A full-body photograph of a middle-aged man with a grey beard and mustache, smiling slightly. He is wearing a short-sleeved, button-down shirt with a blue and white plaid pattern, dark blue cargo shorts, and black flip-flops. He stands on a wooden pier with a railing. The background shows a clear blue sky and the ocean with white waves. A semi-transparent blue banner is overlaid across the middle of the image, containing white text.

UNDERSTANDING Adult Growth Hormone Deficiency (AGHD)

Models are
for illustrative
purposes only.

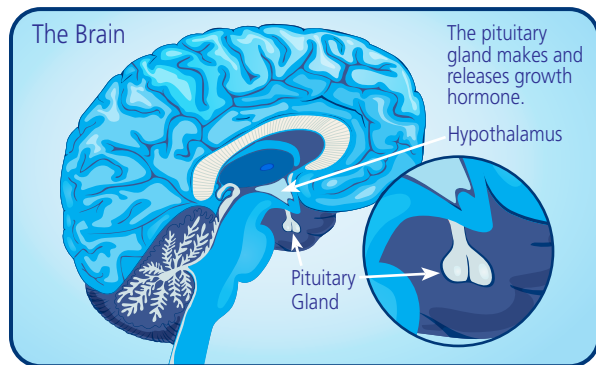
What is Adult Growth Hormone Deficiency (AGHD)?

To understand AGHD, it is helpful to learn what growth hormone is. Growth hormone is a protein made in the brain by the pituitary gland.

Growth hormone helps keep your bones, muscles, and metabolism in balance.

Adults diagnosed with AGHD do not produce enough growth hormone.

Location of the pituitary gland in the brain

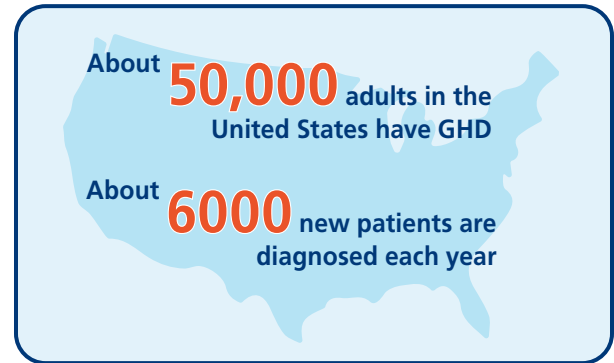


Why would an adult need growth hormone?

Even after we stop growing, adults still need growth hormone.

A lack of growth hormone in adults can affect their bodies in various ways. Growth Hormone Deficiency (GHD) in adults is called Adult Growth Hormone Deficiency (AGHD).

How many adults have GHD?



Typically, there are 2 ways that AGHD can occur:

- Children who had GHD may still have it as adults. In these people, GHD can result from a family history or structural differences in the brain. Some people require treatment throughout life
- Adults can develop GHD later in life

What causes AGHD?

Damage to the pituitary gland or hypothalamus can cause AGHD. This may happen as the result of infection, brain tumor growth, head injury, stroke, or after surgery or radiation to treat pituitary tumors.

How is AGHD diagnosed?

There are special tests used to make a diagnosis of AGHD.

What are the symptoms of AGHD?

Symptoms of GHD in adults vary, and many adults who have this condition can experience a combination of symptoms.

GHD can affect the proportion of fat, muscle, and bone in your body, so you may notice the following signs and symptoms:



Increased fat, especially around the waist



Decreased muscle mass and strength



Thinning bones



Heart problems. Higher LDL cholesterol (the “bad” cholesterol)



Dry, thin skin



Fatigue (low energy/tiredness)



Sensitivity to heat



High blood sugar



Problems with concentration and memory

If you notice any of these signs and symptoms, talk to your doctor so they can perform exams and tests to make an accurate diagnosis.

Testing for AGHD

The pituitary gland produces growth hormone in different amounts at different times of the day. This makes it difficult to test the amount of growth hormone the pituitary gland is releasing with only one blood sample.

Endocrinologists may perform a stimulation test, or stim test, which uses a series of blood samples to test hormone levels in the blood.

During this test, the pituitary gland is stimulated to release growth hormone in the blood. Several blood samples are taken over a period of time to measure the amount of growth hormone in the body.

The endocrinologist may need to do more than one stim test to diagnose or rule out AGHD.

There are different types of stim tests. You and your doctor will discuss which stim test may be right for you.

Why should you be tested?

Adults who are not treated for GHD may be at increased risk of:

- Heart disease
- Diabetes
- Osteoporosis
- Disease of the arteries and veins

Your endocrinologist may recommend treatment to support the amount of growth hormone produced by your pituitary gland and schedule regular follow-up visits to make sure the treatment is working well.



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