

# Sermorelin Therapy in Monterey Park CA

## **What is Sermorelin? What can it do?**

Sermorelin acetate is 29 chain amino acid peptide analog of Growth Hormone Releasing Hormone (GHRH), which is produced by the pituitary gland and is necessary for normal growth and development. GHRH stimulates the pituitary to increase production of growth hormone. The increased volume of human growth hormone (hGH) produced by the pituitary gland causes an increase in the production of Insulin-Like Growth Factor-1 (IGF-1) by the liver and results in several health benefits such as:

- Increases natural production of Human Growth Hormone HGH
- Enhanced energy & strength
- Improves quality of sleep and helps combat insomnia
- Increases IGF-1 levels
- Enhances wound healing
- Improves Physical and Mental Performance
- Enhances calcium retention and bone density
- Improves Immune Function
- Improves fat burning
- Improves energy and vitality
- Improves skin elasticity
- Aids in connective tissue repair post injury
- Helps to increase feelings of well being
- Combats Stress

### **Sermorelin facts:**

1. Sermorelin patented in 1992 and just released in 2012.  
It is a biologically active analog of GHRH made up of

amino acids that comes from the hypothalamus and will stimulate the pituitary to release more GH not suppress is like taking pure HGH will.

2. Measure IGF-1 blood test to see what your HGH is now: healthy is over 200 mg/l, low end of range is 75 mg/l. Optimally it should be btw. 200-250.
3. Most ppl in mid 50's are at 100-130. You will lose 1-2% HGH production every year after the age of 30.
4. Thierry Hertoghe lots of clinical research in past 10 yrs. In 2005 presented data to American Academy of Anti-aging Medicine He reviewed all published studies about IGF-1 treatments using HGH to raise IGF-1: from 1974-2002 and found when he looked at all txs that increase IGF-1: 88% of studies gave benefit and 12% did not show any benefit and **no adverse affects were found.**
5. IGF-1 will assist sex hormones to work better, without it the sex hormones can be given but will not work very well.
6. How do you know if your IGF-1 is decreasing?
  - Increased Truncal obesity and visceral fat (use the Tanita scale to measure this)
  - A shift from fat metabolism to glucose metabolism: Total CH and TG will go up because of this.
  - Elevated Leptin, which will lead to Leptin resistance (you don't feel satiated any more after eating and will have a lot more cravings for foods and drinks), need IGF-1 for Leptin to be absorbed into the body well so the body does not keep making more and more at no avail.
  - Cardiac decompensation (the heart is a muscle and Sermorelin increases muscle production and optimization).
  - Decreased lean body mass
  - Degenerative Joint disease: IGF-1 is one of the only chemicals in our body that repair collagen and cartilage

1. What other factors can decrease IGF-1 other than aging:
  - Oral estrogen replacement therapy, only use creams or injections. Why? Because IGF-1 is made in the liver and estrogen is detoxed thru the liver as well.
  - Excessive dietary CHO: not just sugars: grains, breads, chips, cookies...lowers IGF-1 levels bec of its effect on the liver
  - Insufficient amounts of protein calories
  - Fasting: short term < 48 hours will increase IGF-1 levels and fasting > 48 hours will lower your IGF-1 levels.
  - Hypothyroidism: most ppl in US over 50 have deficient amounts of thyroid hormone being produced.
  - Sex hormone deficiency
  - Sub optimal liver function: will be made worse by drinking EtOH, caffeine and anything the liver has to detox will effect IGF-1 levels.
  - Frequent eating: so eat 1-2 meals a day and do some short term fasting
  - Emotional deprivation
  - sleep deprivation ( HGH is made while you are sleeping at about 2 am)
  - Exercise deprivation
1. HGH comes from the pituitary 2x/day 2 am and 2 pm. As we know now it does not do a lot but stimulate the IGF-1 production from the liver, IGF-1 made in liver and is the messenger that does the work.
2. To raise you HGH naturally thru the body:
  - Short term fasting not over 48 hours, eating 1 meal a day
  - Eat more protein 1/35g/kg/day and less CHO,
  - Take L-glutamine, L-lysine and L-arginine every day
  - Do not eat AT/before bed except pure CHO, can eat small amount of CHO like  $\frac{1}{2}$  an orange or apple this will increase insulin and then at 2 am help to

increase HGH. Eat no protein at all before bed for at least 2 hours.

- Make sure you have enough thyroid hormones working, if not take some,
- DHEA is important or IGF-1 to work correctly so test it too and take it if low
- Testosterone, has to be normal for IGF-1 to correctly
- Correct Est/progesterone ratio
- Safe regular exercise