FIT Whey for Sport

Grass-Fed Whey Protein Isolate

Available in Cocoa

Clinical Applications

- Helps Maintain Lean Muscle Mass*
- Supports Muscle Recovery Following Exercise*
- Excellent Source of Protein With BCAAs*

FIT Whey for Sport Cocoa *provides an excellent source of protein with essential BCAAs, formulated to help maintain lean muscle and support muscle recovery for individuals at all fitness levels—from competitive athletes to active aging adults. Each serving delivers 21 g of high-quality protein from whey isolate, with no fillers and real cocoa that mixes well and tastes great. This formula is NSF Certified for Sport® for trusted purity, safety, and quality assurance.**

Discussion

Next to water, protein is the most abundant substance in the human body and is 1 of the 3 energy-supplying primary macronutrients that support anabolic processes and essential physiological functions. It is of principal importance for growth, development, and maintenance of body tissues, has a structural function in muscles, blood, skin, hair, nails, and internal organs, and is required for synthesizing hormones, enzymes, and antibodies. Protein also contributes to satiety, supports stable blood sugar levels, and helps mitigate the progressive loss of lean muscle mass that naturally occurs with aging.*[1-3]

Protein quality is a measure of its amino acid profile. Of the 20 amino acids that are the building blocks of proteins, 9 are classified as essential, meaning they cannot be produced endogenously and must be obtained through food.*[4]

Unlike carbohydrates and fats, the other primary macronutrients, protein does not have a dedicated storage system in the human body and must be consumed regularly to meet ongoing physiological demands.[4] When protein intake is insufficient, the body initiates catabolism, breaking down skeletal muscle and other tissues to supply essential amino acids. Protein deficiency, whether chronic, subclinical, or acute, can impair immune function, reduce lean muscle mass, and lead to serious health consequences.*[1]

Evidence has suggested that the current recommended daily allowance (RDA) for protein, 0.8 g/kg/day (0.36 g/lb), reflects only the minimum required to prevent deficiency and maintain basic physiological functions.[1,5] *The Dietary Guidelines for Americans 2025-2030* (DGA) recommends a protein intake of 1.2-1.6 g/kg/day based on individual caloric requirements, which vary widely based on age, activity level, body weight, diet quality, and health status. The DGA prioritizes protein-rich foods at every meal, as part of a nutrient-dense, healthy dietary pattern.[6] Animal sources of protein include eggs, dairy, poultry, fish, and red meat, while plant-based options include nuts, seeds, soy, lentils, and beans.

When used appropriately, protein supplements offer a convenient means of meeting protein requirements, with the choice of product influenced by individual taste preferences, nutritional needs, and dietary restrictions.*

Whey Protein

Whey is the nutrient-dense liquid byproduct of cheese-making, formed when milk coagulates and separates into solid curds. To produce supplemental whey protein, the liquid fraction is dried to produce a concentrate, which contains approximately 40%-80% protein. Further filtration yields whey protein isolate, a highly purified form that is 90%-95% protein and lower in carbohydrates (including lactose) and fat than whey protein concentrate.*[3,7]

For maintaining lean muscle mass and supporting post-exercise muscle recovery, whey protein is widely regarded as the gold standard for supplementation. This designation is attributed to whey's complete essential amino acid profile and high concentration of branched-chain amino acids (BCAAs), particularly leucine, which is a key regulator of muscle protein synthesis (MPS).[8] Whey protein contains the highest concentration of BCAAs of any single protein source,[3,9] making it especially effective for stimulating MPS and attenuating muscle protein breakdown whether at rest or following exercise.*[7]

In addition to its amino acid composition, whey protein exhibits high digestibility and bioavailability. It is designated as a protein with high biological value (BV) and has the highest possible Protein Digestibility-Corrected Amino Acid Score (PDCAAS).[3] Together, these characteristics underscore the well-documented role of whey protein in supporting MPS and overall muscle health across a range of activity levels.*[1]

Maintenance of Lean Muscle Mass and Muscle Recovery

Periods of muscle catabolism occur during intense or prolonged exercise, caloric or protein restriction, aging, illness, or other metabolic stressors. During intense physical activity, significant alterations in amino acid and

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protein metabolism occur in skeletal muscle, including increased oxidation of BCAAs, which reduces plasma and intracellular leucine concentrations.[10,11] Because BCAAs are among the first amino acids used under these conditions, they are widely recognized as integral to muscle health.[3] Post-exercise consumption of whey protein increases tissue leucine availability and stimulates the mTOR pathway—the master regulator of MPS—supporting muscle health, recovery, and the maintenance of lean muscle mass.[10,11] This mechanism is particularly important for populations at risk for muscle loss.*

Such at-risk populations include older adults, in whom muscle loss is driven by innate metabolic changes that lead to a gradual decline in muscle mass, strength, and function.[4] Another clinically relevant risk factor is the increasing use of satiety hormones for weight management across broader populations, as appetite suppression may result in inadequate protein intake.*[12]

As a result, recommendations for protein intake are tailored to activity level to promote lean muscle mass and support muscle recovery in athletes, while also helping mitigate age-related or other factors that may contribute to muscle loss. Although larger studies focusing on age- and/or activity-specific populations are needed to further validate existing findings, the current body of research consistently demonstrates that, when combined with resistance exercise, increased protein intake contributes to the maintenance and recovery of lean muscle mass.*[1,5]

Building on these recommendations, numerous randomized controlled trials have evaluated the effects of whey protein supplementation on maintaining lean body mass (LBM) and stimulating MPS. In non–resistance-trained subjects (N = 63), whey protein supplementation (~22 g post-exercise) during a 9-month supervised resistance training program resulted in significantly greater gains in LBM compared with soy protein or carbohydrate control, despite similar total caloric and protein intake. The superior response was attributed to higher post-exercise circulating BCAA levels, highlighting protein quality as a key determinant of training adaptations.*[9]

Similarly, in healthy sedentary young men (N = 36), supplementation with 20 g of whey protein over a 4-week resistance training period enhanced exercise-induced increases in lean muscle mass and improved muscular strength and endurance compared with placebo.[13] Supporting these findings, a 12-week randomized controlled trial in healthy young adults (N = 8) demonstrated that consumption of whey protein isolate providing 30 g of whey and 2.91 g of leucine—considered the threshold for stimulating MPS—significantly increased lean muscle mass when paired with resistance training.*[11]

Protein timing also appears to play a critical role in optimizing recovery and whole-body protein balance. In a double-blind, crossover study of resistance-trained individuals (N = 12), consumption of 25 g of whey protein immediately following intense evening exercise and again after a 10-hour recovery period significantly improved whole-body net protein balance compared with a non-exercise, non-supplement control condition. This strategy enhanced post-exercise anabolism and attenuated overnight fasted-state protein losses, suggesting benefits from repeated post-exercise protein ingestion for recovery.*[14]

In aging populations, whey protein has demonstrated benefits for maintaining LBM during periods of induced inactivity and energy restriction. In a randomized trial assessing the impact of protein quality on lean mass and MPS in older adults, subjects (N = 32) underwent 2 weeks of physical inactivity combined with a 500 kcal/day energy deficit and either a whey protein or collagen peptide supplement. Both groups experienced reductions in lean mass and MPS. However, upon resuming physical activity during the recovery phase, whey protein (30 g, comprising 45% of daily protein intake at ~1.6 g/kg/day) resulted in a significantly greater rebound in MPS. These findings confirm the importance of protein quality for supporting muscle recovery.*[15]

Consistent with these findings, a pooled analysis of a 12-week trial in healthy older men (N = 33) demonstrated that a high-protein diet supplemented with 25 g of whey protein in combination with resistance exercise (RE) supported body weight maintenance and reduced fat mass compared with a non-exercise control group. Additionally, the analysis showed that the protein supplement group significantly reduced fat mass even without resistance exercise, albeit with a more modest reduction of 0.5 kg (±0.3 kg, $P < 0.05$) vs. the 1.0 kg (±0.5 kg, $P < 0.04$) for the RE + protein supplement group.*[16]

Current research supports consuming a moderate dose (~20-25 g) of high-quality, leucine-rich protein for optimal MPS.[14] In terms of digestibility and bioavailability, whey and egg protein are comparable, with both complete proteins achieving the highest possible PDCAAS score. In a dose-response study using egg protein, healthy young men (N = 6) consumed 0, 5, 10, 20, or 40 g of protein following intense resistance exercise. The results demonstrated that approximately 20 g of supplemental protein was sufficient to maximize the post-prandial anabolic muscle protein response. Protein synthesis increased in a dose-dependent manner up to 20 g of dietary protein, with no additional benefit observed at the 40-g dose, indicating a plateau in MPS beyond the 20-g dose.*[17]

Satiety

In the early 1990s, the mechanism for how the gut peptide hormone GLP-1 mediates meal-induced satiety was identified. As part of the pool of research on satiety mechanisms, it was found that dietary protein provides greater immediate satiety than other macronutrients and that milk is more satiating than sugar-sweetened soft drinks. This was attributed to the upregulation of endogenous GLP-1 production by the protein in milk.*[12]

In a randomized crossover study designed to assess the mechanism of action of whey protein on glycemic control, healthy young men (N = 10) were given pre-meal loads of 10 and 20 g of whey protein, glucose, or water. Whey protein resulted in lower mean plasma glucose, lower insulin concentrations, and an increased post-meal GLP-1 and peptide tyrosine-tyrosine (PYY), suggesting that whey protein lowers post-meal glucose control by both insulin- and non–insulin-dependent mechanisms.[18]

These mechanisms were also summarized in a systematic review and meta-analysis of studies investigating pre-meal whey protein supplementation. The analyzed data consistently demonstrated that whey protein before meals lowered postprandial blood glucose, reduced gastric emptying rate, increased peak insulin, and elevated plasma concentration of GLP-1.*[19]

FIT Whey for Sport Cocoa features 21 g of high-quality whey protein isolate with essential BCAAs. It is formulated to support the maintenance of lean muscle mass and to promote muscle recovery following exercise. One serving contributes 42% of the daily value for protein, making it an excellent choice for anyone looking to increase protein intake.*

Body Composition

Joint and Muscle Support

NSF Certified for Sport

Sports Nutrition

Proteins

FIT Whey for Sport Cocoa Nutrition Facts

21 Servings per container

Serving size	**1 Scoop (about 28g)**
Amount per serving **Calories**	**100**
	%Daily Value*
Total Fat 1g	**1%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 15mg	**5%**
Sodium 45mg	**2%**
Total Carbohydrate 1g	**<1%**
Dietary Fiber 1g	**4%**
Total Sugars 0g	
Includes 0g Added Sugars	**0%**
Protein 21g	**42%**
Vitamin D 0mcg	0%
Calcium 100mg	8%
Iron 1.6mg	8%
Potassium 150mg	4%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: Whey protein isolate, cocoa (processed with alkali), sunflower lecithin, and monk fruit extract.

CONTAINS: Milk.

DIRECTIONS: Blend, shake, or stir 1 level scoop (28 g) in 8-12 oz of water or other beverage and consume once daily, or use as directed by your healthcare professional. Adjust amount of water to desired taste and thickness.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

FORMULATED TO EXCLUDE: Wheat, gluten, corn, yeast, soy, fish, shellfish, peanuts, tree nuts, egg, sesame, ingredients derived from genetically modified organisms (GMOs), artificial colors, and artificial sweeteners.

Typical Amino Acid Profile Per Serving:

Alanine	1,095 mg	Lysine	2,100 mg
Arginine	385 mg	Methionine	455 mg
Aspartic Acid	2,430 mg	Phenylalanine	625 mg
Cysteine	490 mg	Proline	1,225 mg
Glutamic Acid	3,730 mg	Serine	930 mg
Glycine	335 mg	Threonine	1,505 mg
Histidine	345 mg	Tryptophan	410 mg
Isoleucine	1,425 mg	Tyrosine	605 mg
Leucine	2,290 mg	Valine	1,220 mg

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