

## Why is Cortisol bad?

Cortisol is an important hormone in the body, secreted by the adrenal glands and involved in the following functions and more:

- Proper glucose metabolism
- Regulation of blood pressure
- Insulin release for blood sugar maintenance
- Immune function
- Inflammatory response

Normally, it's present in the body at higher levels in the morning and at its lowest at night. Although stress isn't the only reason that Cortisol is secreted into the bloodstream, it has been termed "the stress hormone" because it's also secreted in higher levels during the body's 'fight or flight' response to stress, and is responsible for several stress-related changes in the body. Small increases of Cortisol have some positive effects:

- A quick burst of energy for survival reasons
- Heightened memory functions
- A burst of increased immunity
- Lower sensitivity to pain
- Helps maintain homeostasis in the body

While Cortisol is an important and helpful part of the body's response to stress, it's important that the body's relaxation response to be activated so the body's functions can return to normal following a stressful event. Unfortunately, in our current high-stress culture, the body's stress response is activated so often that the body doesn't always have a chance to return to normal, resulting in a state of chronic stress.

Higher and more prolonged levels of Cortisol in the bloodstream (like those associated with chronic stress) have been shown to have negative effects, such as:

- Impaired cognitive performance
- Suppressed thyroid function
- Blood sugar imbalances such as hyperglycemia
- Decreased bone density
- Decrease in muscle tissue
- Fatigue
- Insulin Resistance
- Impaired Attention Span
- Damage to the Hippocampus
- Increased Appetite during periods of Stress - leading to Binge Eating during periods of Stress
- Higher blood pressure
- Lowered immunity and inflammatory responses in the body, slowed wound healing, and other health consequences
- Increased abdominal fat, which is associated with a greater amount of health problems than fat deposited in other areas of the body. Some of the health problems associated with increased stomach fat is heart attacks, strokes, the development of, higher levels of "bad" cholesterol (LDL) and lower levels of "good" cholesterol (HDL), which can lead to other health problems!
- Prolonged exposure to excessive levels of Cortisol may interfere with the ability of the Hypothalamus to respond to the negative feedback mechanism that permits it to reduce its secretion of Cortisol in response to higher than normal circulating Cortisol levels;
- Damage to the structure of and interference with the functions of several regions of the Brain associated with Memory;
- Impairment of Long-Term Memory;
- Acceleration of the death of Neurons;
- Inability to recognise/remember already existing neuro-linguistic pathways;