

MEN'S HEALTH



What Low Testosterone Quietly Costs You

1,007 men. Two years. One identical lifestyle program. The men who also received testosterone gained muscle and lost fat, while the placebo group lost muscle doing the exact same thing.

Swipe

THE WORRY

Nothing About It Announces Itself

No pain. No acute event. No moment on a calendar. Just a slow subtraction of muscle, a slow gain around the middle, bone thinning silently, and a tiredness sleep no longer fixes.

THE ARITHMETIC

0.4% a Year, Then 1.3% a Year

Total testosterone falls by roughly 0.4 percent a year. The free fraction, the part that can actually act, falls three times faster, about 1.3 percent a year. Neither is detectable from one year to the next.

THE T4DM TRIAL

1,007 Men, Same Program, Different Result

Both groups followed the identical lifestyle program for two years. The testosterone group gained 0.4 kg of muscle and lost 4.6 kg of fat. The placebo group lost 1.3 kg of muscle and 1.9 kg of fat. Both lost weight. Only one kept its muscle.

THE T4DM TRIAL

A 40% Lower Risk of Type 2 Diabetes

In the same 1,007-man trial, two years of treatment was linked to around a 40 percent lower risk of developing type 2 diabetes, beyond what the lifestyle program achieved alone, in men already at high metabolic risk.

THE TESTOSTERONE TRIALS

788 Men, 65 and Over: Three Domains Moved

Sexual function, anemia, and bone mineral density all improved. That is the evidence. Bone density is a measurement of the bone, a reasonable proxy, not a count of fractures prevented.

THE MECHANISM

The Loop That Keeps Fat in Place

Excess body fat converts testosterone to estrogen. That lowers testosterone further, which makes fat easier to gain and muscle harder to hold, which means more fat, which means more conversion.

THE BOTTOM LINE



It's Not About Starting Treatment

A low result can be the first visible sign of something else: thyroid disease, a pituitary problem, iron abnormalities, sleep apnea, or poor blood sugar control. The reason to get it assessed is to find out why, not to reach for therapy.