

Human Growth Hormone (HGH)/Growth Hormone/Somatotropin

1. **Definition:** “is a peptide hormone secreted by the anterior pituitary gland”.
2. Is anabolic hormone that builds and repair tissue such as collagen & muscle tissue throughout the body.
3. Its release is stimulated from the release of Growth Hormone Releasing Hormone (GHRH), which is released as a result of exercise. HGH boosts muscle growth, strength, and exercise performance, while helping you recover from injury and disease
4. Promotes the release of Insulin-like growth factor 1 (IGF-1), which promotes anabolic effects within the body.
5. It also helps facilitate the body's response to exercise.
6. Is only released periodically, such as during certain stages of sleep, certain parts of the day and with exercise.
7. Menstrual cycles and oral contraceptive use also have a significant impact on growth hormone levels.
8. The periodic release of HGH combined with its positive anabolic and metabolic effects on the body has led to supplementation of HGH to improve exercise performance.
9. Low HGH levels may decrease your quality of life, increase your risk of disease, and make you gain fat

9. 11 Ways to Boost Human Growth Hormone (HGH) Naturally:

1. Lose body fat

- The amount of belly fat you carry is directly related to your HGH production
- Those with higher levels of belly fat will likely have impaired HGH production and an increased risk of disease.
- Belly fat is the most dangerous type of stored fat and linked to many diseases. Losing belly fat will help optimize your HGH levels and other aspects of your health.

2. Fast intermittently

- Studies show that fasting leads to a major increase in HGH levels.
- However, continuous fasting is not sustainable in the long term. Intermittent fasting is a more popular dietary approach that limits eating to brief time periods.
- Multiple methods of intermittent fasting are available. One common approach is a daily 8-hour eating window with a 16-hour fast. Another involves eating only 500–600 calories 2 days per week
- Intermittent fasting can help optimize HGH levels in two main ways. First, it can help you drop body fat, which directly affects HGH production
- Shorter 12–16-hour fasts likely help as well, though more research is needed to compare their effects with full-day fasts.

3. Try an Arginine supplement

- When taken alone, Arginine may boost HGH.

4. Reduce your sugar intake

- An increase in insulin is associated with lower HGH levels.
- Refined carbs and sugar raise insulin levels the most, so reducing your intake may help optimize growth hormone levels
- Aim to achieve a balanced diet, as what you eat has a profound effect on your health, hormones, and body composition.

5. Don't eat lot before bedtime

- Your body naturally releases significant amounts of HGH, especially at night.
- Nevertheless, insulin levels normally decrease 2–3 hours after eating, so you may wish to avoid carb- or protein-based meals 2–3 hours before bedtime.

6. Consume GABA supplement

- Gamma Amino Butyric Acid (GABA) is a non-protein amino acid that functions as a neurotransmitter, sending signals around your brain.
- As a well-known calming agent for your brain and central nervous system, it's often used to aid sleep. Interestingly, it may also help increase your HGH levels
- GABA may also increase HGH levels by improving your sleep, since your nighttime growth hormone release is linked to sleep quality and depth
- However, most of these increases were short-lived and GABA's long-term benefits for growth hormone levels remain unclear

7. Exercise at a high intensity

- Exercise is one of the most effective ways to significantly raise your HGH levels.
- The increase depends on the type of exercise, intensity, food intake around the workout, and your body's own traits
- High-intensity exercise increases HGH the most, but all forms of exercise are beneficial

8. Consume Beta-Alanine and/or sports drink around workout

- Some sports supplements can optimize performance and temporarily boost your HGH levels.

9. Optimize sleep

- The majority of HGH is released in pulses when you sleep.
- These pulses are based on your body's internal clock or circadian rhythm.
- The largest pulses occur before midnight, with some smaller pulses in the early morning
- In fact, getting adequate amount of deep sleep is the best strategy to enhance long-term HGH production

Few simple strategies to help optimize your sleep:

- ✓ Avoid blue light exposure before bedtime
- ✓ Read a book in the evening
- ✓ Make sure your bedroom is at a comfortable temperature
- ✓ Don't consume caffeine late in the day

10. Take melatonin supplement

- Melatonin is a hormone that plays an important role in sleep and blood pressure regulation
- Melatonin supplements have become a popular sleep aid that can increase the quality and duration of your sleep
- To maximize its effects, take 1–5 mg about 30 minutes before bed. Start with a lower dose to assess tolerance

11. Consume natural supplements

Several other supplements may enhance human growth hormone production, including:

- Glutamine: 2-gram dose may temporarily increase levels up to 78%
- Creatine: 20-gram dose of creatine significantly increased HGH levels for 2–6 hours
- Ornithine: After 30 minutes of exercise found a greater peak in HGH levels
- L-dopa: In patients with Parkinson's disease, 500 mg of L-dopa increased HGH levels for up to 2 hours
- Glycine: Improve gym performance and provide short-term spikes in HGH

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