New study suggests combining soy, whey and casein supports long-term gain in lean muscle mass

Protein
Protein is a key nutritional component needed to promote muscle growth and maintenance. Research has shown soy-dairy protein blend ingestion prolongs the muscle protein synthesis response in combination with resistance exercise. A recent study also found long-term use of a soy-dairy protein blend supplement may enhance muscle gains when provided for 3 months along with participation in a resistance exercise program.

The anabolic potential of the blend has recently been demonstrated in acute studies that show prolonged delivery of amino acids to muscle when a blend of soy and dairy proteins is consumed after exercise.1,2

Study Design
68 young recreationally active men participated in resistance exercise training for 3 months.3

- Assigned to consume one of three treatments (22g supplements) daily for the duration of the study:
  - Soy-dairy protein blend
  - Whey protein isolate
  - Isocaloric carbohydrate (maltodextrin)

Study Outcomes
- Both protein supplements support similar and significant muscle mass gains, compared to carbohydrate placebo.
- Consuming a soy-dairy protein blend containing DuPont™ Danisco® soy protein during a resistance exercise training program can help enhance and prolong lean mass growth, especially in the upper body.
- No changes in testosterone levels were found during the 12 weeks of supplementation.

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Promotion of skeletal muscle mass
Sustained amino acid availability
Long-term adherence to fitness program

Resistance exercise

Protein Blend leads to greater increase in muscle gain and a higher percentage of subjects who gained muscle over the “expected gain from exercise.”
**Lean Body Mass Gains With Exercise & Protein**

**Study Outcomes Continued**

- Soy-dairy protein blend may help prolong gains during a long-term training program:
  - Only subjects consuming the protein blend continued to gain arm, trunk and whole body muscle mass during the last 6 weeks of training.
  - Both protein groups had greater number of subjects who are responders, compared to placebo. Protein supplementation helped to ensure gains in muscle with participation in a training program.

**REFERENCES**


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DuPont is a market-driven science company. Our vision is to be the world’s most dynamic science company, creating sustainable solutions essential to a better, safer, healthier life for people everywhere. DuPont’s reach extends around the world, with more than 10,000 scientists and engineers in more than 150 research centers in 35 countries.

DuPont Nutrition & Health combines in-depth knowledge of food and nutrition with current research and expert science to deliver unmatched value to the food, beverage and dietary supplement industries. We are innovative solvers, drawing on deep consumer insights and a broad product portfolio to help our customers turn challenges into high-value business opportunities.