

## Set-Point Theory

- According to the set-point theory, there is a control system built into every person dictating how much fat he or she should carry – a kind of thermostat for body fat. Some individuals have a high setting, others have a low one. According to this theory, body fat percentage and body weight are matters of internal controls that are set differently in different people.
- The set-point theory was originally developed in 1982 by Bennett and Gurin to explain why repeated dieting is unsuccessful in producing long-term change in body weight or shape. Going on a weight-loss diet is an attempt to overpower the set point, and the set point is a seemingly tireless opponent to the dieter.
- The ideal approach to weight control would be a safe method that lowers or raises the set point rather than simply resisting it. So far no one knows for sure how to change the set point, but some theories exist. Of these, regular exercise is the most promising: a sustained increase in physical activity seems to lower the setting (Wilmore et al. 1999).
- According to the set-point theory, the set point itself keeps weight fairly constant, presumably because it has more accurate information about the body's fat stores than the conscious mind can obtain. At the same time, this system pressures the conscious mind to change behavior, producing feelings of hunger or satiety. Studies show that a person's weight at the set point is optimal for efficient activity and a stable, optimistic mood. When the set point is driven too low, depression and lethargy may set in as a way of slowing the person down and reducing the number of calories expended.
- The set point, it would appear, is very good at supervising fat storage, but it cannot tell the difference between dieting and starvation. The dieter who begins a diet with a high set point experiences constant hunger, presumably as part of her body's attempt to restore the status quo. Even dedicated dieters often find that they cannot lose as much weight as they would like. After an initial, relatively quick loss, dieters often become stuck at a plateau and then lose weight at a much slower rate, although they remain as hungry as ever.
- Dieting research demonstrates that the body has more than one way to defend its fat stores. Long-term caloric deprivation, in a way that is not clear, acts as a signal for the body to turn down its metabolic rate. Calories are burned more slowly, so that even a meager diet almost suffices to maintain weight. The body reacts to stringent dieting as though famine has set in. Within a day or two after semi-starvation begins, the metabolic machinery shifts to a cautious regimen designed to conserve the calories it already has on board. Because of this innate biological response, dieting becomes progressively less effective, and (as generations of dieters have observed) a plateau is reached at which further weight loss seems all but impossible.