

Understanding Low T and Testosterone Supplementation

What is testosterone?

Testosterone is the primary male sex hormone and is responsible for many of the male features, including bone density, fat distribution, muscle strength and mass, red blood cell production, sex drive, and sperm production.

What is “Low T”, or late-onset hypogonadism (LOH)?

Today, “Low T” is commonly used to refer to the gradual decrease in testosterone levels as men age, or late-onset hypogonadism (LOH). LOH is a natural process and **SHOULD NOT** to be confused with other pathologic causes of hypogonadism like gonad failure.

Some common symptoms of low T include:

- Fatigue, or reduced energy level
- Decreased sex drive, or libido
- Decreased quality and number of erections
- Loss of muscle mass
- Increased body fat

Alternative explanations to symptoms

It is important to consider alternative explanations for symptoms to prevent missing an important diagnosis. Common conditions that may explain one or more of low T symptoms include:

- Thyroid conditions
- Poor sleeping
- Obesity
- Poorly controlled diabetes
- Stress
- Erectile dysfunction
- Depression

Risks and benefits of testosterone supplements

Theoretical benefits of testosterone supplements is the reversal of low T symptoms. However, there is currently a lack of strong evidence to support the benefits of testosterone supplements in otherwise healthy older males. While some studies have shown improvements in libido, muscle mass, and decreased body fat, no long-term sustained benefits have been noted.

On the other hand, significant adverse outcomes have been noted in multiple studies. One recent study showed that men above the age of 65 and those with prior heart disease had twice the risk of having a heart attack after testosterone supplementation compared to those without. Another study was terminated prematurely due to the high number of adverse outcomes. Most noticeable adverse outcomes include increased mortality, heart attacks, and strokes. Side effects of testosterone supplement include increased red blood cells and both cancerous and noncancerous prostate growth.

Treatment and follow-up

A comprehensive exam with your doctor is required to explore alternative causes of your symptoms and whether treatment with testosterone is the right thing for you. If the decision to pursue treatment is made, it is suggested that one should check in with their doctor regularly to:

- Ensure that symptoms are improving
- Monitor prostate health
- Monitor red blood cell count
- Monitor cardiovascular health

Should symptoms fail to improve, discontinuing treatment is advised.