

# Short-Term Overeating Has Lasting Impact

Study Shows Long-Term Weight Gain Can Result From Just 1 Month of Overeating

## Effects of Overeating: Study Details

Ernersson tracked 18 men and women, average age 26, who increased their energy intake by about 70% and capped their [physical activity](#) at no more than 5,000 steps a day (roughly 2.5 miles) for four weeks.

"The participants' daily energy intake before the study was on average about 2,270 calories per day and during the intervention they increased their daily energy intake by an average of 70% compared to before the intervention," Ernersson tells WebMD.

That translates to nearly 4,000 calories a day.

The [diet](#) was not healthy. "During the intervention the diet was mainly from fast foods, [such] as hamburger, pizza and french fries," Ernersson says.

Ernersson evaluated weight, [body mass index](#), and other data at the start of the study, after the four-week eating binge, again six and 12 months later, and two and a half years later. He compared the feasting group with another group of 18 (average age 25) who didn't feast or have a cap on their physical activity.

The results:

- The feasting group gained an average of 14 pounds after their one-month binge, while body weight overall in the comparison group stayed the same.
- At six months, the feasting participants had lost about 50% of the [weight gain](#) but still had higher body weight than they did at the study start. Five participants had returned to nearly the weight they had at the start.
- At 12 months, the overall weight of the feasting group was still higher than at the study start.
- At 2.5 years, the weight of the comparison group was the same overall, but those in the feasting group had a further rise. The average weight at study start -- 149 pounds -- had risen to an average of 160 pounds.
- Fat mass also increased in those who feasted -- from 20% of total body weight to nearly 24% after one month. At 12 months, it went down to 22.6%, but was still higher than at the study start

The change in fat mass was larger than expected, according to Ernersson. "Based on this, it can be recommended to avoid very high food intake that might occur during shorter periods," Ernersson says. The researcher concedes that the study has limitations and that the findings need to be confirmed in future research.

## **Overeat Now, Pay Later: Other Opinions**

The study findings add credibility to what nutrition experts have told us for years about moderation, says Alice Lichtenstein, DSc, the Gershoff Professor of Nutrition Science and Policy at the Friedman School at Tufts University, Boston.

"Given what we currently know, I think the best advice we can give people is to moderate food intake and physical activity to achieve and maintain a healthy body weight," she says.

"Although there are times when overindulgence is difficult to avoid, for example, Thanksgiving Day, it is important to not turn that event into Thanksgiving weekend."

Another interesting finding of the study, says Joan Salge Blake, RD, a professor of nutrition at Boston University, is that the feasting seems to have affected some more than others. "It sounds like some could get back to their previous weight," she says. But some were not able to.

The take-home message is clearly not to overeat in the first place, says Blake, who is also a spokeswoman for the American Dietetic Association. "Once you gain it, it is very challenging to take it off." Prevention of weight gain is the best strategy, she says.

Lichtenstein can't help but wonder what might happen if researchers looked at the opposite situation: short-term undereating coupled with increased physical activity, and what effect that might have on body composition long-term.