

FOCUS ON THE ADRENAL GLANDS

It all starts here!

The adrenal glands are small endocrine glands that sit on top of the kidneys. They produce the hormones Pregnenolone (the Mother Hormone), DHEA, estrogen, progesterone and testosterone, cortisol and epinephrine (adrenaline). The adrenal glands are your body's first line of defense against the stresses of daily living - they give orders to the reproductive organs, play a role in thyroid function and metabolism and regulate the fight-or-flight stress response.

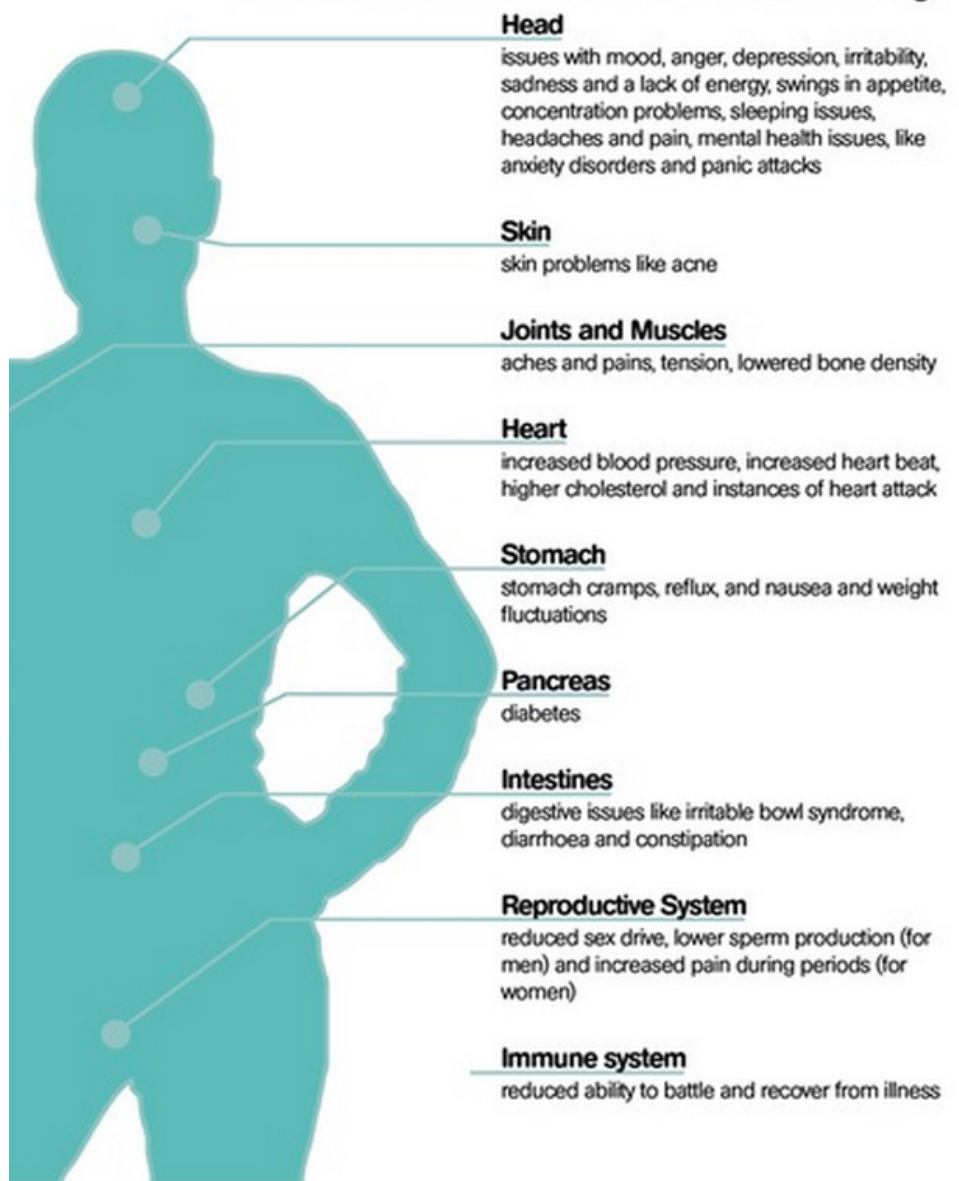
Cortisol is the main stress hormone made in your adrenal glands and it's designed to get you out of danger. When you're in a stressful situation, you feel the positive effects of cortisol – the rise of energy, the sharp focus, the charge.

Cortisol has 3 main jobs: raise blood sugar (to feed muscles so you can run or fight), raise blood pressure, and modulate immune function.

There are two key points about a healthy stress response that need to be emphasized: First, it takes priority over all other metabolic functions in the body and second, it wasn't designed to last very long.

Our ancestors used this response to escape life-threatening situations like running from woolly mammoths! Their adrenals would release adrenaline and cortisol which would immediately increase their heart rate and blood pressure, release energy stores for immediate use, shut down digestion and other secondary functions, and sharpen their senses. Thousands of years later, our bodies still respond the same way, except nowadays we are not running away from anything! In the past there would be acute moments of stress followed by periods of rest but today we are in a constant state of chronic stress.

What Stress Does to Your Body



There are two types of stress – external stress and internal stress. External sources of stress could be a demanding job, relationship turmoil or living in a polluted city. Internal sources of stress include poor eating habits, skipping meals or reliance on caffeine. When you skip meals or consume something that doesn't work for your metabolism – sugar, caffeine, refined flour products – or you have extreme amounts of external stress, your adrenals over-produce cortisol and it's levels rise in your body.

If this were to happen once or twice a month it would be okay, but for most of us it happens every single day with absolutely no let-up. This eventually leads to what is known as the "cortisol switch", where your body not only recognizes the positive aspects of cortisol but starts recognizing the negative aspects of cortisol too.

Example: You drink a cup of coffee and feel like a rock star for 30 minutes. Then you hit a wall and get all anxious and jittery. Your blood sugar drops and you begin to feel heavy and deflated.

Here's the deal: When cortisol is high for long periods of time, it can cause a phenomenon called Pregnenolone Steal. **Many of the hormones that support your menstrual cycle, your energy levels and your libido are derived from Pregnenolone – thyroid hormones, estrogen, progesterone and testosterone in particular.**

Basically, pregnenolone is made from cholesterol, progesterone is made from pregnenolone, and cortisol is made from progesterone. When we are chronically stressed, we use cortisol faster than it can be produced - so our bodies steal pregnenolone and progesterone to make more cortisol. This leads to low pregnenolone and low progesterone.

Over time, sustained high cortisol leads to low pregnenolone and low progesterone! This is why long periods of stress are so detrimental to a women's cycle and fertility!

It is also linked to high blood pressure, diabetes, increased belly fat, brain changes such as atrophy of the hippocampus (where memory is synthesized), depression, insomnia, loss of sex drive, and fertility problems. FACT: fat cells in the belly have four times more cortisol receptors compared to fat cells elsewhere, so your muffin top just keeps growing as your cortisol climbs and stays high.

This stress and ultimate burnout of the adrenal glands is known as Adrenal Fatigue or Dysfunction.

SIGNS AND SYMPTOMS OF ADRENAL FATIGUE OR CORTISOL DYSFUNCTION:

Inability to maintain steady energy levels throughout the day - Reliance on refined carbs and caffeine

Fatigue (lack of energy in the morning, even after a full nights sleep)

Tired but wired feeling, poor sleep (difficulty winding down or staying asleep)

Amenorrhea, light or irregular periods, worsening PMS

Dark circles under the eyes

Brain fog and forgetfulness – ADD, scattered thoughts, inability to focus on one task for long

Fertility issues – difficulty getting pregnant

Unexplained hair loss

Sensitivity to light, or difficulty seeing at night

Cravings for salt and/or sugar

Weight gain in the mid-section – the dreaded muffin top

Low stamina for stress, and easily irritated, high anxiety, panic attacks

Poor immunity; high incidence of colds and flu; chronic infections (bacterial, viral, fungal, yeast)

Light-headedness, dizziness upon standing up

Dry, unhealthy skin with excess pigmentation, adult acne

Lack of libido or no libido, cystic breasts

If the adrenals are constantly over-worked every day for years on end, the entire endocrine system becomes deficient and stops functioning properly. This is why the food you eat and proper stress management is CRUCIAL to begin healing your hormonal imbalances. Once your adrenal function is restored, cortisol production is reduced and your adrenals resume normal function and production of hormones.