What Is Stress?

There Are Reasons We Experience Stress

Stress is a physical expression of our “Fight or Flight” survival mechanism. A threatening situation will trigger a stress response, which prepares us to confront or flee a possible danger. This helps for immediate danger but unfortunately the stress response is also triggered by tense situations where physical action is not an option, such as unreasonable boss, heavy traffic, or financial problems.

Two types of stress

1. Acute - Acute stress prepares us for fight or flight, and is generally short-term.
2. Chronic – Chronic stress is long term and is the main cause of stress-related health problems.

Stress causes chemical changes in the body that, left unchecked, can have negative effects on both mental and physical health. High levels of stress contribute to health issues as diverse as depression, insomnia, heart disease, skin disorders and headaches.

Acute Stress in Detail

Acute stress is a short-term response by the body’s sympathetic nervous system. How long acute stress lasts may vary—the response can last for a few minutes or a few weeks. During an acute stress response, the adrenal medulla (part of the adrenal glands, two small glands located on top of each kidney) begins to release catecholamine hormones (including adrenaline and noradrenaline). In all, over seventeen different hormones are released during an acute stress response.

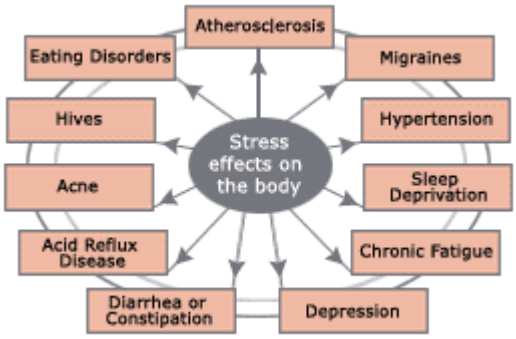
Physical responses

- blood sugar levels rise
- additional red blood cells are released (to carry extra oxygen)
- peripheral blood vessels constrict
- pulse quickens
- blood pressure rises
- digestion stops

Chronic Stress in Detail

Chronic stress occurs when continuous acute stress responses keep the body on alert continuously, negatively affecting health. The ongoing stress response causes the hypothalamus and pituitary gland (portions of the brain) to release a chemical known as ACTH (adrenocorticotropic hormone). ACTH, known as the “stress hormone” stimulates the adrenal gland to produce and release cortisol.

Cortisol is one of the hormones associated with waking and sleeping. Levels of cortisol naturally fluctuate during the day. Cortisol levels are highest in the morning and lowest at night. Higher levels of cortisol in the morning help us wake up. When chronic stress stimulates cortisol production, the daily cycle of cortisol levels is disrupted. High levels of cortisol may occur at night. This can result in insomnia.



Stress Affects Your Health

Imbalances of cortisol and other stress-related hormones weaken health over time and the effects are not immediately seen. Practicing stress management techniques can help minimize the effects of stress on your health.

High Levels of Stress (Cortisol) Contributes to Weight Gain

Cortisol promotes the synthesis of glucose from proteins in order to make more glucose available as fuel in response to stressful situations. This reduces lean muscle mass and increases blood sugar levels. Research has shown that cortisol also increases the depostion of abdominal fat and increases cravings for food, especially carbohydrates (sugars). This helps to set up the vicious cycle of stress and overeating (especially of unhealthy foods), which created more stress and more overeating, etc. By supporting a person's adrenal glands and lowering cortisol output, this vicious cycle can be broken.

Source: http://commit2bfit.me/what-we-do/stress-less/what-is-stress-what-can-i-do-about-it/