

WHEY PROTEIN

ADD SOME MUSCLE TO YOUR DIET WITH WHEY PROTEIN

ALL PROTEINS ARE NOT CREATED EQUAL—protein quality is determined by the protein's amino acid composition *and* by the ability of the body to digest and metabolize the protein. Whey protein is both a high-quality protein naturally found in milk and one of the best natural sources of essential amino acids, “essential” because the body cannot make them and therefore they must be supplied through diet.

Research shows that consuming whey protein in combination with resistance exercise can boost the rate at which the body makes lean muscle.^{1,2} Essential amino acids found in whey protein include the branched-chain amino acids leucine, isoleucine and valine. These components of whey protein help to increase protein synthesis, and may result in the building of new muscle mass following resistance exercise.³ In addition, whey protein is highly digestible and rapidly absorbed.

For additional information about the health benefits of whey protein, visit: www.nationaldairyCouncil.org/wheyprotein



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HOW MUCH WHEY PROTEIN IS NEEDED TO STIMULATE PROTEIN SYNTHESIS?

Research shows that consuming at least 20g of whey protein following resistance exercise can result in an increase in muscle protein synthesis in healthy adults.²

HOW CAN PEOPLE EASILY INCORPORATE WHEY PROTEIN IN THE DIET?

While found naturally in cow's milk and yogurt, whey protein also is found in many commercial sports nutrition products such as drinks, energy bars and powder mixes for smoothies and shakes. One energy bar can contain 8 to 25 grams of whey protein.



¹ Burke DG et al, The effect of whey protein supplementation with and without creatine monohydrate combined with resistance training on lean tissue mass and muscle strength. *Intl J Sport Nutr Exer Metab* 11(3): 349-64, 2001.

² Tipton KD et al, Ingestion of casein and whey proteins result in muscle anabolism after resistance exercise. *Med Sci Sports Exerc* 36(12): 2073-2081, 2004.

³ Bloomstrand E et al, Branched chain amino acids activate key enzymes in protein synthesis after physical exercise. *J Nutr* 136: 269S-273S, 2006.