



Hormone Balancing 101

Everyone's Guide to Better Health

Hormones determine how we feel. Many physicians believe it is the most important thing you can address for optimizing your health after diet and exercise.

Starting with the day we are born, the body produces hormones (chemical messengers) to control how and when things happen in the body; growth, development, and most physical and mental functions that happen all throughout life.

Most hormones are produced by a group of glands known as the endocrine system. Even though these glands are located in various parts of the body, they are considered one system because of how they work together. These glands include ovaries (female), testes (male), adrenal and thyroid glands and pancreas.

The hormones travel from these glands into the blood stream and are then delivered to the right cells in the body. **Hormones are extremely powerful – when they reach the right cells in the body it's like they flip a switch and the light goes on.**



The impact of unbalanced hormones is widespread. The causes too are multiple, physical demands, emotional stress, or simple aging. Often when imbalanced, the signals do not reach the right place at the right time. Sometimes cell functions stop working completely. At other times, cells are over stimulated and work too hard. All this chaos can cause unpleasant symptoms and even set the stage for developing chronic disorders or disease.

Most hormones cannot be stored in the cells of the body. They work on an “as needed” basis. (Kind of like teenagers do!). Therefore, they must be made and released into the blood at the precise times they are needed. To keep this intricate timing arrangement of hormones balanced, the body must constantly fine-tune hormone release to keep proper levels. It's a bit like two people attempting to keep both sides of a teeter-totter in the air.

Actually – it's even harder than that because the hormones all “communicate with each other”. If one gets out of balance, then the others try and adjust up and down to compensate. It becomes like six people attempting to keep both sides of the teeter totter from hitting the ground.

Because of this complexity, a hormonal issue rarely stems from just one hormone. If there is a disruption in the balance of hormones produced by one gland it can cause other glandular systems to participate and soon throw off the body's entire system. Throw one panicking chicken into the hen house and before long all the other chickens will be running around like maniacs!

Hormones have a profound effect on your everyday health and well-being. Although we only have tiny amounts of hormones, they do act throughout the body in a very powerful way...sort of like perfume – a little goes a very long way. Hormones have individual affects, but also interact with each other to produce dramatic effects in the body.

Female hormone imbalance

The brain produces follicle stimulating hormones (FSH) and luteinizing hormone (LH). These hormones tell a woman's ovaries to make several other hormones. Most important are estrogen and progesterone which interact to coordinate a woman's menstrual cycle during her reproductive years. When any of the hormones coming from the brain or the ovaries are imbalanced, symptoms may occur. Imbalances are most common in puberty and menopause, but imbalances can happen at any age. Several conditions are well known to be associated with hormonal imbalance including: polycystic ovarian syndrome (PCOS), endometriosis, breast disease, and irregular periods.

Symptoms of female hormone imbalance (in alphabetical order)

- * Acne or oily skin
- * Bloating
- * Bone loss
- * Decreased fertility
- * Depression
- * Excess facial and body hair
- * Hot flashes
- * Heavy or painful periods
- * Irregular periods
- * Irritability
- * Loss of muscle mass
- * Loss of scalp hair
- * Low libido
- * Memory lapses
- * Mood swings
- * Nervousness
- * Night sweats
- * Poor concentration
- * Sleep disturbances
- * Tender or fibrocystic breasts
- * Urinary incontinence
- * Vaginal dryness
- * Weight gain

Male hormone imbalance

The brain produces the pituitary hormones follicle stimulating hormone (FSH) and luteinizing hormone (LH) which trigger hormone production from the testes. The testes produce nearly 95% of all male testosterone. The rest comes from the adrenal glands. The testes also produce small amounts of estrogen. As a man gets older, testosterone levels fall and estrogen levels tend to rise. Lower testosterone levels may affect bone density, muscle strength, body composition and sex drive. The imbalance that occurs when testosterone is low in relation to estrogen may also contribute to prostate problems.

Symptoms of male hormone imbalance (in alphabetical order)

- * Bone loss
- * Decreased mental clarity
- * Decreased muscle strength
- * Decreased stamina
- * Decreased urine flow
- * Depression
- * Erectile dysfunction
- * Hot flashes
- * Increased abdominal fat
- * Increased urge to urinate
- * Irritability
- * Low sex drive
- * Mood swings
- * Night sweats
- * Poor concentration
- * Sleep disturbances

Adrenal Gland Imbalance

The adrenal glands produce three types of steroid hormones two of which we hear about a lot: glucocorticoids (cortisol) and androgens (DHEA/DHEAS). Cortisol is there to make sure the body can respond and adapt to the stresses of daily life – it's our fight or flight hormone. It also helps to maintain blood sugar levels and supports a healthy immune system.

Androgens made by the adrenals provide the majority of DHEA for both men and women. For women, the adrenal glands are the major source of testosterone (in men it's the testes). If the adrenal system is out of balance people may have problems with their nervous and immune systems, blood sugar irregularities, and high testosterone and DHEA levels.

Symptoms of adrenal imbalance (in alphabetical order)

- * Allergies / asthma
- * Arthritis
- * Bone loss
- * Chemical sensitivities
- * Morning/evening fatigue
- * High blood sugar
- * Increased abdominal fat
- * Memory lapses
- * Sleep disturbances
- * Sugar cravings