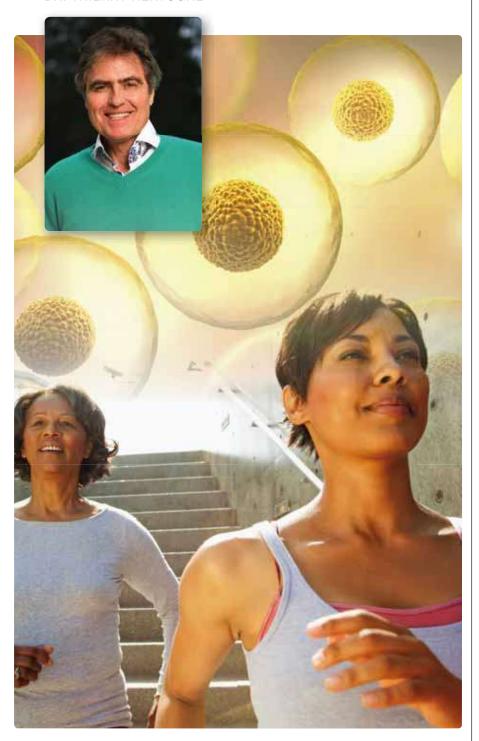
## The Anti-Aging Power of Hormone Therapy

DR. THIERRY HERTOGHE



## PART ONE

Dr. Thierry Hertoghe is one of the world's leading experts in and practitioners of hormone replacement therapy for longevity and disease prevention.

In this exclusive, two-part interview, **Dr. Hertoghe**, president of the International Hormone Society and the World Society of Anti-Aging Medicine, tells Life **Extension**® how hormone therapy can help fight disease and promote longevity.

LE: In your practice in Belgium, you use hormone replacement to treat a number of disorders. Why do you think this type of therapy is often overlooked by mainstream medicine?

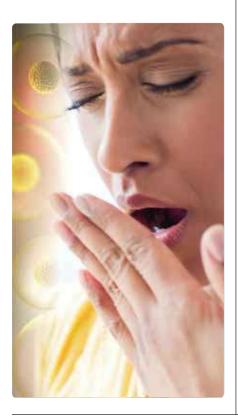
Dr. Hertoghe: Most doctors are trained to treat consequences of disease and not the cause. In contrast, most hormone therapies focus on preventing diseases and treating their causes. There are also scientifically unsubstantiated fears that hormone treatments could cause cancer or heart disease. But research shows that properly adjusted and well-balanced hormone treatments, at appropriate doses, are safe, and even protective.

There's also a widespread belief that hormone deficiencies are extremely rare and that treatments should be reserved for severe deficiencies only. But data from numerous scientific studies show that low-to-normal hormone levels are frequent and are associated with disease.

In addition, the science of optimal hormone replacement therapy is hardly taught in medical schools. My team and I have developed a high-level training program in "evidence-based hormone therapy" for physicians and nutritionists, which fills in these educational gaps.

**LE:** How do you use hormones to treat or prevent disease?

**Dr. Hertoghe:** I focus on detecting and treating any degree of hormone deficiencies or excesses, even mild ones. For each hormone supplementation, I try to find the dose and route of administration (oral,



transdermal, intramuscular, or sublingual) that fits the patient and the treatment best. If the patient has heart disease, diabetes, osteoporosis, or any other type of age-related disease, I will adjust my treatment to that condition. I do not focus on treating a disease but focus on correcting the **hormone deficiencies** that cause or aggravate it. In most cases the disease improves.

LE: Can you explain your belief that hormones can alter aging?

Dr. Hertoghe: There is a gradual age-related decline of hormone production. That decline is aggravated by mental and physical stress, which causes the body to compensate with increased secretion of certain hormones, which then taxes the endocrine glands that secrete them. The more an endocrine gland has to produce hormones, the more likely and quickly the patient's gland is going to prematurely age and become unable to produce enough hormones to meet daily needs.

For example, take the adrenal glands, which produce hormones to cope with stress. If stress is too severe and persistent for many months, there is no possibility for the adrenal glands to recover. After overproducing hormones, the production of the adrenal glands will collapse and end up in what is called adrenal burnout. That means the adrenals are no longer able to produce enough hormones, even in unstressed conditions.

**LE:** How can hormone therapy prevent that from happening?

**Dr. Hertoghe:** Well-adjusted hormone therapies may spare endocrine glands, stopping them from having to overwork and prematurely

age. For example, when **testosterone** is applied to male rats from youth to old age, the testicles are spared from overworking. When the testosterone treatment, which suppressed the rats' own production of testosterone, is stopped at old age, the testicles of the older rats secrete testosterone again—at levels *equal* to that of younger rats. Even the sperm production of these old rats recovers to a rate equal to that of young rats!

**LE:** What conditions do you treat with hormone therapy?

**Dr. Hertoghe:** The most frequent reasons patients come to see me are *psychological* complaints, such as **fatigue**, **depression**, and low resistance to **stress**. The most frequent *physical* complaint is to restore a more youthful physical appearance.

Then come age-related diseases, such as cardiovascular disease, hypertension, and diabetes. Cancer is a rarer condition for us to treat. That's not because of a lack of ability—we are able to stimulate the immune system of the patient considerably and improve health and energy levels—but because of the unjustified fear patients have of taking hormones.

The results we have seen on age-related diseases are very satisfying. Our treatments should be considered as adjuvant and complementary interventions to that of the patient's medical specialists. We cannot promise full recovery, but in many cases we seem to be able to help our patients come close to full improvement.

**LE:** Can you walk us through how you begin to treat a patient with hormone therapy?

Dr. Hertoghe: In our clinic, patients first fill out extensive questionnaires on their medical history and that of their family, and on about 15 hormone deficiencies or excesses. We also review the patient's diet in detail, which is of crucial importance. Many of the hormone treatments may not work well if the patient's diet is too far from the Paleolithic diet. This type of diet consists of eating the types of unprocessed foods that have existed on earth for millions of years, such as fresh and organic fruit and vegetables, unprocessed meat, fish, poultry, and eggs cooked at low temperature without oil.

Then we do laboratory tests. These are not only blood tests, which provide a snapshot of hormone levels, but also 24-hour urine hormone tests, which provide a more stable, 24-hour picture of what is happening with the hormones.

**LE:** What are the next steps?

Dr. Hertoghe: Based on this information, we start with hormone and nutritional supplementation, insisting that the patient also follow a Paleolithic-type diet for at least five out of seven days to guarantee full efficacy of hormone treatments. We also inform patients that it is more efficient, safer, and better to correct all their important deficiencies and not just one or part of them. Otherwise, treatments are unbalanced and less efficient.

Some treatments, such as thyroid and growth hormone, have to be started at very low doses and then slowly increased. Other treatments, such as adrenal hormones (DHEA, cortisol, pregnenolone, aldosterone), sex hormones (testosterone, estrogen, progesterone), and melatonin, may be started at the dose that is

expected to be optimal. Patients are informed of signs and symptoms of deficiency and excess of each hormone treatment and encouraged to regularly check them. The patient is also seen in regular follow-ups.

LE: You mentioned that age and stress harm hormone production. What other factors impact hormones?

Dr. Hertoghe: Many environmental factors do. It is not wise to eat foods or drink beverages that contain pollutants. For example, research has shown that plastic subunits from the walls of plastic water bottles migrate into the liquid. These units have effects similar to estrogen.

Toxins in food, such as trans fats and the polycyclic aromatic hydrocarbons that appear in barbecued food, damage the endocrine glands and make them age faster. Pesticides in food may also be a problem because many of them have an affinity for sex hormone receptors and may block the beneficial effects of sex hormones.

Alcohol contains three types of estrogens: phytoestrogens, mycoestrogens, and estrogenic pesticides. These all oppose testosterone action. Additionally, alcohol speeds up the conversion of testosterone into estradiol in the liver, depleting

testosterone in men and increasing estrogen levels to an excessive point.

**LE:** Do you think hormone therapy will become more accepted in the future?

Dr. Hertoghe: The most impressive advance in medicine in the next decades will come from a shift in focus from therapies that treat the consequences of disease to those that treat the causes. Doctors and patients will pay greater attention to hormone and nutritional therapies and use pharmaceutical drugs as additions in areas where hormone and nutritional supplementation are not sufficient. •

If you have any questions on the scientific content of this article, please call a **Life Extension**® Wellness Specialist at 1-866-864-3027.

Part Two of this interview will continue in the September issue.

Dr. Thierry Hertoghe practices medicine at his clinic in Brussels, Belgium, where he specializes in using hormone treatments and nutritional therapies to fight disease, optimize health, and promote longevity. He is president of the International Hormone Society and the World Society of Anti-Aging Medicine.

