Set Point Theory

What is Set Point?

Many parts of our physical and psychological makeup are determined either in part, or completely, by our genes. For example, height is mostly determined by genetic factors - some environmental factors may influence it a little, but for the most part, it is what it is. Some people are shorter than average while others are taller than average. People generally accept that we can't change our height, it's just the way we were born.

In the long term, the same principle applies to weight. Genetics play a large part in determining the weight that our bodies tend towards, and this depends on our overall build, our bone structure, metabolism, musculature, and much more.

Research suggests that each human body has a weight range that it is genetically predisposed to maintain. This natural weight range is called your "set point". Set point will vary for every individual regardless of other factors such as their height and gender.

Set Point Theory and Body Weight

The human body uses regulatory mechanisms to keep its weight within this natural set point range. For example, if you eat a little more than you need to maintain your body weight, then typically your body temperature will rise and your metabolism speeds up to burn off the extra energy. If on the other hand you do not eat enough to maintain your weight, then your metabolic rate slows down to spare the available calories (see our handout on Metabolism for more info). Another regulatory mechanism is hunger - if the body is not getting enough energy, you will feel more hungry, and/or be more preoccupied with food.

Consider a person who typically eats a balanced diet and exercises moderately. We expect that for much of their adulthood, their weight will tend to fluctuate within their set point weight range. Their weight may fluctuate up temporarily if, for example, they go on a holiday. However, upon their return home, once they resume their normal pattern of eating and exercise, their weight will naturally fluctuate down again without effort. Conversely, a person's weight may temporarily fluctuate down if they become ill or go through a period of stress. However, once their health has improved, their body will fight to regain the lost weight by increasing hunger levels and slowing their metabolism temporarily.

What if You're Below Your Set Point?

Set point is a particularly important concept to understand if you have an eating disorder. You may be engaging in periods of restricted eating, and if this results in you falling below your body's natural set point weight range, your body will respond by increasing your hunger signals (at least initially) and your mental preoccupation with food, while decreasing your metabolism (see our handout on Starvation Syndrome for more information). These mechanisms are in place to try and get your body back to its natural weight range; they were developed through evolution to protect us from starvation.

Trying to keep your body below its natural set point weight range results in an ever-increasing battle with these mechanisms. Preoccupation with food becomes so overwhelming that it can be hard to concentrate on anything else. Due to increased levels of hunger and increased thoughts about food, constant restricting of food intake makes you vulnerable to episodes of binge eating. This is why dieting is so ineffective (see our handout, *Why Diets Don't Work*).

Eating a well balanced diet and exercising moderately will help you keep your body within its natural weight range, and keep you in control. If you are suffering from food preoccupation due to restricted food intake, the key lesson to learn from set-point theory is this:
To recover from your preoccupation with food, weight, and hunger, your body must be returned to a weight that is within its natural weight range. No amount of psychological treatment will remove your food obsessions unless weight is regained to a healthy, normal range for your body.

Accepting Your Set Point

Perhaps your set point weight range is higher than average, higher than you'd like it to be, or higher than others (your doctor, peers, the media etc.) have suggested it 'should' be...then what? Well, here we can return to the example of height, and remind ourselves of the idea that 'it is what it is'. The most important goal is body acceptance. You cannot change your genetic makeup, or your natural set point weight range. Therefore, achieving full recovery from an eating disorder and healthy body image involves full acceptance our body as it is—height, weight, shape, and all!

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