

Q&A

You Have Questions?

We Have Answers



Growth Hormone & IGF-1

How does growth hormone improve your health?

Growth hormone is an anabolic hormone, which means that it builds up your body. It does this partly directly by regenerating tissues and mildly increasing the blood sugar level, partly indirectly by stimulating the secretion of another powerful hormone—called IGF-1 or insulin-like growth factor I—because of its analogy with insulin in structure and action (lowering the blood sugar level).

Growth hormone not only builds up your muscles, blood vessels and bones more than testosterone—the male hormone—can, but it also builds up the nervous tissue, including the brain and its neurons (brain cells), and increases the blood sugar level to provide more energy. Thus, growth hormone has not only powerful actions on our physical appearance and health, but also, and even more, on our minds and moods.

In the brain, growth hormone intensifies the number of contacts between the neurons or nerve cells while increasing their activity. In the nervous system, growth hormone strongly stimulates the parasympathetic nerves, the nerves that calm us down. In the blood, growth hormone increases the sugar level, the main substrate for energy in the neurons. These various actions of growth hormone on the brain may explain why it helps considerably to improve our memory and our capacity to multitask—doing different activities at almost the same time, while going from one into the other with easiness. They also explain why growth hormone may deeply reduce anxiety and provide a sort of sixth sense for many patients, or a capacity to find solutions all the time to almost any problem, while others who are not treated seem confused, hesitate, and turn around the pot when confronted with the same problems.

Can meditation help to improve growth hormone effects?

Meditation or spiritual practices may help to increase growth hormone. One hour of training, for example, significantly increased the blood concentrations of growth hormone in elderly men. Increases of 5 to 15% can be expected with such practices. This may not seem like much, but for people with borderline low growth hormone levels, it may make the entire difference. These increases in growth hormones may also explain some of the calmness and inner peace felt by practitioners after a session

What are the side effects of IGF-1?

In addition to the rare hypoglycemia, stiffness can occur due to excessively tonic muscle development (muscles becoming hard). Overdose effects of IGF-1 are similar to those with growth hormone excess such as swelling of the feet, hands, and nose as well as muscle overdevelopment.

At what age, and at what pathology should IGF-1 treatment be used, since it does not prolong, but shortens life?

Studies have shown the efficiency of IGF-1 treatment. Please refer to these articles and references for more information about it:

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- Bartke A. Can growth hormone (GH) accelerate aging? Evidence from GH-transgenic mice. *Neuroendocrinology.* 2003 Oct;78(4):210-6.
- Laron Z. Effects of growth hormone and insulin-like growth factor 1 deficiency on ageing and longevity. *Novartis Found Symp.* 2002;242:125-37; discussion 137-42.

SEND US YOUR QUESTIONS

Send us your questions at office@hertoghe.eu and discover Dr. Hertoghe's replies in next week edition: «Testosterone in men and Women».

Warning: Questions concerning personal cases and/or on consultations will not be considered. The information in this article is published for informational purposes only and can not be considered as personalized medical advice. This is not a prescription. There are possible contradictions for the products mentioned. No treatment should be undertaken based solely on the contents of this article and it is strongly recommended that the reader consult with health professionals accredited to the health authorities for any questions related to their health and well-being.



If you want to take your exam before the end of the year, note that we have just opened four new exam sessions. Save the date, come and take your exam in Brussels and enjoy the beautiful city for the weekend.

Available dates:

- Friday, September 29, 2017 - 2pm
- Friday, October 20, 2017- 2pm
- Friday, November 24, 2017- 2pm
- Friday, December 22, 2017- 2pm

Registration

None of the proposed dates suit you? Any questions? Contact us at office@hertoghe.eu

