

THE JOURNAL



Testosterone and Your Joints: The 51 Percent That Disappears

A cross-sectional study of 10,439 US adults found 51 percent lower odds of arthritis in the highest testosterone quartile. In the same fully adjusted model, the continuous estimate came out at 1.02. Both numbers are true.

Swipe

THE WORRY

Low testosterone, bad joints?

A large American dataset appears to show that adults in the top quarter for testosterone have half the arthritis of those in the bottom quarter. It is exactly the number a hormone clinic would put on a billboard.

THE HEADLINE STAT

51 percent lower odds

Mean testosterone was 163.67 ng/dL in the arthritis group versus 233.91 ng/dL without it. Split into quartiles, the highest group had 51 percent lower odds of arthritis than the lowest.

THE NUMBER THAT NEVER GETS QUOTED

Odds ratio 1.02

Treated as a continuous variable across three models of increasing adjustment, the odds ratio moved from 0.87 unadjusted to 1.02 fully adjusted, with a confidence interval of 0.97 to 1.07 that crosses 1.00.

WHAT FULL ADJUSTMENT MEANS

Age and weight were carrying the number

The arthritis group averaged 59.90 years against 43.36. A body mass index of 30 or above was present in 55.24 percent of the arthritis group versus 34.59 percent of the others.

WHY THE QUARTILES STILL LOOK SIGNIFICANT

Comparing men with women, essentially

The lowest testosterone quartile ran from 0.52 to 18.77 ng/dL, a range you mostly only see in women. The highest ran from 378 to 2000, a male range. The quartile split partly is a sex split.

THE BOTTOM LINE

Be suspicious of a hormone offered for a joint problem

This is one of the strongest recent datasets on the question and it does not support the offer. The one modifiable factor the authors point to is body weight, not a hormone.

SAFETY FRAMING

Can testosterone therapy treat joint pain?

No. This is an observational snapshot with no treatment, no randomization and no follow-up. Testosterone is for a properly diagnosed deficiency after full assessment, not a joint complaint.