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Study shows rice protein on par with whey

Groundbreaking study on bodybuilders found that rice protein offered identical benefits to dairy-based whey protein

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The findings of a ground-breaking double-blind study at the University of Tampa proved for the first time that plant-based rice protein has identical benefits to dairy-based whey protein. The study results, which specifically followed a tightly controlled population of seasoned bodybuilders and how they built muscle and experienced the same rates of repair and soreness, were presented at Natural Products Expo West on March 9, 2013, by its coauthor, Dr. Ralf Jaeger, FISSN, CISSN, MBA.

Jaeger was joined by several influencers in the sports nutrition, rice fractioning, vegan education and fitness industries to convey the impact and scope of this discovery. The rice protein the researchers chose for the study was Growing Naturals' Organic Rice Protein made with Axiom Food's Oryzatein®, which has recently become a monographed industry standard for its many qualities, noted of which is their unique hexane-free fractioning process used to isolate protein from whole grain brown rice.

"In the past, studies have shown that the combination of resistance exercise with consumption of animal-derived protein (such as whey, casein, eggs, meat) has had a different effect on muscle growth than when resistance exercise was paired with plant-based protein such soy," said Dr. Jaeger. "The results of this study show, for the first time, this has changed. The objective of the study, titled, 'Rice Protein Increases Lean Body Mass, Muscle Hypertrophy, Power and Strength Comparable to Whey Protein Following Resistance Exercise,' was to determine if high doses of rice protein isolate could increase recovery and elicit adequate changes in body composition compared to whey protein isolate if given following periodized resistance-training. In summary, we found that rice protein isolate administration post resistance exercise decreases fat-mass and increases lean body mass, skeletal muscle hypertrophy, power and strength comparable to whey protein isolate."

For the study, Jaeger and his coauthor, Dr. Jacob Wilson (University of Tampa, Department of Health Sciences and Human Performance), used 24 healthy, college-aged, resistance-trained participants. Each had a minimum of one year of strength training experience. The participants were randomly and equally divided into two groups. Each group consumed 48g of rice or whey protein isolate immediately following training on training days only. Participants followed a specific training protocol three times a week for eight weeks under direct supervision. The supplements contained equal amounts of calories and protein. Before and after the first training session, participants gave ratings for perceived recovery, soreness and readiness to train. At baseline (week 0), midway (week 4), and end (week 8) participants were measured for muscle thickness, body composition, bench press and leg press strength. Changes were measured and recorded.

Results showed there were no significant differences in the ratings between the groups supplemented with rice versus whey for recovery. In other words, each supplement produced a similar effect. Moreover, both groups experienced significant changes in body composition, strength and power from week 0 to week 8. Specifically, muscle mass, strength, and power increased while body fat decreased. The changes observed were similar for both groups.