

OF CARNITINE AND TESTOSTERONE

L-carnitine has an important effect on testosterone, but does that mean bigger and stronger muscles?



Original Research
Kraemer, W., et al.
Androgenic responses to resistance exercise: Effects of feeding and l-carnitine. *Medicine and Science in Sports and Exercise* 38(7):1288-1296, 2006.

L-CARNITINE SEEMS TO EVOKE POSITIVE EFFECTS ON ANDROGEN RECEPTORS. BUT WHEN DAN GAUDREAU CRANKS ON THE CONAN'S WHEEL IT WON'T MAKE HIM ANY MORE AMAZING TO THE LADIES.

Testosterone is perhaps the strength and power athlete's most favorite word. After all, this hormone is what makes men men: the more testosterone you have, the more manly a man you are. And of course that also means you are one big and strong individual. But testosterone is a complex hormone that is affected by many things, including training and feeding. After you pump iron, your testosterone levels increase, then decrease to resting or even lower levels. Interestingly, after you eat, testosterone levels decrease, whether you trained first or not. The specific causes of these shifts have not yet been elucidated, but scientists speculate that they might be due to a decrease in testosterone synthesis or secretion, or perhaps increased cellular uptake of this hormone. So clearly, both food and training play a role in your testosterone levels. The amino acid L-carnitine might be an important link to that, too, because it has been shown to impact the complex hormonal cycle called the hypothalamic-pituitary-gonadal axis in a positive way, thus perhaps positively influencing testosterone. This study by researchers from the University of Connecticut, the College of New Jersey, and the College of William and Mary sheds some very important light on what role L-carnitine plays in this complex cycle.

Power Key: carnitine, anabolic, testosterone, feeding, weight training