Stress: Everything You Need to Know

Stress is a circumstance that causes a certain biological reaction. When you sense a threat or a significant challenge, chemicals and hormones flood your body.

Stress activates your fight-or-flight reaction, which allows you to either fight or run away from the stressor. Typically, your body should relax after the reaction has occurred. Constant stress might have a severe impact on your long-term health.

Stress is a natural physiologic response to a potentially hazardous circumstance. When you are under stress, your brain releases chemicals and hormones such as adrenaline and cortisol into your body.

This causes your heart to beat quicker and delivers blood to muscles and vital organs. You are invigorated and have increased awareness, allowing you to concentrate on your current demands.

Stress Hormones

When you detect danger, the hypothalamus, located at the base of your brain, responds. It delivers nerve and hormone impulses to your adrenal glands, which then secrete a plethora of hormones.

Nature's technique of preparing you for danger and increasing your chances of surviving is to produce these hormones.

Adrenaline is one of these hormones. You may also be familiar with it as epinephrine, or the fight-or-flight hormone. Adrenaline acts quickly to accomplish the following tasks:

- increase your heartbeat
- increase your breathing rate
- make it easier for your muscles to use glucose
- contract blood vessels so blood is directed to the muscles
- stimulate perspiration
- inhibit insulin production

While this is beneficial in the short term, recurrent adrenaline rushes might result in:

- damaged blood vessels
- high blood pressure, or hypertension
- higher risk of heart attack and stroke
- headaches
- anxiety
- insomnia
- weight gain

Adrenaline is an essential stress hormone, although it is not the predominant stress hormone. That's cortisol at work.