Vasopressin

Testosterone

Thyroid

Melatonin

Aldosterone

Estrogen & Progesterone

Growth Hormone

Calcitonin

MSH

"Look after your hormones, they will look after you!"

IGF-1

Parathormone

DHEA & Androstenedione

Insulin

Cortisol & Glucocorticoids

Pregnenolone

Oxytocin

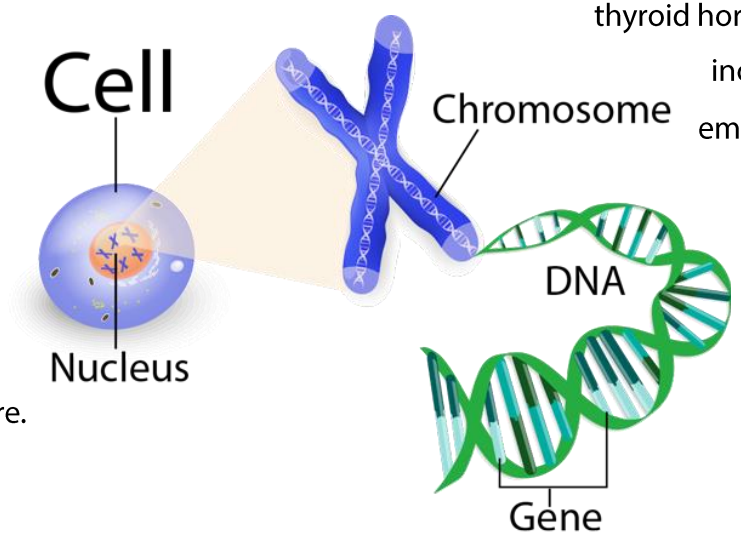
WHAT HORMONES MEAN TO YOU?

The body contains more than one hundred different types of hormones, and they pour into your bloodstream at the rate of thousands of billions units per day. Hormones regulate your heartbeat and your breathing. Hormones make men "men" and women "women". Hormones put you to sleep at night and wake you up in the morning. They control your blood pressure. They build bone, maintain muscle tone, and lubricate joints. Hormones govern growth. They make the body produce energy and heat. Hormones burn fat. Hormones govern the menstrual cycle and allow pregnancy (and birth) to occur. They fight stress, prevent fatigue, calm anxiety, and relieve depression. Hormones make and keep memories. Hormones maintain the correct level of sugar in the blood and tissues. They resist allergic reactions and infections. They soothe pain. Hormones control your sex drive, virility, and fertility. They stimulate your brain and your immune system.

Hormones are crucial to every single function of the human body.
No one can live without them.

WHAT HORMONES MEAN TO YOU?

Hormones are made in the endocrine glands, then flow into the bloodstream and are carried to every part of the body to produce their varied effects. Hormones direct and coordinate the body's cells to ensure their proper functioning. From the blood they penetrate deeply into the cells, usually acting on the genes in the nucleus, unlocking a portion of the genetic code, accessing the information the cells need to do their jobs, including making hormones. Some, like the thyroid hormones, act on practically every cell of the body. Others act in a more focused manner, on just one or two organs, like aldosterone, which works in your kidneys to retain water and salt in your body, thereby maintaining blood pressure.



With hormonal deficiencies, the cells won't – can't – function as well. Total absence brings total disorganization. To take just one example, the complete absence of thyroid hormones would turn a human being into an unconscious organism, incapable of forming the simplest thought or feeling the most basic emotion. In a sense, we wouldn't even be human without hormones.

Hormone, *"to set life in motion"*

WHAT HORMONES MEAN TO YOU?

Brain: pregnenolone, DHEA, ACTH, etc.

Pituitary gland :
- **anterior:** growth hormone, ACTH, TSH, etc. ;
- **posterior:** vasopressin

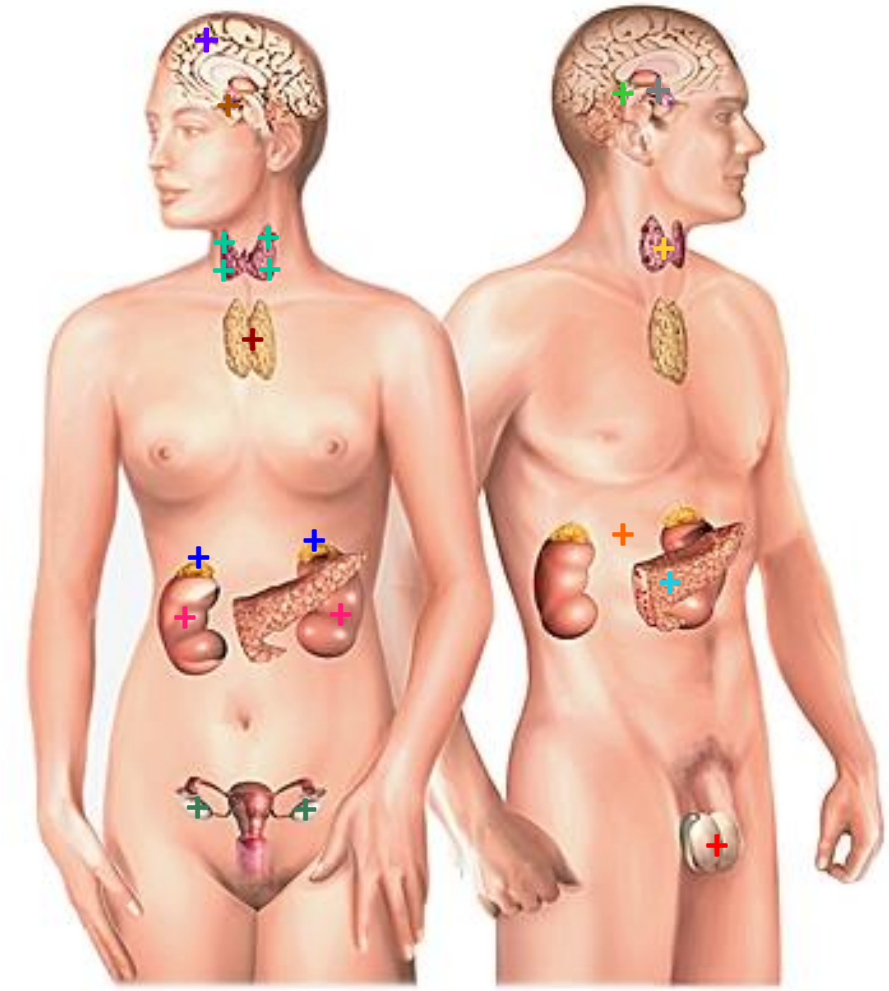
Parathyroid glands: parathormone

Thymus: thymosins

Adrenal glands: DHEA, cortisol, aldosterone, pregnenolone

Kidneys: EPO (erythropoietin); convert thyroid hormone T4 into the active T3

Ovaries (female): estrogens and progesterone; some androgens



Hypothalamus: vasopressin and oxytocin

Pineal gland: melatonin and epitalon

Thyroid gland: thyroid hormones, calcitonin

Liver : somatomedin C; converts thyroid hormone T4 into the active T3

Pancreas: insulin

Testicles (male): testosterone and dihydrotestosterone

WHAT HORMONES

DO FOR YOU?

Oxytocin has many roles.

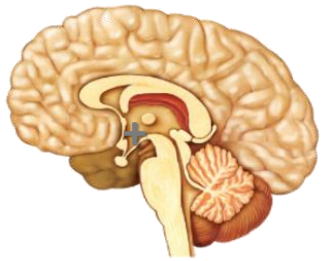
Psychosocial effects:

+ Oxytocin stimulates sociability, friendliness and deeper bonds between people more than any other hormone.
+ It may improve the mood, making people smile more in the presence of others.
+ Oxytocin reduces anxiety, especially for social encounters.

Physical effects:

+ Oxytocin can prevent ischemia by dilating the diameter of arteries, including the coronary arteries of the heart.
+ By the same vasodilatory effect, oxytocin can lower the blood pressure.
+ Oxytocin may speed up wound healing, possibly by increasing blood supply to the wound thanks to its vasodilatory effects.
+ Oxytocin increases pleasure at orgasm.
+ Oxytocin may relax muscles and reduce pain, beneficial effects that may be of considerable help to patients with fibromyalgia.
+ Etc.

WANTED!



Name: Oxytocin

Origin: Hypothalamus

Daily production: 1-2 IU

Features: Factors that increase oxytocin levels are physical contact, hugging, massage, noise, reading, singing physical activity, sexual contacts, cohabitation and eating.

Signs of Oxytocin Deficiency

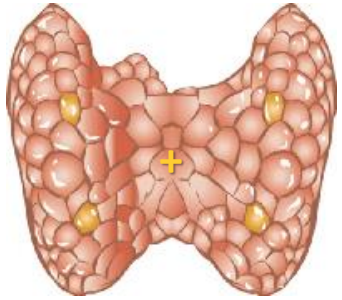
Paleness, no or poor emotional manifestations, excess pain sensitivity, excessively (emotionally) detached from others, irritability, etc.

WHAT HORMONES
DO FOR YOU?

Thyroid hormones (thyroxine (T4) and triiodothyronine (T3)) increase blood flow, heart rate, heat production, metabolism, energy production and consumption, speed of thinking, intestinal motility, thirst, urination, HDL (good) cholesterol, immune defenses against various infections and cancer, and many other functions.

Also, thyroid hormones beneficially decrease total and LDL (bad) cholesterol, diastolic blood pressure, the amount of "myxedema" , the edema consisting of mucous waste products outside the cells that are typical of thyroid deficiency, and accelerate the elimination of old defective enzymes and other waste products inside the cells.

WANTED!



Name: Thyroid Hormones

Origin: Thyroid Gland

Daily production:

- T4: 80-100 µg
- T3: 20 µg

Features: Eating high calorie diets, fruits and vegetables can increase thyroid activity. Eating sugar does too, although transitorily, an effect that perhaps explains why certain people like eating sugar.

Signs of Thyroid Deficiency

Obesity, prone to an ear, nose, and/or throat infection, morning fatigue, intolerance to cold, easily shivers, etc.