

Hormones act as the body's messengers. They are secreted into the bloodstream and control most major bodily functions. Hormones are vital to a person's health, however, as you age, hormone production progressively decreases. Synthetic hormones are often prescribed by doctors in an attempt to restore the body's hormonal balance. Unfortunately, synthetic hormones also produce undesirable effects such as weight gain, bloating, headaches, fatigue, heart disease, and possibly cancer. On the other hand, bioidentical hormones, an alternative to commonly prescribed synthetic hormones, are natural hormones identical to those produced by the body itself. Since they are natural and identical in structure to those produced by the body, they allow the body to function at an optimal level as instructed by hormones without negative side effects. Along with a healthy diet and exercise and nutritional supplements a person's body can be restored to hormonal balance and well being.

DHEA – dehydroepiandrosterone

DHEA is hormone produced by the body's adrenal glands and also the brain. It functions as a precursor to male and female sex hormones. It is the most abundant hormone in the body and regulates metabolic functions and hormone balance. DHEA can increase energy strength and libido, as well as reduce cardiovascular disease and increase sexual vitality.

Pregnenolone – P5 endogenous hormone

Pregnenolone is steroid hormone produced in the brain. It can be converted into progesterone, functions as a memory enhancer, and is a factor in cell repair, particularly in the brain and nerve tissue. It is a natural defense against brain injury and facilitates cerebral functioning.

Melatonin

Melatonin is produced by the pineal gland (a pea size gland in the brain). It is a neurotransmitter hormone that regulates circadian rhythms. The body rejuvenates and repairs itself during state 4 (REM) sleep. Melatonin has a powerful antioxidant effect which helps prevent disease. Deficiency in melatonin is linked to poor sleep, jet lag, irritability, hypersensitivity, and premature aging.

Thyroid Hormones – T4 & T3

Thyroid hormones are produced by the thyroid gland. There are two hormones produced T4 (Thyroxine) and T3 (Triiodothyronine), both of which are essential to the function of every cell in the body. Thyroid hormones regulate the body's growth, temperature, metabolism, and cerebral functioning. The thyroid hormone is probably the safest and most beneficial cholesterol reducing agent and vital in the prevention of cognitive impairment.

Growth Hormone – Human Growth Hormone (HGH)

HGH is produced in the pituitary gland and responsible for cell growth and regeneration. It also contrib-

utes to bone and muscle strength, brain function, enzyme production, integrity of hair, skin, and nails, and fat breakdown. Growth hormone becomes deficient with age leading to increased fat and body weight and lower energy levels. Growth hormone supplementation can result in improving energy level, body fat, wrinkles and muscle pain.

Testosterone – Sex Hormone

Testosterone is produced in the adrenal glands, testes, and ovaries. In men it is the primary sex hormone. Its key role is in reproduction and the maintenance of bone and muscle strength. It protects against cardiovascular disease, hypertension, and arthritis. Testosterone hormones decrease cholesterol, improve skin tone, healing capacities, increased libido and sexual performance. Testosterone in women is converted to the primary female sex hormone. It also plays an important role in body fat reduction, libido, endurance, and energy.

Estrogen – Estrone, Estradiol, Estriol

Estrogen is the primary female hormone produced by the ovaries, fat cells and adrenal glands. It is responsible for a female's physical features, as well as reproduction and instrumental in bone formation. Estrogen protects against heart disease, stroke, osteoporosis, Alzheimer's disease, memory disorders, vaginal atrophy and urinary incontinence. It also prevents symptoms of menopause such as hot flashes and mood swings. Estrogen is also produced in men and thought to effect sperm count.

Progesterone

Progesterone is a steroid hormone secreted by the corpus luteum (a hormone secreting structure) in the ovaries and by the adrenal glands. Its primary function is to prepare a woman's body for pregnancy and maintain pregnancy thereafter. If a woman becomes pregnant, progesterone is also secreted by way of the placenta. Progesterone also plays a role in sexual desire and protects against uterine and breast cancers, osteoporosis, fibrocystic disease, and ovarian cysts.