



Over 30

Growth Hormone Enhancing Formula

270g – Product Code 1800

Whilst HGH is essential to the physical development of children, it is also vitally important in adults for energy, fat and sugar metabolism, mental competence, DNA, tissue repair, strength, bone density, skin tone and the immune and nervous systems.

However, another hormone called *Growth Hormone Releasing Hormone* (GHRH) controls the release of HGH.

After puberty, GHRH begins to decline, restricting HGH secretion and causing signs of aging, such as increased body fat, bone fragility, weakness, wrinkled skin, reduced energy, loss of memory and loss of concentration.

Following is an explanation of the part each of the ingredients plays in this outstanding, synergistically-formulated product

1. Glycine

A major ingredient in this formula is Glycine. Glycine is the simplest amino acid and is the only amino acid that is not optically active (it has no stereoisomers).

Glycine is essential for the production of the DNA building blocks, nucleic acids, bile acids, porphyrins, other amino acids, and the energy producing compound, creatine phosphate.

Glycine is the second most common amino acid in body proteins and enzymes. Another interesting feature of glycine is its similarity to gamma-aminobutyric acid, and glutamic acid. All three molecules have a neuro-inhibitory or calming effect on the Brain and Central Nervous System. This is likely one of the mechanisms responsible for glycine's ability to release HGH.

In addition to the above benefits, there is research that supports glycine as a potent releaser of HGH. One study showed that 6.75 grams of glycine, taken orally at bedtime, caused a three-fold increase in blood levels of HGH. In another study, as little as 250 mg of glycine showed a significant rise in HGH.

2. Glutamine

Glutamine, like Glycine, has many functions in addition to being a powerful HGH releaser. It is the food of choice for the cells lining the gastrointestinal tract. It helps with normal cellular function.

It is critically important for these cells to be able to

maintain selective intestinal permeability (allow digested nutrients through, and keep undigested food and microbes from being absorbed).

Glutamine has also been used extensively to prevent breakdown of skeletal muscle. As the body is placed under severe stress, acid build-up can occur, and muscle breaks down to release glutamine, which acts as a buffer and neutralises the acid through the liver and allows it to be secreted via the kidneys.

Thus glutamine supplementation is critical in trauma patients, athletes, and in senior citizens, and could be beneficial to almost everyone.

3. Mucuna pruriens

Commonly known as *velvet bean* or *cowitch*, is a plant indigenous to India. A clinical study confirmed the efficacy of the seeds in the management of Parkinson's disease by virtue of their L-Dopa content. *Mucuna pruriens*, recognised as an aphrodisiac in Ayurveda, has been shown to increase testosterone levels, leading to deposition of protein in the muscles and increased muscle mass and strength.

4. L-Pyroglutamic Acid

Is believed to be associated with activity of the key neurotransmitter, acetylcholine, and with the production of GABA and glycine, two other important neurotransmitters.

5. Vitamin B6

Is involved in a wide variety of biochemical reactions, including the synthesis of the neurotransmitters serotonin, dopamine, norepinephrine and gamma-aminobutyric acid (GABA). Thus B6 indirectly helps with release of HGH via synthesis of GABA and dopamine.

6. Ginseng

Korean ginseng is used as a so-called "adaptogen" for increasing resistance to environmental stress and as a general tonic for improving well-being. It is used for stimulating immune function, improving physical and athletic stamina and improving cognitive function, concentration, memory and work efficiency.

7. Green Tea Leaf

Green tea is natural dried leaves of the tea plant, *Camellia sinensis*. Green tea is a compilation of potent

antioxidants. It has a high content of polyphenols, which are a class of bioflavonoids. Green tea extract is used primarily for its free radical fighting capabilities, but has a wide range of applications:

8. Magnesium creatine chelate

This particular form of magnesium chelated to creatine makes it a good substrate for mitochondrial ATP production. Research supports the fact that Magnesium bound to creatine in a 1:1 ratio markedly increases cardiovascular performance and reduces recovery time.

9. Stevia rebaudiana

A natural sweetener with a long list of other beneficial qualities.

10. Fructooligosaccharides (FOS)

Also a natural sweetener (known as prebiotics). These are long chain polysaccharides which can be added for their sweetening effect and, more importantly, serve as a food for the beneficial intestinal bacteria.

11. Flanagan Microclusters

The real value of this product lies in the synergy between all the ingredients. The amino acids glycine and glutamine, combined with mucuna pruriens and pyroglutamic acid, have the ability to promote the release of HGH from the pituitary. Vitamin B6, green tea leaf, ginseng root, and magnesium chelate provide energy, antioxidant and anti-inflammatory support that are important in maintaining normal cellular function. This product is best used either at bedtime or 1-2 hours before exercise. HGH is normally released during sleep between 1-3 am (depending on the time one goes to sleep), or in response to exercise.

Factors important for optimum HGH release and optimum human performance include:

- High quality sleep 7-9 hours, awakening refreshed, and remembering dreams. It is the pulsing of REM with non-REM sleep several times at night which promotes the release of GHRH (growth hormone releasing hormone) from the hypothalamus which then promotes the release of HGH from the pituitary. Sleep masks are important. Any light

hitting the eyes (or the body) has been shown to decrease the pineal gland production of melatonin which will definitely interfere with quality and quantity of sleep.

- Exercise both aerobic and resistance training with machines or weights. Approximately 2-3 times per week resistance training and 3-4 times per week aerobic (jogging, biking, swimming, stationary cycles etc,)
- Eat a balance of vegetables (raw and cooked), with fish, poultry, and some red meat (ideally all organic), and use extra virgin olive oil liberally. Eat smaller portions and eat about every 4-5 hours. Avoid sugar and simple carbohydrates (white bread, pasta and cereal); consider sugar substitutes such as stevia, lohan, or xylitol. This is highly individual, and it is most important to maintain ideal body weight. Bioelectrical impedance devices can be used to determine the lean muscle to fat mass ratio. It is known that both a healthy liver and high percentage of lean muscle mass are the two main systems for maintaining optimal blood sugar levels (fasting sugar between 85-100 mg%). When blood sugar stays higher for any period over 1-2 hours, there will be extra insulin released which promotes inflammation and fat storage. In addition, elevated blood sugar (especially in the evening) releases somatostatin which indirectly will block the release of HGH.
- Hydration is important – usually about one half of body weight in ounces of water as a general guideline.
- Stress reduction or modulation is critical. This can be accomplished with Yoga, Tai Chi or meditation. Stress increases cortisol, which tends to raise blood sugar and lower DHEA, a critical hormone in building lean muscle mass.

It is obviously vital to combine good lifestyle habits with the consumption of this product.

There is no magic bullet in nutrition. Nutritional supplementation should be part of an holistic approach to health. This includes exercise appropriate to age, fitness and the individual, and by consciously keeping stress at a manageable level.

This product is not intended to diagnose, treat, cure or prevent disease

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