

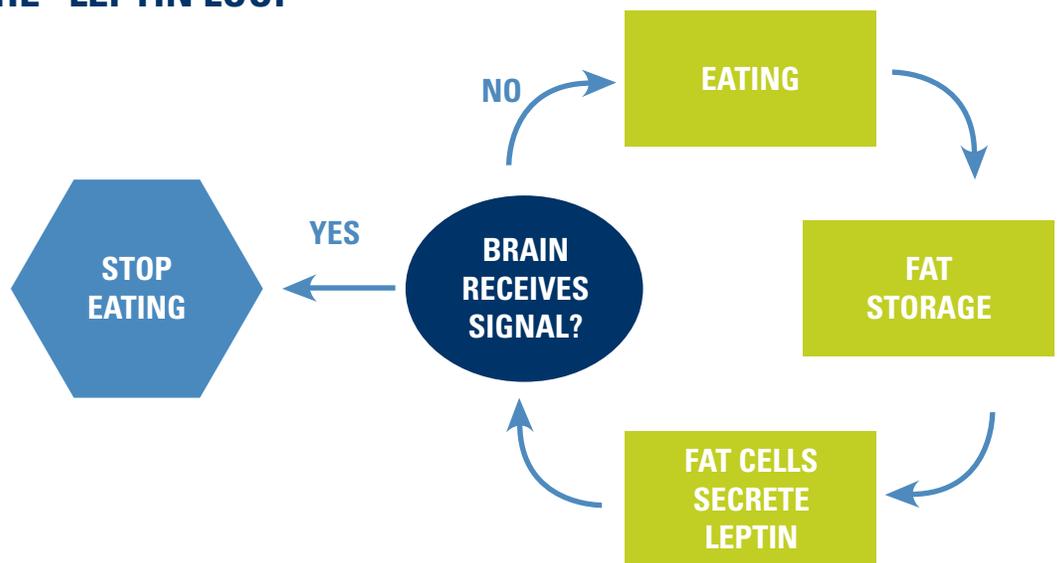
MAY 2016 FAT CHANCE

Six years after losing hundreds of pounds on the popular TV show “The Biggest Loser,” 14 of the 16 Season 8 contestants have regained the weight. Now, some are even heavier. All are plagued with slower metabolisms and battle hunger, cravings and binges. A study published this month in *Obesity* sought to find out why. From the onset, the researchers knew that the metabolic rate slows after weight loss. What they hadn’t anticipated was for how long. Six years later, the Season 8 contestants’ metabolisms were still stalled. The researchers were “frightened and amazed” by the body’s fight to maintain its set point.

Set point refers to the body weight that a person maintains without any discretionary effort. It operates much like a thermostat. When a thermostat is set to the desired room temperature, the heating or cooling system automatically shuts on or off to maintain it. With the set point, the brain responds to weight changes by secreting hormones that either encourage or discourage appetite, fat storage and metabolic rate. When people lose or gain weight, whether by intent or by accident, these hormones go into overdrive to protect the set point. In this case, most of the Season 8 contestants were now in better health and more physically active, but one of the weight-regulating hormones, leptin, was abnormally depressed.

Leptin is a hormone produced in body fat. When it is operating properly, leptin shuts off hunger and stimulates the metabolism to burn more energy. When it was discovered in 1994, scientists thought that leptin deficiency was the cause of the obesity epidemic. To test their theory, they replaced the hormone in leptin-deficient subjects. The subjects—both animal and human-- increased their activity, ate less and lost fat stores. Unfortunately, not all obese people are leptin-deficient. Many have very high levels of leptin, but their bodies ignore it. This leaves them hungry despite fullness and lethargic despite adequate energy reserves, much as the Season 8 contestants described.

THE “LEPTIN LOOP”





the supplement
FACILITATING VITALITY

WHAT CAN WE LEARN FROM THE SEASON 8 CONTESTANTS?

Every human behavior requires a biochemical signal and these signals are far more powerful than we ever imagined. Our current environment encourages a biochemical signal disruption that increases appetite, reduces activity and promotes fat storage. At “The Ranch” (The Biggest Loser Training Camp), the diet is low in sugar and high in fiber. Meals are regular and balanced. The day is intentionally and vigorously active. The contestants are supervised by nutrition, fitness and medical professionals. In a controlled environment, significant weight loss occurs. When the participants returned to the real world, the disrupters returned and the weight followed.

Since none of us lives on “The Ranch,” what behaviors can we adopt to avert the hormonal dysfunction encouraged in our work and home environments?

- 1 **Reduce our consumption of sugar**, particularly sugary beverages such as fruit juices and sodas. These spike insulin. Insulin encourages fat storage.
- 2 **Increase our consumption of fiber** by eating real fruits and vegetables, beans, nuts and whole grains. Fiber slows the insulin response.
- 3 **Exercise.** Exercise will burn off stored muscle fat and improve mood.
- 4 **Eat a protein-based breakfast** like eggs. Protein slows the rise of ghrelin, the hormone that makes your stomach growl and sends you scavenging for food.
- 5 **Get a good night’s sleep.** A tired body ignores leptin.
- 6 **Wait 20 minutes before eating seconds.** It takes a while for food to get through the 22 feet of intestine to where the fullness switch resides.
- 7 **Control stress** with exercise. Exercise reduces the stress hormones that mobilize blood sugar and fatty acids.
- 8 **Stop eating three hours before bed.** Energy consumed too late in the day increases insulin resistance.

If any of you find this as fascinating as I do, the best book that I have found on the topic is:

Fat Chance, Beating the Odds against Sugar, Processed Food, Obesity, and Disease, by Robert H. Lustig, MD.



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Patricia M. Fuller has dedicated the last 18 years to designing and delivering wellness programs. Her events earn consistently excellent ratings for her holistic approach and her real world application.

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