

Scientists review effects of soy and whey protein supplementation post-exercise

October 11 2013

A group of researchers recently expanded upon the limited prior research examining the effects of soy and whey protein supplementation on testosterone, sex hormone binding globulin (SHBG), and cortisol responses to an acute bout of resistance exercise. Their study, "The Effects of Soy and Whey Protein Supplementation on Acute Hormonal Responses to Resistance Exercise in Men" is now available in the *Journal of the American College of Nutrition*.

With protein supplement use by athletes on the rise, a group of researchers recently expanded upon the limited prior research examining the effects of soy and whey protein supplementation on testosterone, sex hormone binding globulin (SHBG), and cortisol responses to an acute bout of resistance exercise.

"This study starts to unravel and provide some insights into one of the real urban myths about [soy protein](#) and resistance exercise in men," said Dr. William J. Kraemer, the lead researcher of the study.

Using a sample of 10 resistance-trained men in their early 20s, protein supplementation consisted of 3 treatment groups: [whey protein](#) isolate, soy protein isolate, or a maltodextrin placebo control. No other supplements were allowed. Vegetarians, vegans, or subjects who consumed high-protein diets were excluded from the study. For 14 days, participants would ingest 20g of their assigned supplement at the same time each morning. The participants would then perform 6 sets of heavy resistance squats at 10 reps each using 80 percent of their maximum

lifting weight.

"Our main findings demonstrate that 14 days of supplementation with soy protein does appear to partially blunt serum testosterone. In addition, whey influences the response of cortisol following an acute bout of [resistance exercise](#) by blunting its increase during recovery. Protein supplementation alters the physiological responses to a commonly used exercise modality with some differences due to the type of protein utilized," wrote the researchers.

More information: Kraemer, W. et al. The Effects of Soy and Whey Protein Supplementation on Acute Hormonal Responses to Resistance Exercise in Men, *Journal of the American College of Nutrition*.
[www.tandfonline.com/doi/abs/10 ... 07315724.2013.770648](http://www.tandfonline.com/doi/abs/10.1080/07315724.2013.770648)

Provided by Taylor & Francis

Citation: Scientists review effects of soy and whey protein supplementation post-exercise (2013, October 11) retrieved 23 May 2024 from <https://medicalxpress.com/news/2013-10-scientists-effects-soy-whey-protein.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.