

## Why Keeping Weight Off Can Be Difficult

**A report explains that a variety of hormones work together to increase our appetite, prompting us to feed ourselves more, cut down on energy consumption, and transform food into fat.**

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While many people believe that the difficulty they experience in trying to lose weight and keep it off is a result of a lack of discipline, a report has uncovered the fact that for at least 12 months, participants in a study who dropped pounds by following a low-calorie diet experienced greater hunger compared to their level of hunger at the start of their diet. In addition, they had elevated levels of hormones that direct the body to take in more food, decrease energy use, and transform food into fat.

Published recently in *The New England Journal of Medicine*, the report sheds light on the reason that, out of every five people who follow a diet, about four of them regain the weight they lost within 12 to 24 months. Some of these people actually gain a few additional pounds, too.

The report highlights the very common result: Following successful weight reduction, the body activates what the report calls “multiple compensatory mechanisms” that work in cooperation with each other to make sure that the lost pounds are regained fast and with ease.

Statistics show that two-thirds of individuals in the United States exceed their ideal weight or can even be considered obese; the same can be said for increasing percentages of the populations of developing countries. There is some good news offered by the fact that the rates of obesity in the United States are showing signs of freezing; however, that good news is tempered by the fact that the rates do not show any signs of decreasing. Government health officials warn that the current pervasiveness of excess weight among Americans could result in substandard health and premature death for an entire generation.

According to Dr. Daniel Bessesen, an endocrinologist and obesity researcher at the University of Colorado’s Denver Health Medical Center, the study reported in *The New England Journal of Medicine* presents a “very comprehensive” and “really discouraging” view of the range of responses the body has to losing weight. It depicts the amazing number of the body’s hormones that are put to work to make sure that lost weight is gained back.

The hormones that influence hunger differ in their characteristics, and include insulin, dehydroepiandrosterone ( DHEA), adrenaline, thyroid hormone, testosterone ( in male ) , progesterone ( in female ) , cholecystokinin, amylin, ghrelin, and leptin. Some of these hormones are released from the adrenals, sex organs, thyroid gland and intestines; others

emanate from the pancreas or the fat cells. Certain hormones increase a person's level of hunger, while other hormones control a person's sense of fullness after consuming food. There are also hormones that signal the brain that a sufficient amount of food has been taken in, and there are hormones that play a role in controlling the way in which consumed calories are used.

Participants in the study were 50 males and females who were obese but did not have significant issues with their health. Study participants followed a rigid, 550-calorie-per-day eating plan for two months. Researchers conducted blood work on participants who completed the eating plan within 14 days following the end of the eating plan to measure levels of nine specific hormones that control metabolism and appetite, and they asked each man and woman about the sensations of hunger each experienced after meals, between meals, and in the periods leading up to meals. Twelve months after completion of the eating plan, the researchers repeated the blood work and again asked the participants about their sensations of hunger at certain times of the day.

What the study researchers learned from the testing and questioning threw a stark spotlight on the difficulties of controlling one's weight. Out of the 50 men and women who enrolled in the study, 34 successfully reached the 12-month point, while four participants dropped out of the initial two-month-long, calorie-restricted eating plan. Another seven participants did not succeed in eliminating 10% of their body mass, the milestone established by the study's researchers as a requirement for participants' continued inclusion in the study.

During the 12-month-long "weight maintenance" phase, participants received ongoing guidance on an exercise and diet regimen intended to assist them in maintaining their new, reduced weights. Another five participants dropped out of the study during this phase.

The participants still active in the study showed an average weight loss just shy of 30 pounds at the ten-week mark – the first time their hormone levels were measured.

At the one-year mark, those remaining participants had put back on an average of just over 12 pounds; however, questioning of the participants revealed that their hunger levels between and after meals, along with the levels of the hormones that affect hunger, came back even stronger than before.

Twelve months past the point where the study participants had finished their super-strict eating plan and had begun the challenging weight-loss-maintenance phase, those diverse hormones were telling dieters to "Consume more food" at the completion of each meal.

The participants reported that their levels of hunger were the same as they had been at the point when they finished the initial strict eating plan. Furthermore, they described their levels of hunger as being substantially stronger than the levels of hunger they experienced prior to the beginning of their diet.

Joseph Proietto, of the University of Melbourne's Department of Medicine, led the study's team of researchers, and they presented this conclusion: "The high rate of relapse after dieting is not surprising." The study authors go on to say that, in all probability, a multifaceted resolution to the obesity epidemic will be required, such as "a combination of medications" that will need to be shown to be safe for extended use.

Boston University obesity researcher Barbara E. Corkey notes that while it was not unexpected that the study participants quickly regained the weight they had lost, the authors had uncovered crucial corroboration regarding how specific hormones act on their own and in cooperation with other hormones to reverse weight loss.

With this new knowledge, she adds, researchers may be in a better position to design new medications and plans of action to help people who have lost weight to keep the weight off.

For a free prescription ( not test) for checking your hormones, email:  
[check.your.hormones@gmail.com](mailto:check.your.hormones@gmail.com)

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