

The Physiology of Stress

The Hypothalamus, Pituitary Gland and Adrenal Gland --→ together secrete the hormone cortisol

The Adrenal Gland secretes cortisol into the bloodstream

The Autonomic Nervous System is activated and it is separated into the:

Sympathetic and Parasympathetic Nervous System

The Sympathetic governs the fight or flight response

The Parasympathetic brings the body to rest and calm states.

Cortisol does the following:

- increases heart rate
- blood pressure
- narrows arteries
- releases epinephrine which increases heart rate
- suppresses our immune system
- causes digestive problems
- digestive problems include not digesting food properly
- can cause ulcers

- high cortisol levels can lead to heart disease
- cortisol constricts arteries and causes blood vessel damage
- produces plaque in arteries
- can cause a heart attack or stroke

High cortisol levels also cause fatigue, sleep problems, anxiety, depression, weight gain, headaches

Normal levels of cortisol are released when we exercise and it regulates blood pressure and blood sugar levels, strengthens heart muscle.