THE OLD STORY

What Testosterone Does to Muscle and Fat in Older Men

Two groups of men. Same lifestyle program. Two years. One group gained muscle and lost 4.6 kg of fat. The other lost muscle. The difference was testosterone.

Swipe

THE WORRY

Strength drifting away, a waist that won·t move

Most men who ask about testosterone are really asking about their body: strength that has drifted, a stubborn waist, the sense the same effort no longer works. It used to be a gym-anecdote question. Now it has a randomized answer.

THE TRIAL

1,007 men. Two years. Same program, different result.

The T4DM trial randomized 1,007 men aged 50 to 74, all carrying excess weight around the middle, all at high metabolic risk. Every man got the same lifestyle program. Half also got testosterone.

THE NUMBER WORTH KNOWING

Gained muscle. Lost 4.6 kg of fat.

Testosterone group: +0.4 kg of muscle, -4.6 kg of fat. Placebo group, same lifestyle program: -1.3 kg of muscle, -1.9 kg of fat. One group was building while losing. The other was breaking down while losing.

BEYOND THE SCALE

Type 2 diabetes risk fell by around 40 percent

In men already at high risk, two years of testosterone cut diabetes risk by roughly 40 percent beyond the lifestyle program alone. But a separate large trial, TRAVERSE, did not find the same effect on progression from prediabetes to diabetes. Not a settled indication.

THE SAFETY TRIAL

5,246 men. No difference on the outcomes that matter most.

TRAVERSE, the cardiovascular safety trial regulators required, followed 5,246 men and found no difference in major cardiac events, overall mortality, or prostate cancer against placebo.

WHY THIS NEEDS A DOCTOR

22 percent vs 1 percent: the number that requires monitoring

22 percent of men on testosterone in T4DM reached a hematocrit of 0.54 or higher, versus 1 percent on placebo. And after stopping treatment, the body·s own hormone production took six to twelve months to recover.

THE BOTTOM LINE

Not for every man. For the right man, done properly.

These trials studied particular men: older, carrying excess weight, with measured low testosterone and real symptoms. Telling who genuinely needs treatment from who needs a metabolic plan instead takes proper bloodwork, not a single reading, and ongoing supervision once started.