

TOURNAMENTS FOR TESTOSTERONE

The effects of competition on testosterone in women

Testosterone is a hormone most often associated with men, for obvious reasons. Not only do men have 10 times more testosterone in their body than women, but it is associated with the aggressive behavior exhibited by males in competitive situations. The term “roid rage” was coined because anabolic androgenic steroids, which are derivatives of testosterone, have been linked to aggressive behavior. It has been found that testosterone levels increase in men during sports competition; it has also been found that winning and losing can affect a man’s testosterone levels, with winners experiencing an increase and losers experiencing a decrease.³ However, responses in women are not well understood. In most of the research on women, testosterone responses have been mixed, with some studies showing an increase and other studies showing no change. However, these studies were on women in team sports. There has been little research on women in individual sports. To fill this gap in the science, researchers from the Department of Psychology at Simon Fraser University in Burnaby, British Columbia, looked at the effects of competition on testosterone levels in female wrestlers.

Power Key: testosterone, competition, women, aggression



As in men, it looks like women’s testosterone levels increase during competition. But more study is needed.

Original Research

Hamilton, L.D., et al. The effect of competition on salivary testosterone in elite female athletes. *International Journal of Sports Physiology and Performance* 4:538-542, 2009.