

The average temperature of the sauna was 176F, with approximately twenty percent humidity also produced higher HGH levels. Sauna bathing has a moderate to optimal effect on growth hormone levels for certain individuals. Therefore, to increase your GH levels, it may be a good idea to spend some time in a sauna. Featured Image by Pixy



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**Andrew Huberman : Sauna Protocol To 16x Growth Hormone**

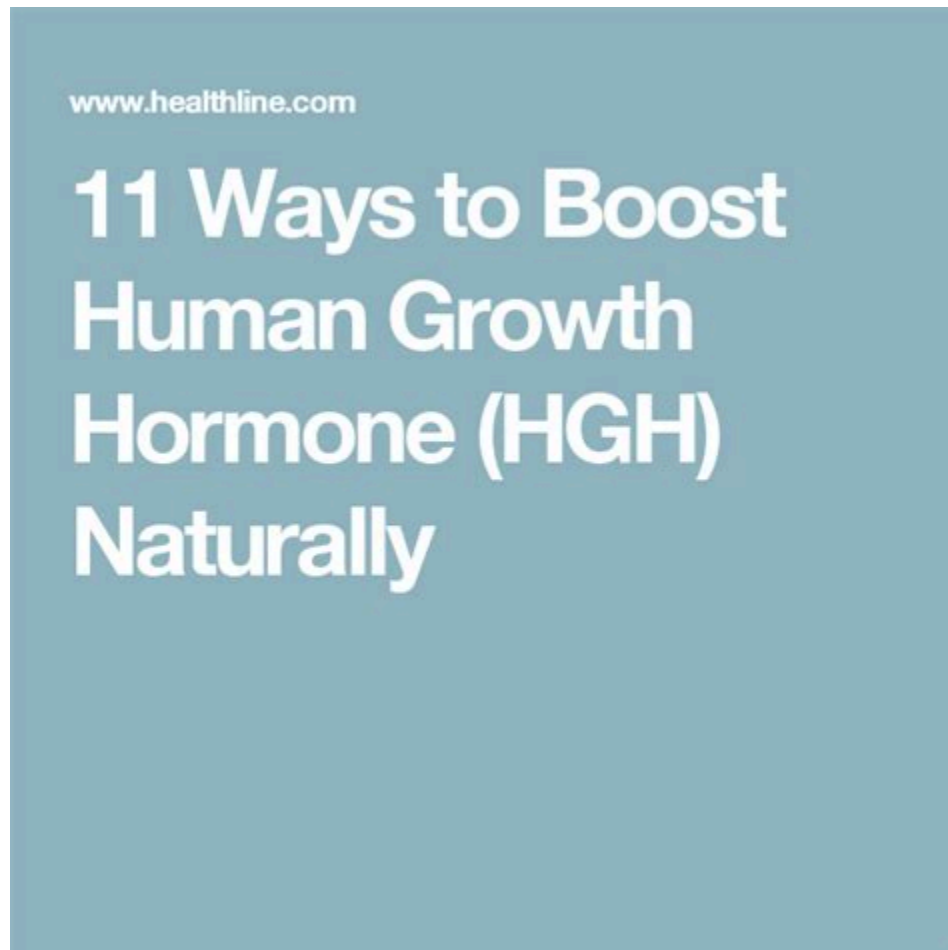
#653  
Heat therapy:  
Growth  
hormone up  
16x

**Andrew Huberman**

DoctorsToTrust.com Huberman Lab Podcast

Two 1-hour sauna sessions at 176°F, 7x/wk produced a 16-fold increase in hGH levels after day 3. Traditional dry saunas are the hottest (~173°F) and thus the most efficient at raising hGH levels.

## **10 Ways to Boost Human Growth Hormone (HGH) Naturally - Healthline**



The growth hormone effects generally persisted for a few hours post-sauna (Hannuksela and Ellahham, 2001). It is noteworthy, however, that sauna use and exercise work synergistically to significantly elevate growth hormone when used together (Ftaiti et al. , 2008). 4. 6. Immune function and respiratory infection

## HEALTH EFFECTS AND RISKS OF SAUNA BATHING

Katriina Kukkonen-Harjula, Kyllikki Kauppinen

UKK Institute for Health Promotion Research, Tampere, Finland

Received 1 February 2006; Accepted 2 May 2006

### ABSTRACT

**Objectives.** To study physiological, therapeutic and adverse effects of sauna bathing with special reference to chronic diseases, medication and special situations (pregnancy, children).

**Study design.** A literature review.

**Methods.** Experiments of sauna bathing were accepted if they were conducted in a heated room with sufficient heat (80 to 90°C), comfortable air humidity and adequate ventilation. The sauna exposure for five to 20 minutes was usually repeated one to three times. The experiments were either acute (one day), or conducted over a longer period (several months).

**Results.** The research data retrieved were most often based on uncontrolled research designs with subjects accustomed to bathing since childhood. Sauna was well tolerated and posed no health risks to healthy people from childhood to old age. Baths did not appear to be particularly risky to patients with hypertension, coronary heart disease and congestive heart failure, when they were medicated and in a stable condition. Excepting toxemia cases, no adverse effects of bathing during pregnancy were found, and baths were not teratogenic. In musculoskeletal disorders, baths may relieve pain. Medication in general was of no concern during a bath, apart from antihypertensive medication, which may predispose to orthostatic hypotension after bathing.

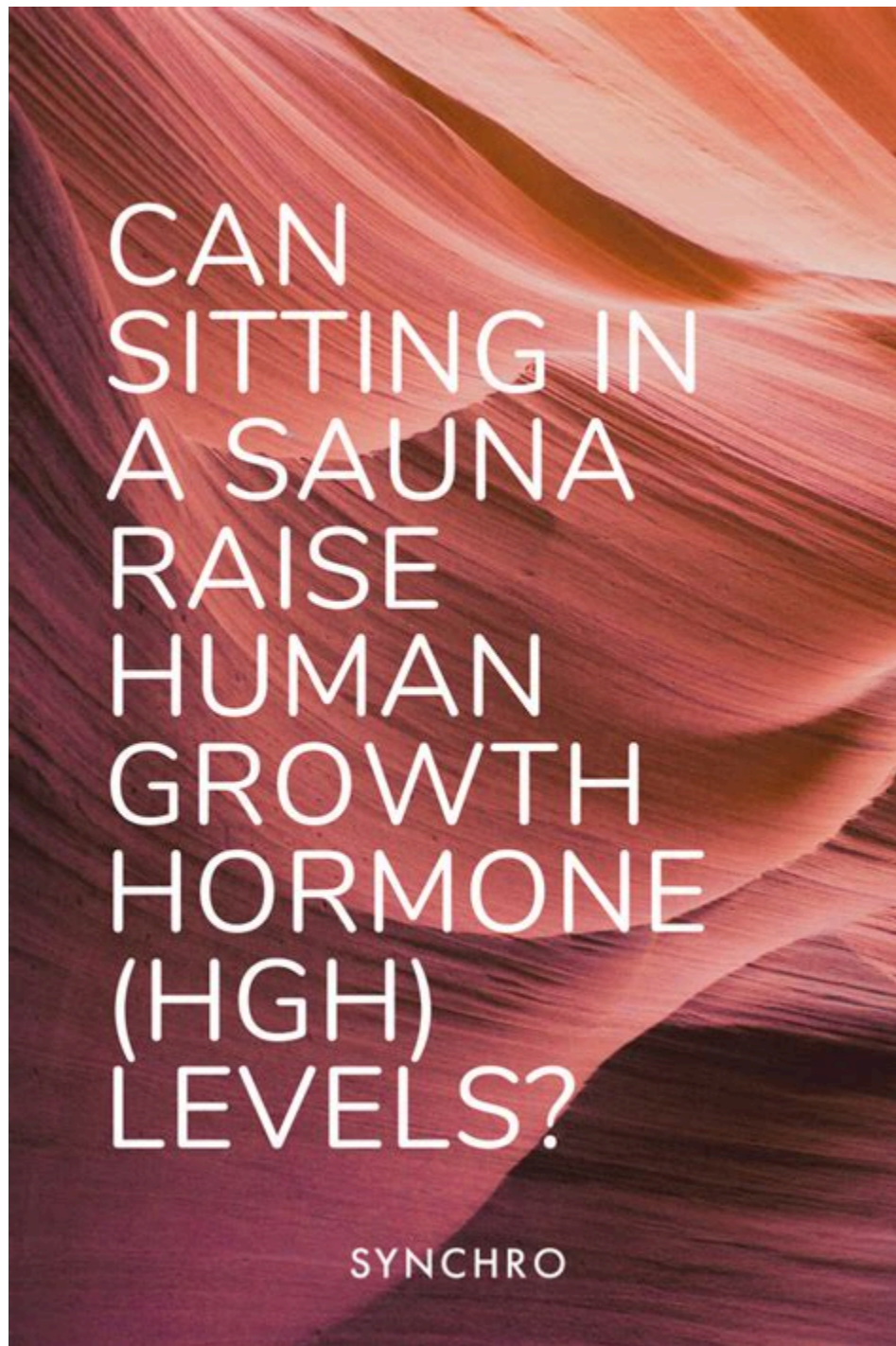
**Conclusions.** Further research is needed with sound experimental design, and with subjects not accustomed to sauna, before sauna bathing can routinely be used as a non-pharmacological treatment regimen in certain medical disorders to relieve symptoms and improve wellness.

*(Int J Circumpolar Health 2006;65(3):195-205.)*

**Keywords:** sauna bathing, cardiovascular diseases, medication, pregnancy, heat

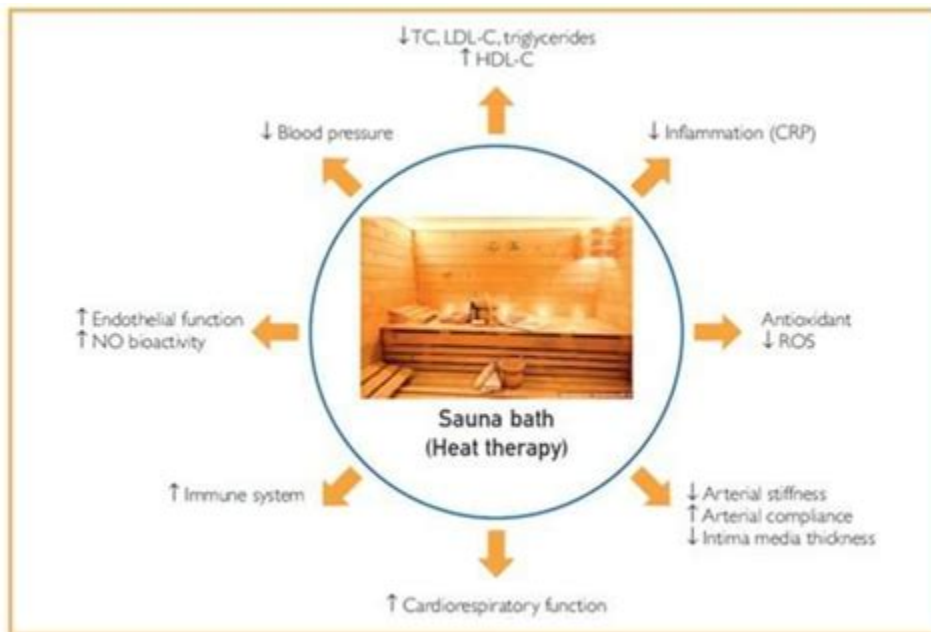
4 30-Minute Sauna Sessions (176 °F) Increases Growth Hormone 16x (Andrew Huberman discusses the study which found this in this short clip) : r/Biohackers r/Biohackers • 2 yr. ago Farnectarine4825 4 30-Minute Sauna Sessions (176 °F) Increases Growth Hormone 16x (Andrew Huberman discusses the study which found this in this short clip) podclips

## Does Sauna increase Human Growth Hormone (HGH)?



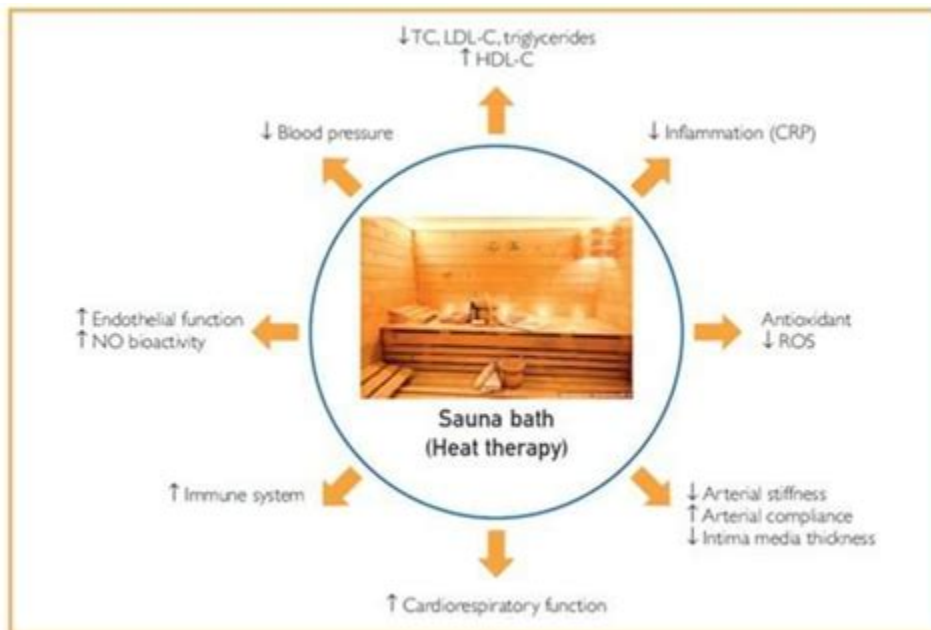
The Sauna Protocol: A Path to Hormonal Surge 30-Minute Heat Sessions: The Magic Number for Growth Hormone Imagine this: sitting in an 80°C sauna, not once but four times daily. It's intense, it's sweaty, and according to research, it may send your growth hormone soaring by 16 times.

## Endocrine effects of repeated sauna bathing - Wiley Online Library



Heat exposure decreases core body temperature. To optimize GH release and sleep: don't eat two hours before sleep and do the sauna close to sleep and in a fasted state. Hydration: You lose water .

## Endocrine effects of repeated sauna bathing - PubMed



Serum GH and prolactin in males exhibited 16- and 2.3-fold increases (P less than 0.01), respectively. In females serum prolactin rose over four-fold (P less than 0.01). The GH rise in response to hyperthermia declined after the third day but prolactin remained elevated at the end of the experiments in males.

## Are Saunas the Next Big Performance-Enhancing "Drug"?



Scientists observed a 16x rise in serum growth hormone levels after sauna use in the study participants. A much larger and longer study from Finland studying 2,300 middle aged men over 20 years found regular sauna use correlated with a much lower mortality rate than the men who didn't use the sauna as regularly or at all.

# Clinical Effects of Regular Dry Sauna Bathing: A Systematic Review

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Evidence-Based Complementary and Alternative Medicine  
Volume 2018, Article ID 1857413, 30 pages  
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## Review Article

### Clinical Effects of Regular Dry Sauna Bathing: A Systematic Review

Joy Hussain  and Marc Cohen 

School of Health and Biomedical Sciences, RMIT University, Melbourne, VIC, Australia

Correspondence should be addressed to Joy Hussain; joyhussain9@gmail.com

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**Introduction.** Many health benefits are claimed by individuals and facilities promoting sauna bathing; however the medical evidence to support these claims is not well established. This paper aims to systematically review recent research on the effects of repeated dry sauna interventions on human health. **Methods.** A systematic search was made of medical databases for studies reporting on the health effects of regular dry sauna bathing on humans from 2000 onwards. Risk of bias was assessed according to the Cochrane Collaboration guidelines. **Results.** Forty clinical studies involving a total of 3855 participants met the inclusion criteria. Only 13 studies were randomized controlled trials and most studies were small ( $n < 40$ ). Reported outcome measures were heterogeneous with most studies reporting beneficial health effects. Only one small study ( $n = 10$ ) reported an adverse health outcome of disrupted male spermatogenesis, demonstrated to be reversible when ceasing sauna activity. **Conclusions.** Regular dry sauna bathing has potential health benefits. More data of higher quality is needed on the frequency and extent of adverse side effects. Further study is also needed to determine the optimal frequency and duration of distinct types of sauna bathing for targeted health effects and the specific clinical populations who are most likely to benefit.

## 1. Introduction

Sauna bathing is a form of whole-body thermotherapy that has been used in various forms (radiant heat, sweat lodges, etc.) for thousands of years in many parts of the world for hygiene, health, social, and spiritual purposes. Modern day sauna use includes traditional Finnish-style sauna, along with Turkish-style Hammam, Russian Banya, and other cultural variations, which can be distinguished by the style of construction, source of heating, and level of humidity. Traditional Finnish saunas are the most studied to date and generally involve short exposures (5–20 minutes) at temperatures of 80°C–100°C with dry air (relative humidity of 10% to 20%) interspersed with periods of increased humidity created by the throwing of water over heated rocks [1]. In the past decade, infrared sauna cabins have become increasingly popular. These saunas use infrared emitters at different wavelengths without water or additional humidity and generally run at lower temperatures (45–60°C) than Finnish saunas

with similar exposure times [2]. Both traditional Finnish and infrared sauna bathing can involve rituals of cooling-off periods and rehydration with oral fluids before, during, and/or after sauna bathing.

Sauna bathing is inexpensive and widely accessible with Finnish-style saunas more often used in family, group, and public settings and infrared saunas more commonly built and marketed for individual use. Public sauna facilities can be located within exercise facilities and the relationship between saunas and exercise, which may include synergistic hormonal responses, is an area of active research [3–8]. The use of private saunas, especially involving infrared saunas, is also increasing and saunas are used for physical therapy in massage clinics, health spas, beauty salons, and domestic homes. This trend is capitalising on the call for additional lifestyle interventions to enhance health and wellness particularly in populations that have difficulty exercising (e.g., obesity, chronic heart failure, chronic renal failure, and chronic liver disease) [9]. Facilities offering sauna bathing often

The same research group of both studies reported earlier findings of significant increases in heart rate, systolic blood pressure, growth hormone, adrenocorticotrophic hormone, and cortisol levels along with significant decreases in diastolic blood pressure and plasma volumes after single and repeated sauna sessions in 20 women after 2 weeks of .

## Here's Why Saunas Stimulate Muscle Growth - Warner Orthopedics



In this video, we'll be discussing a groundbreaking sauna protocol that has shown to increase growth hormone levels by an impressive 16 times! If you're looking to optimize your health,

### Use Sauna & Deliberate Heat Exposure for a Healthier Life



(1) If you already use saunas, then you may already know some or all of these benefits. But did you also know that using a sauna can boost your human growth hormone (HGH) level to a massive degree? Keep reading as I discuss studies that show the huge impact that saunas have on your HGH.



## Sauna Use: 16x Increase in Growth Hormone & Cardiovascular Benefits



36 Likes, TikTok video from The King of Testosterone (@kingoftestosterone): "Neuroscientist: 16% GROWTH HORMONE is increased by Hot sauna". @KingofTestosteroneoriginal sound - The King of Testosterone.

## Can Sitting In A Sauna Raise Human Growth Hormone (hGH) Levels? - Synchro



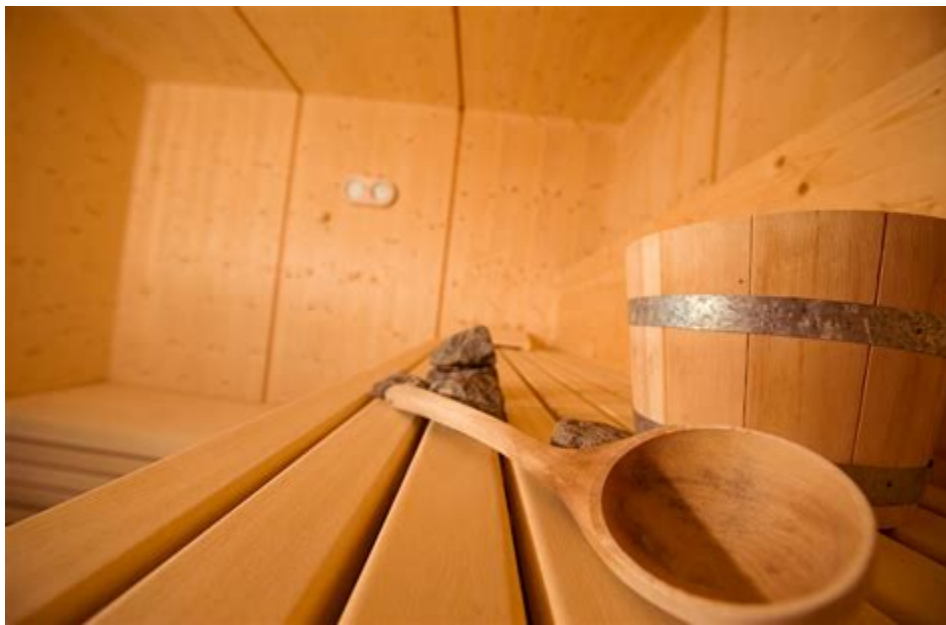
This post will explain how heat can be used to increase growth hormone, muscular hypertrophy, endurance, and otherwise aid performance. It's authored by Rhonda Perciavalle Patrick, Ph. D, and it's comprehensive. But before we get started, you need to read some background and warnings... Heat is no joke.

## **A Guide to Using Sauna to Increase Your Health and Longevity**



Protocol #3—Sauna for Growth Hormone Release. To use sauna for improved release of Growth Hormone, use the sauna infrequently (once per week or less). However, those days you do sauna, you will be in the sauna for multiple sessions of 30 minutes each with cool down periods in between. Peer-reviewed research says this protocol works well to .

### **Hot Sauna Boosts Growth Hormone by 16x - Optimize Your Health**



Sauna bathing can cause a transient increase in levels of growth hormone. The same heat shock proteins shock the body to the point where they will send stress signals to your pituitary gland which in turn will increase hormone release including human growth hormone (HGH).

## Neuroscientist: 16% GROWTH HORMONE is increased by Hot sauna - TikTok



Finally, the release of growth hormone can be stimulated through sauna use. Occasional use of specific sauna protocols, such as four 30-minute sessions with cool down periods in between, has been shown to dramatically boost the amount of growth hormone released, according to peer-reviewed research (Leppaluoto et al. , 2006).

### How Effective Is the Sauna at Increasing GH? < Life Your Way



Clearly there are a lot of potential benefits from sauna usage, but few have been conclusively proven. Even the association with increased lifespan may be a self-fulfilling prophecy caused by selection bias. That is, because sauna use is labeled as healthy, it could be that healthier people are more likely to engage in it, thus making it associated with good health and long life regardless of .

## The Science Behind Sauna Use for Boosting Human Growth Hormone



Serum GH and prolactin in males exhibited 16- and 2.3-fold increases ( $P < 0.01$ ), respectively. In females serum prolactin rose over four-fold ( $P < 0.01$ ). The GH rise in response to hyperthermia declined after the third day but prolactin remained elevated at the end of the experiments in males.

## Saunas and HGH levels - Evolutionary



Here are 10 evidence-based ways to increase human growth hormone (HGH) levels naturally. Chris Ryan/Caia Image/Adobe Stock. 1. Lose body fat. The amount of belly fat you carry is directly related .

## Neuroscientist: "Hot Sauna INCREASE YOUR Growth Hormone by . - YouTube



Dec 14, 2023 Jasper Knight Saunas across various cultures for centuries for relaxation and health purposes. And while the soothing heat exposure provides its own benefits, emerging research now suggests that dry sauna use may also offer a natural way to boost human growth hormone levels.

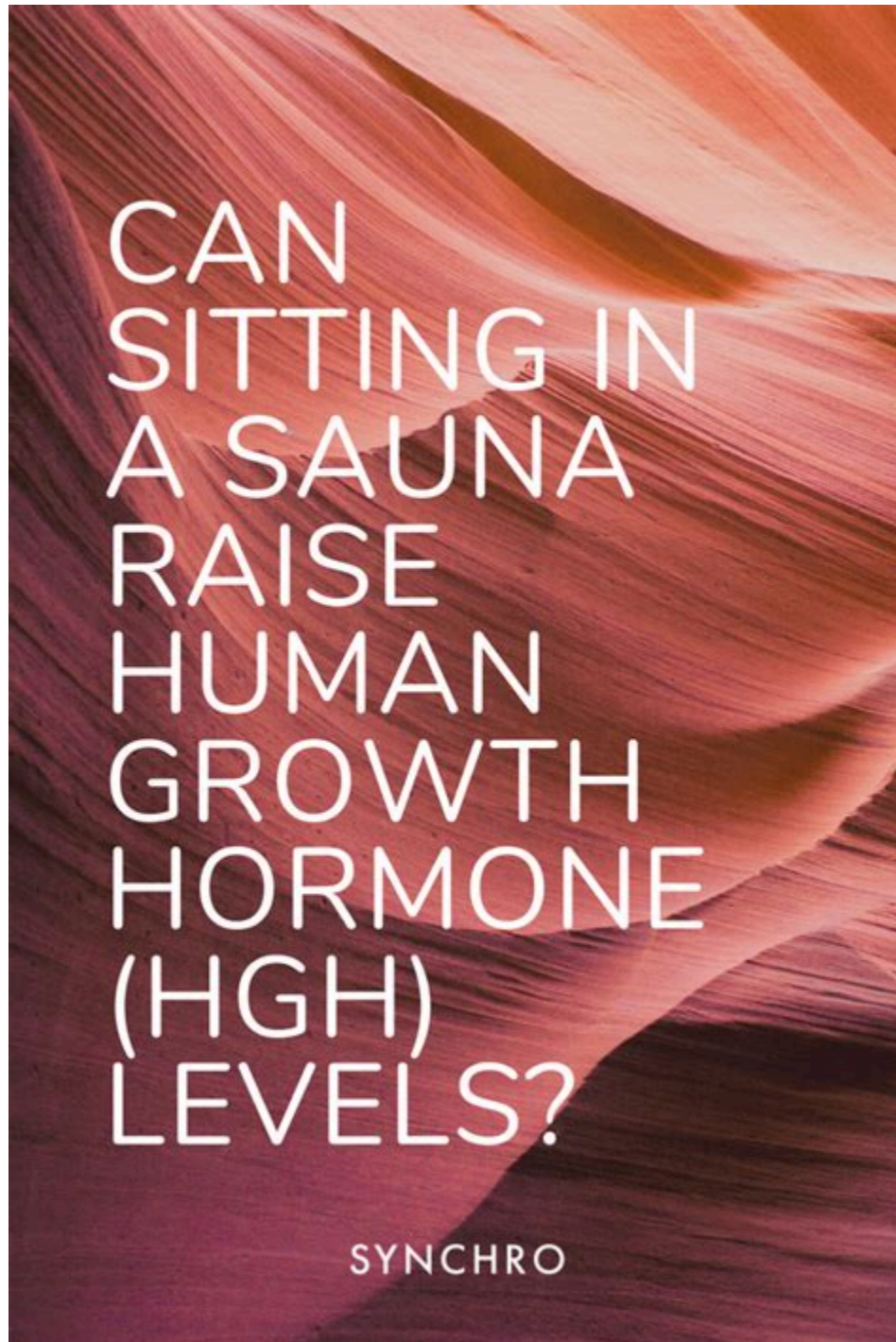
## Deliberate Heat Exposure Protocols for Health & Performance



Neuroscientist: "Hot Sauna INCREASE YOUR Growth Hormone by 16 Times" The Best Protocol To Use Sauna - YouTube This Is a Short Recap about the use of sauna & other alternative deliberate.



## 4 30-Minute Sauna Sessions (176 °F) Increases Growth Hormone 16x .



Pituitary Hormones Prostanoid Acids Thyroid Hormones The sauna induces changes in the secretion of hormones, some similar to changes induced in any other stress situation and others characteristic of exposure to the sauna. Noradrenaline is usually the only catecholamine raised by the sauna in people accustomed to it.

## Do Saunas Increase Growth Hormone - Sauna Helper



Can Sitting In A Sauna Raise Human Growth Hormone (hGH) Levels? by Graham Ryan 01 Apr 2020  
Saunas have long been valued in societies around the world for their ability to detoxify the body and promote vitality. Recently, however, research seems to indicate that the benefits of time spent in a sauna might go even deeper.

## Andrew Huberman's Sauna Protocols And The Science Behind Deliberate .



🔥 In a two-hour sauna session at 80 degrees Celsius, subjects experienced a 16-fold increase in growth hormone levels. 🧠 There is a specific sauna protocol that can increase the amount of growth hormone released into the brain and body by 16-fold. 📌 ?

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