HOLTORF MEDICAL GROUP®
CENTERS FOR HORMONE IMBALANCE, HYPOTHYROIDISM AND FATIGUE

DHEA de•hydro•epi•an•dros•ter•one

This is the most abundant hormone in the body, and it is also a precursor hormone, which is a substance from which other important hormones are produced. DHEA is mainly secreted by the adrenal glands but is also produced by the skin and brain. It is an essential component in many of the body's physiological and metabolic functions including building the immune system, reversing the effects of stress, regulating hormone balance and helping maintain levels of well-being. It promotes an anabolic or protein building state, which increases lipolysis or breakdown of fat. It can increase energy, strength and libido. Studies link it to reduced cardiovascular risk and restored sexual vitality.

PREGNENOLONE preg•nen•o•lone

This is another precursor hormone. It is made in the brain, it functions as a memory enhancer, and is a factor in cellular repair, particularly in the brain and nerve tissue. It protects against neuronal injury and facilitates cerebral function.

MELATONIN mel•a•ton•in

This is produced by the pineal gland (in the brain). It is a neurotransmitter hormone that regulates circadian rhythm (your patterns of sleep). Research has shown that the cells of the body rejuvenate and repair during the deeper stages of sleep. Deeper stages of IV sleep help produce natural "CD4" killer cells—which are important to a strong immune function and growth hormone production. Deep sleep also helps energize the body and improve mood. Melatonin has powerful antioxidant effects, which also helps disease prevention. Melatonin deficiency is linked to poor sleep, jet lag, irritability, hypersensitivity and premature aging. Studies also link it to inhibiting breast cancer cell proliferation.

THYROID HORMONE thy•roid

Produced by the thyroid gland this metabolic hormone regulates temperature, metabolism and cerebral function. It contributes to energy levels and the body's ability to maintain a constant temperature. It increases fat breakdown, improves head hair growth, reduces cholesterol levels and bodyweight. Thyroid hormone is probably the safest and most beneficial cholesterol reducing agent yet it is infrequently used for this purpose. It is also vital in the prevention of cognitive impairment.

GROWTH HORMONE

human growth hormone—HGH

This is produced by the pituitary gland and converted by the liver into a protein called somatomedin-C or IGF-1 (insulin-like growth factor-one). It is IGF-1 that is responsible for most of growth hormone functions in the body. Growth hormone contributes to ongoing tissue repair, cell rejuvenation, bone and muscle strength, brain function, enzyme production, integrity of hair, nails and skin and fat breakdown. The signs of growth hormone deficiency are significantly correlated to the signs of aging: body composition shifts from lean muscle mass and high energy levels to increased fat/body weight and low energy levels, decreased bone mineralization (bone growth slows), vitality ebbs, and cardiovascular disease and mortality increase. Concurrent with physiological effects, decreased human growth hormone also has psychosocial effects that include impaired physical performance, poor sleep, and decreased social interaction. Growth Hormone supplementation can result in significant improvements in energy, sense of well-being, along with decreased muscle pain, body fat and signs of aging such as wrinkles.

TESTOSTERONE tes•tos•ter•one

Produced by the adrenal glands, testes and ovaries, it is a hormone vital to both sexes. It contributes to muscle mass, strength, endurance, decreased fat, increased exercise tolerance, enhancement of well being, and sex drive. In males, testosterone protects against cardiovascular disease, hypertension and arthritis. It leads to improved lean muscle mass, increased bone density, decreases in cholesterol, improved skin tone, improved healing capacity, and increased libido and sexual performance. It prolongs the quality of life by decreasing age-related diseases—as does estrogen in females. Testosterone is also extremely important in females for body fat reduction, sense of well-being, libido, endurance and energy, making supplementation an ideal option for both men and women.

ESTROGEN es•tro•gen

Primarily a female hormone, it is secreted by the ovaries, but is also present in men. In women, estrogen protects against heart disease, stroke osteoporosis, Alzheimer's Disease, memory disorders, vaginal atrophy and urinary incontinence. It also prevents symptoms of menopause, including hot flashes, irritability, mood swings and temperature dysregulation. It improves balance by improving the visual somatosensory system within the central nervous system. Estrogen deficiency also results in sagging breast tissue and skin, increased facial wrinkles, fatigue, depression, mood swings and decreased libido. Estrogen is instrumental in orchestrating the menstrual cycle and works in harmony with progesterone, both of which are essential to normal, healthy female function. Often equine (horse) based "estrogen" taken from pregnant mare's urine is used to replace human estrogen. These equine-based products actually contain equilins and estrones, not human estradiols or estriols, and these equine products have been linked to an increased incidence of cancer and heart disease.

PROGESTERONE pro•ges•ter•one

This is again considered a female hormone. The root components of the word ("pro" means "for" and "gesterone" means "gestation") clearly point out the importance of this hormone. It is produced in four areas of the body; the ovaries, the corpus luteum (the ruptured follicle), the adrenal glands—and in pregnant women, the placenta. Progesterone is often used to treat PMS. It protects against uterine and breast cancers, osteoporosis, fibrocystic disease and ovarian cysts. Often synthetic progestin is used

to replace natural progesterone and is accompanied by significant side effects.

Natural versus Synthetic Hormones

The sad truth is that because only synthetic hormones can be patented, drug manufactures have created synthetic hormones that attempt to mimic natural hormones function, yet are structurally and functionally different enough from the natural hormones they are attempting to replace. Such synthetic hormones often produce many desirable effects, but more often than not, also produce undesirable or negative side effects such as bloating, headaches, fatigue, weight gain, heart disease and possibly cancer. Natural hormones, by contrast, are substances that are structurally identical to those our bodies naturally create. Clearly, natural hormones possess the identical structure and function as substances created by our bodies and produce all the desirable effects without the undesirable or negative side effects associated with synthetic hormones. We prescribe only natural hormones because of our commitment to your total well being.

Summary

Hormones are not drugs. They are natural substances that are vital to your health. As you age, your hormone production progressively decreases, which leads to and accelerates the aging process and the onset of age related diseases. Natural hormone replacement therapy restores your body to its youthful levels of hormones by bringing them back to the levels that your body was accustomed to in its younger years. Your doctor is specially trained in this area and will formulate a program tailored to your unique physical requirements. After you receive a complete physical examination and laboratory evaluation, your doctor will prescribe hormones to restore your youthful levels. Additionally, your doctor will also make recommendations as to proper diet, exercise and nutritional supplementation as important components of your natural hormone replacement therapy program.

Protect and Preserve Your Future—Now!

Unchecked physical deterioration is not an absolute requirement of growing older. Now, you can add years to your life and untold quality as well, through natural hormone replacement therapy. How sad it is that so many will pay more per year on owning and operating a car than they will on their own present and future health.