FOR IMMEDIATE RELEASE

Contact:
Tatiana Ernandes
Regional Communications Specialist
+55 11 972816327
tatiana.ernandes@iff.com

Where science & creativity meet

NEWS RELEASE

Nourish

Studies Establish the Effectiveness of Plant Protein in Muscle Growth and Strength Development

ST. LOUIS – Nov. 16, 2021 – Until recently, whey protein was believed to be the optimal choice of protein. The results of several studies demonstrated that when it comes to gaining muscle mass and strength, supplementation with isolated soy protein is as effective as dairy proteins, such as whey. A recent study conducted at the University of São Paulo (USP) in Brazil further investigated whether isolated soy protein can provide the same benefits to individuals who follow an exclusive plant-based diet.

The study placed 38 men (19 omnivores and 19 vegans) with a mean age of 25 years in a supervised weight training program. For three months, they participated in two weekly training sessions. All subjects had their diets adjusted to include 1.6 grams of protein per kilogram of body weight **—** omnivores achieved this with supplemental whey and vegans with supplemental isolated soy protein. At the beginning and the end of the intervention, data collected for leg lean mass, whole muscle and muscle fiber cross-sectional area, and leg-press 1RM, showed that both groups achieved equal gains in muscle mass and strength. The methodology and results are documented in this article.

The research uses SUPRO® isolated soy protein, and was funded by the Research Support Foundation of the State of São Paulo (FAPESP). SUPRO® is a high-quality plant protein source, has 90 percent protein content and all the amino acids needed for muscle health, as well as excellent digestibility. It is suited for applications in sports nutrition supplements, either in powder or ready-to-drink beverages.

"Most studies that have examined the impact of protein supplementation have included participants who follow an omnivorous diet. The USP study is unique in that it tested a common protein supplement dose recommended to individuals who are seeking to gain muscle, but its participants follow very different background diets," said Dr. Barbara Peters, nutrition scientist, IFF.

Research conducted at the Arizona State University, published in 2020, used a different approach to arrive at similar results. It was the first study to supplement an omnivorous diet with soy protein or whey matched for leucine levels. Protein supplements were designed to provide 10 grams of essential amino acids, including 1.8 grams of leucine, which has been shown to maximally stimulate muscle

protein synthesis in adults. Participants received either 19 grams of whey protein isolate or 26 grams of soy protein isolate, along with participating in resistance training three times per week. After 12 weeks, both groups demonstrated similar gains in muscle mass and strength.

Both studies indicate that people who follow a variety of diets can benefit from high-quality protein supplementation. Active individuals who train regularly and wish to gain lean mass can choose to follow a diet based on plant proteins or one that includes animal protein and still experience the benefits from a protein supplement.

###

Where science & creativity meet

Welcome to IFF

At IFF (NYSE: IFF), an industry leader in food, beverage, health, biosciences and sensorial experiences, science and creativity meet to create essential solutions for a better world – from global icons to unexpected innovations and experiences. With the beauty of art and the precision of science, we are an international collective of thinkers who partners with customers to bring scents, tastes, experiences, ingredients and solutions for products the world craves. Together, we will do more good for people and planet. Learn more at iff.com, Twitter , Facebook, Instagram, and LinkedIn.