



IWIMSM-03: Iberoamerican Workshop on Model. and Simulation Methods, Valencia, Spain, 2019



Comparison of the effects on muscle mass and strength when applying a high carbohydrate diet and a ketogenic diet

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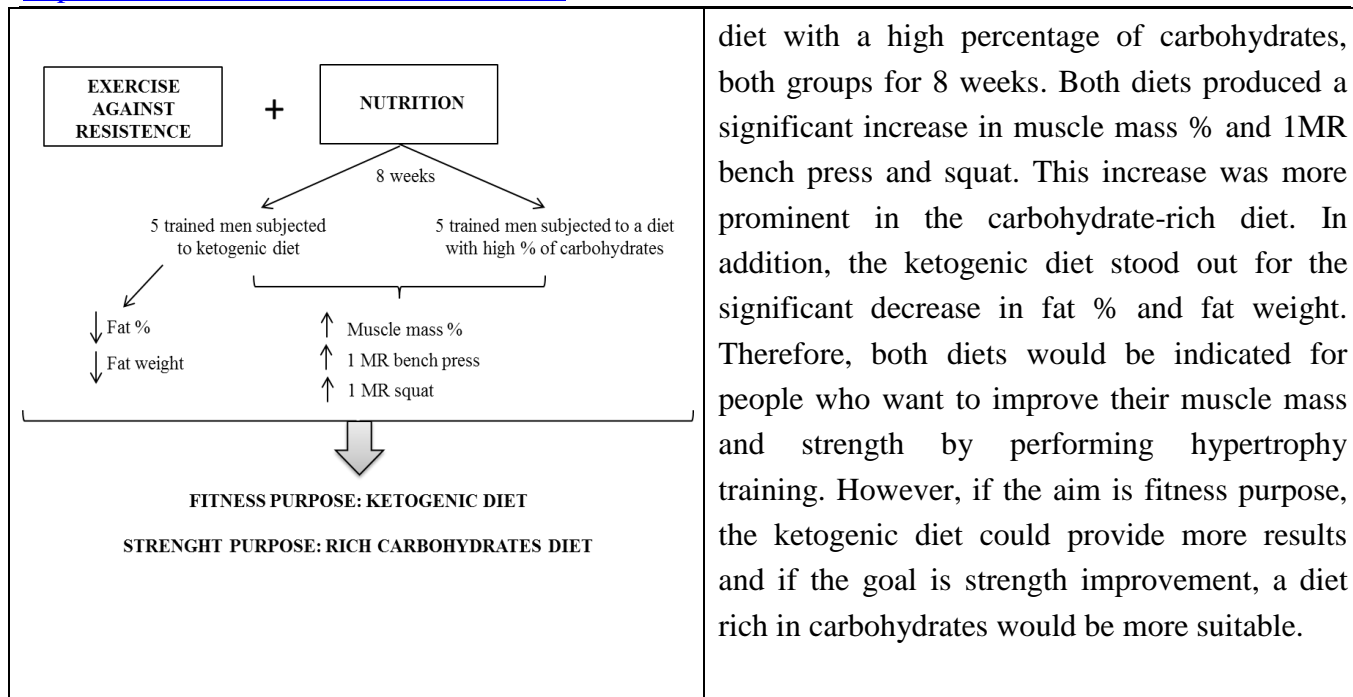
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Graphical Abstract

Abstract.

Scientific evidence shows the importance of nutrition in muscle hypertrophy, especially with the aim of achieving a positive energy balance between food intake and energy consumption, if there is always a suitable protein intake. Several studies show that the combination of exercise against resistance with excessive energy consumption produces gains in lean body mass. However, the exact amount of all macronutrients is not clear. 10 men with more than 2 years of experience in systematic strength training were divided into 2 groups of 5 subjects, one group submitted to a ketogenic diet and the other to a



diet with a high percentage of carbohydrates, both groups for 8 weeks. Both diets produced a significant increase in muscle mass % and 1MR bench press and squat. This increase was more prominent in the carbohydrate-rich diet. In addition, the ketogenic diet stood out for the significant decrease in fat % and fat weight. Therefore, both diets would be indicated for people who want to improve their muscle mass and strength by performing hypertrophy training. However, if the aim is fitness purpose, the ketogenic diet could provide more results and if the goal is strength improvement, a diet rich in carbohydrates would be more suitable.

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