

Testosterone: The Good, the Bad, and the Contradictory

By Lane Lenard, PhD

A new study has confirmed that high levels of testosterone are associated with lower blood pressure, reduced risk of heart attacks, improved immune function, and smaller waistlines. But in a bizarre twist, the results of this study seem to show that the same men, who reap the benefits of high testosterone levels, may wind up killing themselves by smoking and drinking to excess or by indulging in other risky behaviors that can lead to personal injury.

The researchers, led by Dr. Alan Booth, a professor of sociology and human development at Penn State University, measured testosterone levels (using saliva samples) in more than 4,300 men between the ages of 32 and 44 years. They found that those men who had the highest levels of testosterone had a 45% lower risk of high blood pressure, a 72% lower risk of having a heart attack, and an 8% lower risk of having three or more colds a year. These men were also 45% less likely to rate their health as fair or poor.

On the other hand, the men with high testosterone levels were 25% more likely to report injuries, 32% more likely to drink alcohol heavily (5 or more drinks per day), and 151% more likely to smoke tobacco.

The health benefits of high testosterone suggested in this study confirm what has been seen in scores of other studies over the last 60 to 70 years, but the men's high risk behavior remains a bit of a puzzle. Since the Penn State researchers *measured* testosterone levels but did not attempt to alter them, it is impossible to say, based on their results, whether the high testosterone levels *caused* the high risk behavior, or was merely a *result* of them.

Many other studies over the years, in which men with low testosterone levels due to aging or disease, had their levels elevated by taking supplementary testosterone or precursors (e.g., androstenedione) have reported similar health benefits to those shown in the current study. These include lower blood pressure, improved blood lipid profiles (i.e., lower LDL- cholesterol and triglycerides), less tendency of blood to clot abnormally, less risk of angina pectoris, reduced abdominal obesity, larger lean muscle and bone mass, less risk of prostate disease, enhanced sexuality, better mood, and improved cognitive function. However, the kinds of high-risk behaviors shown here have *never* been associated with high testosterone levels in these studies, even when levels of the hormone are hundreds of times above normal for weeks or months at a time.

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In fact, other research by Booth and colleagues suggests that testosterone levels may rise as a *result* of, or even in anticipation of certain behaviors, such as athletic competition. The possibility remains, therefore, that the self-destructive behaviors they found in the current study might be the cause of the high testosterone and not the result.

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Dr. Lenard is the co-author, with Jonathan Wright, MD, of the new book, *Maximize Your Vitality & Potency For Men Over 40*. He is also author of *The Smart Guide to Andro*. (Andro is a supplement that effectively raises testosterone levels.)

References

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