

## Growth Hormone Is One Important Hormone

Growth hormone is a powerful substance. You would probably guess that growth hormone helps the body grow and develop, especially during childhood and teenage years. But as we get older it does many things to help the body stay healthy. Here are some of the ways growth hormone helps to keep the body working well:

- ✓ Adds strength to bones
- ✓ Breaks down fats. Grid controls cholesterol levels
- ✓ Controls moods and emotions
- ✓ Gives the body energy
- ✓ Helps the heart function
- ✓ Improves metabolism
- ✓ Keeps arteries healthy
- ✓ Maintains normal muscle mass
- ✓ So you see this hormone plays a key role in keeping many areas in our body running properly. Yes, growth hormone is one important hormone throughout our life, whether young or old.
- ✓ For more information contact:

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# HGH THERAPY ...NO MORE *Living with* ADULT GROWTH HORMONE DEFICIENCY



## GROWTH HORMONE DEFICIENCY ISN'T A LIFE SENTENCE

The pituitary gland is a pea-sized structure found at the base of the brain. One of its many jobs is to make enough growth hormone to keep the body healthy. Growth hormone deficiency happens when the pituitary gland does not make enough growth hormone. Children with this condition who are not treated grow slowly and become very short adults. As adults, we are no longer growing in height, but growth hormone is still working in our bodies. It keeps our bones, muscles, and heart healthy. It works with the brain to control our emotions. Adults who lack growth hormone may have serious health problems.

If you are diagnosed with growth hormone deficiency, you are not alone. Thousands of adults have this condition. The good news is that growth hormone deficiency is very treatable.

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*Restore the Balance  
Improve YOUR Outlook*

**"I was always tired. Now, I have  
the energy to live!"**

## Adults Need Growth Hormone , Too!

Doctors have known about growth hormone deficiency in children for a long time. Because growth hormone has a great effect on height, children with growth hormone deficiency are easy to recognize and diagnose. Most are successfully treated. The harmful effects of growth hormone deficiency in adults were not fully known until the 1990s. At that time, researchers became aware that almost every tissue in the body needs growth hormone to stay healthy. Adults who don't have enough growth hormone are like to die sooner than those who have normal levels. Most often, disease of the heart or blood vessels (atherosclerosis), or stroke is the cause of death.

## Are You Low on Growth Hormone?

Growth hormone deficiency affects tens of thousands of adults in the United States. In adults, growth hormone deficiency usually starts when the pituitary gland is damaged. This can be caused by a tumor in the pituitary gland. It can also happen when surgery is performed to remove a tumor in the pituitary gland. Radiation used to treat head and neck cancer can cause the problem. Trauma to the head, such as from a car accident, can also lead to growth hormone deficiency.

**"I don't feel good, but I don't feel sick either. I just want to feel better."**

## Low GH Symptoms

- ✓ Low GH Symptoms
- ✓ Depression loneliness, or anxiousness
- ✓ Easily breaking a bone
- ✓ Feeling weak and tired
- ✓ Increase in cholesterol levels
- ✓ Lack of interest in social activities
- ✓ Loss of interest in sex
- ✓ Thin and dry skin
- ✓ Trouble exercising for a long time
- ✓ Trouble lifting heavy loads
- ✓ Trouble sleeping
- ✓ Weight gain (abdominal) area

Laboratory tests are needed to determine if you have growth hormone deficiency.

## Restoring the Balance

Growth hormone deficiency in adults can be easily treated. Therapy to replace growth hormone will help restore the hormone level in your body. Treatment is given once daily by self-injection under the skin. Your doctor will start with small dose and will increase it until the treatment is working. You should see your doctor every 4 to 8 weeks to talk about how you are feeling. Your doctor may take a blood sample at these visits. An IGF-I [insulin-like growth Factor I] test should be done to check your treatment levels. Once the right level of growth hormone is reached, you should continue to see your doctor on a regular basis (every 4 to 6 months)

It may take 6 months or longer to see the positive effect of growth hormone replacement therapy. Be determined to get well. Replacement therapy often makes patients feel better and helps them live healthy and full lives. You may also notice:

- ✓ Less body fat, especially around your abdomen
- ✓ More muscle mass
- ✓ More energy to exercise
- ✓ Improved outlook

## Keep at It

You will always have growth hormone deficiency, even if it is controlled with medication. This means you will need growth hormone replacement therapy for the rest of your life. Your doctor can help you stick with the treatment to keep you healthy. Here is some advice from a treated adult patient with growth hormone deficiency:

- ✓ Watch your health
- ✓ Keep regular appointments with your doctor
- ✓ Tell your doctor if you have any problems or symptoms
- ✓ Have your IGF-I level checked regularly
- ✓ Have your cholesterol levels checked regularly
- ✓ Schedule an MRI if you were diagnosed with a pituitary tumor

Many adults with growth hormone deficiency learn to take an active role in their treatment.

**"Get treatment and support. Talk to people."**

Treatment may cause some side effects like mild fluid retention (keeping fluids in the body), muscle aches, or joint aches. You may feel some numbness or pain in your hands. These symptoms can usually be relieved by adjusting the dose according to your doctor's instructions.

## Glossary

**hormones** – Chemical messengers that are made and released by endocrine glands and that target one or more parts of the body.

**pituitary gland** – Master gland of the endocrine system that produces several hormones, including growth hormone.