LITERATURE REVIEW ON THE EFFECT OF WHEY PROTEIN CONSUMPTION IN YOUNG ADULTS PRACTICING PHYSICAL ACTIVITY IN SEARCH OF HYPERTROPHY

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ABSTRACT:

Whey protein is defined as a supplement to the basis of the protein extracted from whey, having, in its composition, mainly alpha-globulin and beta-globulin. These substances help in the coagulation of the blood in the body and participate in the body's defense system. In just one dose, the supplement offers the essential amino acids that the body needs to survive but does not produce them. Its effects on sports performance are also very observed. In this sense, the objective of this work was to perform a literature review on the consumption of whey protein for hypertrophy of young adults, are not athletes, but only practitioners of physical activity in their daily lives. Articles dated from 2012 to 2022 were selected for the research. Keywords for the search of the articles were used "whey protein, hypertrophy, mass gain", on the google academic search sites, PubMed and Scielo. In addition to the date limitation, no other filters were used. Data collection showed that people involved in resistance training require 1.2 to 1.4g of protein per kilogram of weight per day, while strength athletes, 1.6 to 1.7g per kg of weight/day, well above 0.8-1.0 g per kg- of weight/day, established for sedentary individuals. The intake of protein or amino acids, after physical exercises, favors recovery and muscle protein synthesis. Whey protein supplementation significantly increased changes in muscle strength and size in young people, adults and the elderly, improved body composition and exercise performance indexes, positively impacted body composition in women, promoting fat loss and maintenance of lean mass. In the short term, no adverse effects on the back of the use of Whey Protein have been proven. However, caution must be exercised in the use of this supplement, as long-term research still needs to be carried out. As final considerations, it isemphasized that soluble whey proteins have an excellent amino acid profile, characterizing them as proteins of high biological value. They have bioactive serum peptides, which give these proteins different functional properties. The consumption of whey protein in pre-workout, or post-workout is a great ally in the time of generation of hipertrophy in the muscle, having as benefits increased abdominal fat loss, increased gains in body mass during exercise in resistance training in young and old, increased muscle strength and functional capacity, and increased numbers of satellite cells in skeletal muscle in the population of men of university age, untrained who exercise resistance training.

Keywords: hypertrophy; whey protein; physical activity; muscle mass; supplements.

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