

# Chow Line

News from the College of Food, Agricultural, and Environmental Sciences

## Takeaways from the Biggest Loser study

**I recently heard some discouraging news about the prospects of losing weight and keeping it off. What is the best course for people like me, who had a lifelong battle with weight?**

You're likely talking about the study that followed 14 "Biggest Loser" contestants six years after they competed on the TV show. The study, in the journal *Obesity*, has received wide media coverage.

One of the participants actually weighs less than she did at the end of the competition, but the other 13 regained some or all of the weight they had lost. While more than half retained at least a 10 percent weight loss six years later, five now weigh as much or more as they did before the Biggest Loser. Their level of physical activity had not changed significantly since the end of the competition.

What surprised the researchers most were the measurements of the participants' "resting metabolic rate," or the calories a person burns while at rest. It's generally known that when people diet and they trim down, their metabolism slows and they don't burn as many calories. But researchers found that as these participants regained pounds, their metabolic rates did not increase as expected. In order to maintain their weight, most Biggest Loser graduates must eat 200 to 800 fewer calories per day than other people who weigh exactly the same as they do.

In addition to that hurdle, researchers found that the participants continue to have significantly lower levels of the hormone leptin. Less leptin triggers hunger and cravings, and is normal when you diet. The participants had normal levels of leptin when they started the Biggest Loser competition and almost none when they finished. Six years later, the participants' leptin levels had not returned to normal. They were hungry, all the time.



photo: iStock

So, what does this mean for you? Since everyone is different, it's difficult to say. But here are some things to consider:

- Focus on health, not the scale. Eat 2 to 2.5 cups of vegetables and 1 to 1.5 cups of fruit every day, and round out your diet by focusing on whole grains, lean protein and healthy oils. And get plenty of physical activity: Make it your goal to walk, play sports or work out for at least 30 minutes five days a week. Even if the pounds don't drop, regular physical activity lessens the risk of chronic disease.
- Take guidance from the National Weight Control Registry, [www.nwcr.ws](http://www.nwcr.ws), a database of more than 10,000 people who have lost 30 pounds or more and have kept it off for at least a year. Most report they have had success by maintaining a low-calorie, low-fat diet, and 90 percent say they exercise an average of an hour a day. But understand the hunger pangs you will likely feel are real, and you will have to work harder to maintain your weight than your lean friends.
- Shed any shame or guilt you feel about your weight. As science learns more about individual differences in metabolism as well as leptin and other hormones that affect hunger and appetite, it's easier to understand the biological underpinnings of why so many of us struggle with weight issues. Self-blame doesn't help.

May 6, 2016

By Martha Filipic  
614-292-9833  
[filipic.3@osu.edu](mailto:filipic.3@osu.edu)

**Editor:** This column was reviewed by Dan Remley, field specialist in Food, Nutrition and Wellness with Ohio State University Extension.

*Chow Line is a service of the College of Food, Agricultural, and Environmental Sciences and its outreach and research arms, Ohio State University Extension and the Ohio Agricultural Research and Development Center. Send questions to Chow Line, c/o Martha Filipic, 2021 Coffey Road, Columbus, OH 43210-1043, or [filipic.3@osu.edu](mailto:filipic.3@osu.edu).*

**College Marketing and Communications**  
2021 Coffey Road  
Columbus, OH 43210-1043  
614-292-2011

208 Research Services Building  
1680 Madison Ave.  
Wooster, OH 44691-4096  
330-263-3780

© 2016, The Ohio State University

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: [go.osu.edu/cfaesdiversity](http://go.osu.edu/cfaesdiversity).