

# **IMMI ULTRA HGH**

Tap into your inner power with **IMMI Ultra HGH**, which activates your body's potential for enhanced muscle building, musculoskeletal health, tissue repair and recovery, body composition regulation, and growth stimulation.



# Muscle Building and Tissue Repair

HGH is a human growth hormone synthesized and secreted by somatotrophs cells in the anterior pituitary. It plays an essential role in controlling several complex physiologic processes, including growth and metabolism. In addition, HGH is vital for normal brain function. HGH level peaks at about age 20 and steadily declines as we age.

## An individual with growth hormone deficiency often experiences symptoms as follows;

- 1 Metabolic abnormalities.
- Anxiety and depression.
- ▲ Decreased interest in sexual activity.
- 🚹 Fatigue and less stamina.
- 🛕 Low bone mineral density (osteopenia).

# **Overall benefits of IMMI Ultra HGH**

Regulates body fluids.
Enhances injury recovery and muscle tissue repair.
Increases muscle mass.
Supports bone regeneration.
Improves growth hormone serum level.
Promotes regulation of blood sugar and fat metabolism.

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\*Please also note that the product may come in different packaging in accordance with their technical requirements. Please consult our specialist for the specific packaging available to you.

#### HGH exerts its effects both directly and indirectly:

- Direct effects result from growth hormone binding its receptor on target cells to stimulate a response.
- Indirect effects are mediated primarily by an insulin-like growth factor-I (IGF-1) secreted from the liver and other tissues in response to growth hormone. Most of the growth-promoting effects of growth hormone are due to IGF-1 acting on its target cells.



Administration of **IMMI Ultra HGH** boosts HGH level hence improving HGH bioavailability in the body. HGH then induces the generation of insulin-like growth factor 1 (IGF-1) via stimulation of hepatic synthesis and regulates the paracrine production of IGF-1 in many other tissues.

HGH signalling is required for promoting longitudinal body growth, stem cell activation, differentiation, and survival and for regulation of metabolism. HGH induces growth in nearly every tissue and organ in the body and stimulates linear growth and cartilaginous growth of long bones. In children with short stature, HGH increases both the number and size of muscle cells. It also promotes the development of internal organs, and it also increases red cell mass.

By promoting nitrogen retention, HGH increases cellular protein synthesis. HGH also retains potassium and phosphorus in the serum, resulting from cell growth.

HGH stimulates the synthesis of chondroitin sulphate and collagen, in end-stage renal disease, HGH exhibit the ability to improve several nutritional parameters, such as increases in serum insulin-like growth factor-1 (IGF-1), serum albumin, and transferrin, as well as a reduction in blood urea nitrogen. The upregulation of IGF-1 causes the metabolic effects of HGH. Generally, HGH leads cells to enter an anabolic protein state with increased amino acid uptake, protein synthesis, and decreased catabolism of proteins.

HGH stimulates lipolysis via activation of the hormone-sensitive lipase in the adipose tissue, thereby increasing circulating levels of free fatty acids and triglycerides in the plasma. It also leads to reducing fat stores and decreased serum levels of low-density lipoprotein (LDL) cholesterol. In contrast to the effects seen in the adipose tissue, HGH promotes cellular uptake of free fatty acids in skeletal muscle by increasing lipoprotein lipase activity.

HGH may cause hyperinsulinism following beta-cell compensation for insulin resistance; however, there is some evidence that growth hormone directly promotes beta-cell proliferation and glucose-stimulated insulin secretion.

# **Mechanism of action:**

In conditions of growth failure, growth hormone deficiency, low body mass, and malnutrition, HGH treatment acts to mimic and restore the actions of endogenous growth hormone of stimulating linear bone growth, increasing bone mass, increasing muscle, reducing fat mass, and regulating blood glucose and lipid levels.

HGH mediates its effects directly by HGH and indirectly by IGF-1. HGH binds to the human growth hormone receptor (GHR), a dimeric receptor expressed in target cells in the liver and cartilage, resulting in forming a GH-(GHR)2 complex. Upon HGH binding, the GHR is phosphorylated by JAK2 and recruit the signal transducer activator of the transcription (STAT) pathway. Transcription factors such as STAT1, STAT3, and STAT5 are translocated into the nucleus to stimulate target gene transcription.

At the epiphysis or growth plate, growth hormone increases linear growth by promoting differentiation of prechondrocytes and expansion of osteoblasts. Growth hormone binding to its receptor in the liver and cartilage encourages the production of IGF-1, which acts on type 1 IGF receptors to stimulate linear growth. In the liver, activated growth hormone receptor signalling leads to increased production of IGF binding protein-3 (IGFBP-3) and acid-labile subunit (ALS), which bind to IGF-1 in a ternary complex to increase its half-life.



## Available Set :

5 x 2ml vials (Lyophilized powder) + 5 x 2ml (Bacteriostatic water)

#### **Ingredients:**

15iu HGH lyophilized powder.

#### **Application:**

In adults, **IMMI Ultra HGH** maintains the normal body composition musculoskeletal health, accelerates repair and recovery, and regulates metabolic homeostasis. In children with underdeveloped growth, **IMMI Ultra HGH** stimulates growth to achieve the normal growth rate.

#### **General Protocol:**

Subcutaneous injection.

**Dosing:** 0.4cc per session, five (5) times a week. **One entire treatment course:** 3 to 6 months.

#### **Bioavailability:**

A peak in blood 4 to 5 hours after administration, and the levels remain elevated for a total of 8-12 hours.

#### **Storage Instructions:**

- Keep chilled between 2°C to 8°C.
- Do NOT expose to direct sunlight or heat.
- Keep away from children.

#### Shelf Life:

- Before reconstitution: 3 years.
- After reconstitution: The product may be stored for a maximum of 28 days at 2°C to 8°C.
- Daily room temperature exposure should not exceed 30 minutes.

#### **Precaution:**

- Do not exceed recommended dosage.
- ▲ Must not be injected intravenously.
- Eating immediately before or after having an IMMI Ultra HGH injection is not recommended; allow two hours gap.

#### Solution Reconstitution:

- 1. Transfer the bacteriostatic water into the vial containing **IMMI Ultra HGH** peptides powder by directing it at the walls of the **IMMI Ultra HGH** vial.
- 2. Mix the mixture by gently swirling the vial until it dissolves completely.
- 3. Do NOT shake, tap forcefully, freeze, heat, or leave the liquid in direct sunlight.
- 4. Once the mixture is fully diluted, draw 0.44cc for injection.
- 5. Store the remaining solution in the refrigerator for the next session.
- 6. For the next session, let the vial stay at room temperature for 30 minutes before injection.
- 7. Keep the vial clean and sanitize with an alcohol swab before attempting the 2nd solution withdrawal.
- 8. The liquid must be clear and colourless. If it is cloudy, then discard it.
- 9. Needle size: 27g or 30g needles.

#### **Drug Interaction:**

- 11 β-Hydroxysteroid Dehydrogenase Type 1
- Cytochrome P450-Metabolized Drugs

**Oral Estrogen** 

- Insulin and/or Oral/Injectable Hypoglycemic Agents
  - Pharmacologic Glucocorticoid Therapy and Supraphysiologic Glucocortioid Treatment.

#### **Contraindications:**

Considered performance-enhancing therapy; it may not be suitable for a professional athlete.

#### Contraindicated in patients with:

- 1. Acute critical illness due to complications following open-heart surgery, abdominal surgery or multiple accidental trauma, or acute respiratory failure.
- 2. Prader-Willi syndrome who are severely obese, have a history of upper airway obstruction or sleep apnea or have severe respiratory impairment.
- **3.** Active malignancy; any preexisting malignancy should be inactive and its treatment complete before instituting therapy with HGH.
- 4. A known hypersensitivity to HGH or any of its excipients.
- 5. Active proliferative or severe non-proliferative diabetic retinopathy.

## Citation:

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