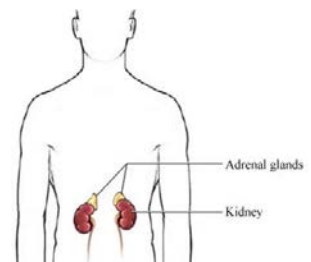


Adrenal Fatigue

What are the Adrenal Glands?

- The adrenal glands are part of the endocrine system, which is a collection of glands and organs in the body that release important hormones.
- These hormones travel through the blood and body fluids to act on other organs, tissues and cells in your body.
- The adrenals are located on top of both kidneys.
- The hormones that the adrenals secrete are responsible for a number of normal body functions and are necessary for life.



Key Adrenal Gland Hormones:

- **Cortisol:**
 - Provides your body tissues with energy to combat the effects of stress, keeps you alert and awake in the daytime, it decreases at night to allow you to sleep, it is a natural anti-inflammatory, and it stimulates the immune system.
- **DHEA:**
 - A natural anti-inflammatory hormone, it is used to convert into other hormones that your body may need, may be responsible for female libido, is a source of estrogen after menopause.
- **Aldosterone:**
 - Involved in the balance of salt and water in your body, therefore affects your blood pressure.
- **Adrenaline (epinephrine):**
 - Gives that well-known “adrenaline rush” sensation and is part of the “fight or flight” reaction of extreme or sudden stress.

Stress and the Adrenals:

- When you are under elevated acute stress (e.g. Studying for final exams, meeting a deadline, skipping a meal) your adrenals respond by producing **more cortisol** to help you deal with that stress.
- This adrenal response can be helpful and harmless in getting you through the stress in the **SHORT TERM**.
- However, if the stressful situations **continue for too long** and the cortisol levels remain chronically elevated and the adrenal glands may eventually burn out
▶ **ADRENAL FATIGUE** .
- The cortisol levels will drop as the adrenals begin to fail to keep up with the person's need for stress hormones.

Symptoms of Adrenal Fatigue:

- Fatigue, lethargy
- Light-headedness (including dizziness and fainting) when rising from a sitting position or laying-down position
- Lowered blood pressure and blood sugar
- Difficulty concentrating or remembering (brain fog)
- Consistently feeling unwell or difficulty recovering from infections
- craving either salty or sugary foods to give them energy
- Unexplained hair loss
- Nausea
- Alternating constipation and diarrhea
- Mild depression
- Decrease sex drive
- Sleep difficulties
- Unexplained pain in the upper back or neck
- Increased symptoms of PMS for women
- Tendency to gain weight and inability to lose it - especially around the waist
- High frequency of getting the flu and other respiratory diseases – plus a tendency for them to last longer than usual.

Prevalence of Adrenal Fatigue:

- Up to 80% of people at some point in their lives!

How do we Diagnose Adrenal Fatigue?

- Based on the above symptoms
- Pupil dilation exam
- Orthostatic blood pressure
- Hormone testing (blood, salivary)- e.g. Cortisol, DHEA

Treatment Strategies:

- Get enough sleep
- Reduce stress
- Exercise regularly
- Eat a healthy diet
- Vitamins and supplements