ago”

when orlistat was approved, but several experimental agents have shown promise, he said. Newer-generation obesity drugs now in trials are taking “a whole new direction in obesity care” by harnessing natural peptides, including peptide YY and glucagonlike peptide-1 analogues.

Bariatric surgery is the last option to consider. “Internists clearly have a role in identifying and treating and referring patients and managing [bariatric surgery] patients, so it’s imperative [to] have a familiarity with these procedures,” Dr. Kushner said.

For selected patients, especially those with comorbidities, “the outcomes are really quite spectacular,” he added. “Diabetes is gone in three out of four patients that have bariatric surgery.” Hypertension, and sleep apnea often improve or resolve after surgery. ■