



The Stress Response

THE HPA AXIS

The HPA axis is the communication network between the **Hypothalamus**, **Pituitary** gland, and **Adrenal** glands. It is the body's primary system for recognizing and responding to stress. Whenever the brain recognizes stress, it triggers a hormone cascade to alert the rest of the body. This results in a release of cortisol (aka "stress hormone"), which tells the body to react AND turns off the signals from the brain.

This system is designed to respond to stress in a balanced way. In fact, some stress is actually beneficial for keeping the brain and body in tip-top shape. Examples of *eustress* (good stress) include regular exercise, cold exposure, fasting, excitement, or new challenges.

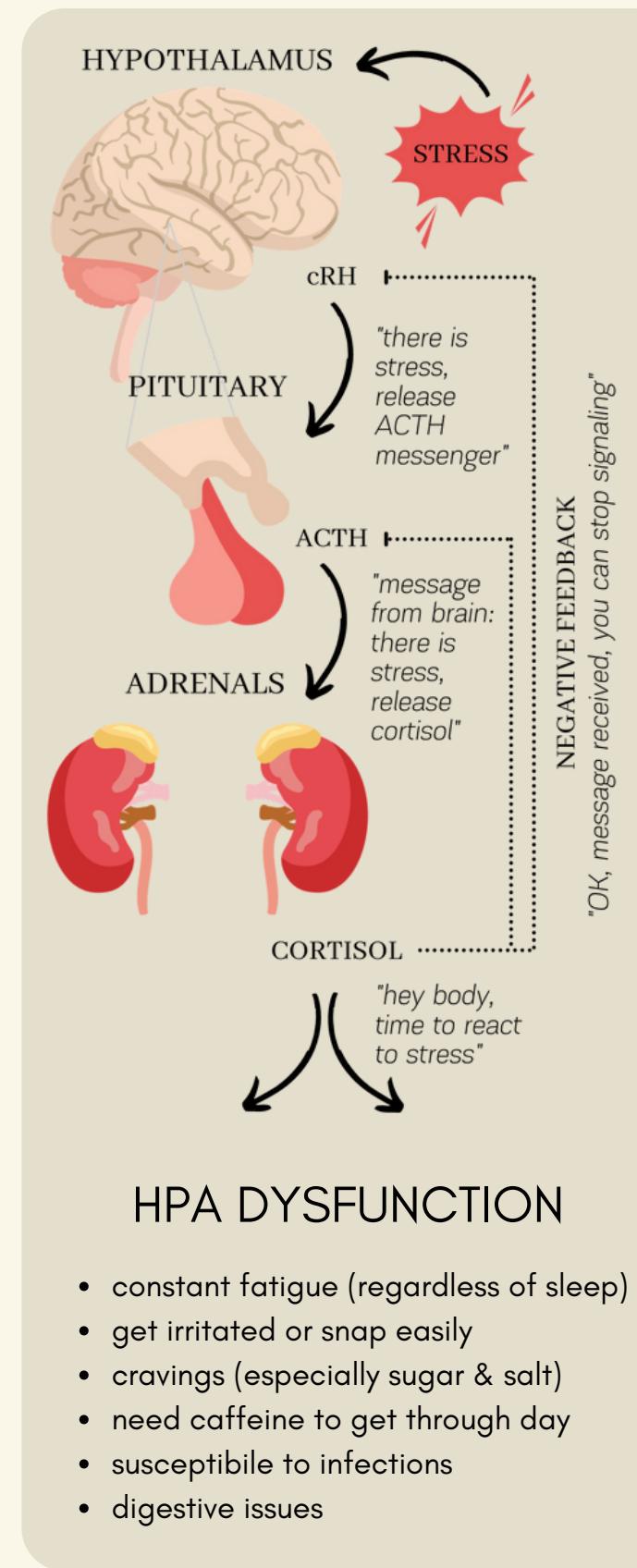
CHRONIC STRESS

However, when stress levels become negative or overwhelming, it is considered *distress*. If someone is overloaded with chronic distress, the system can get worn out (often described as "HPA dysfunction" or "adrenal fatigue").

Over time, the body stops responding to cortisol, leading to *cortisol resistance*.

Chronically elevated levels of cortisol are like the "boy who cried wolf". To compound the problem, communication between these glands is disrupted, the HPA axis becomes imbalanced, and the body loses the ability to respond appropriately to everyday stressors.

What to do? Try to eliminate and manage stress, prioritize sleep, and eat to nourish.



HPA DYSFUNCTION

- constant fatigue (regardless of sleep)
- get irritated or snap easily
- cravings (especially sugar & salt)
- need caffeine to get through day
- susceptible to infections
- digestive issues