

Obesity and Chronic Stress

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Obesity, chronic stress, and poor sleep are common issues in modern society—and they all have an impact on each other. Stress, defined as a real or perceived threat that can be physical, psychological or social in nature, has been identified as a factor that may contribute to obesity. Common sources of stress include relationship conflicts within relationships, a stressful work environment, financial struggles, and lack of social support. At New England Weight Management Institute, we help our patients to understand the relationship between weight, health, and stress, and ultimately find realistic ways to decrease levels of stress.

The body's stress response—known as “fight or flight”—is critical to survival and allows us to adapt to our ever-changing environment. Fight or flight is a complicated interaction between our nerves and the hormones that regulate stress. This reaction affects important body functions such as breathing, heart rate, blood pressure, hormone release and digestion. When fight or flight is activated, stress hormones signal to our body to increase sugar and fat in our blood stream to provide energy for important organs such as our brain, heart and muscles. Unfortunately, these hormonal changes can negatively affect many important body functions that are not necessary for immediate survival, such as digestion, growth and reproduction.



Exposure to chronic stress can have a significant, spiraling impact on our health. Short-term stress can help give our body access to important energy stores. Long-term stress has the opposite effect, often making it more likely that energy is stored as fat. This is especially true of fat stores in the midsection, which is associated with worsened health. Chronic stress can also lead to medical conditions such as high blood pressure, elevated cholesterol and diabetes. The release of a stress hormone called cortisol can increase a person's appetite and result in cravings for foods high in fats and sugar. Unfortunately, these types of foods appear to worsen the brain activity involved in processing of stress and anxiety. Stress can also lead to insomnia or difficulty sleeping, decreased motivation, and increased alcohol consumption, all factors that can contribute to weight gain.

While eliminating stress from our lives completely will never be a realistic goal, there are several ways to prevent the negative effects of chronic stress. Research has shown that some ways to help decrease your stress response include participating in regular physical activity, meditation or other relaxation techniques (such as breathing exercises), getting more sleep, keeping a journal, and talking to someone. Using a variety of these tools, even in small amounts, can have a significant positive impact on helping us manage stress and therefore help prevent the development of many diseases including obesity.

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