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Protein from Plant-Based Rice and Whey Offer the Same Benefits

The findings of a double-blind study at the University of Tampa has demonstrated that plant-based rice protein has identical benefits to dairy-based whey protein. The study, which used Growing Naturals' Organic Rice Protein made with Culver City, CA's Axiom Food's Oryzatein, followed a tightly controlled population of seasoned bodybuilders and examined how they built muscle and experienced repair and soreness. The study, which was published by <u>Nutrition Journal</u>, examined Oryzatein for the study because of its 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 plantbased protein such as soy," said Dr. Jaeger, one of the studies authors. "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, Dr. Jaeger and his co-author, Dr. Jacob Wilson (University of Tampa, Department of Health Sciences and Human Performance), surveyed 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.

David Janow, JD/MBA, CEO, of Axiom Foods, Inc., stated, "Whey protein has been the gold standard of the fitness industry, but as of today, that may be changing. Intolerance to lactose affects nearly 70% of the world's population. Hormones used in cow farming are passed on in larger concentrations through dairy products than through cow meat. We've heard how hormones in cow milk are affecting early puberty. Soy protein is losing popularity after learning about phytoestrogens. Allergen-free plant-based protein is now being shown to rival whey protein."