

High-Protein Diet Does Not Inhibit Resistance Exercise Performance

Many nutritionists cite lack of energy for training and/or competition as a major disadvantage to high-protein diets when carbohydrates are reduced to less than 50% of daily caloric intake. Although evidence of reduced performance during endurance training exists, the effects of high-protein diets on anaerobic performance are less clear. Despite the lack of research, anaerobic athletes including resistance-trained individuals are more likely than endurance athletes to incorporate higher protein intakes to rebuild muscle following intense training.

Researchers in Greece recently reported the effects of a high-protein diet on strength, endurance and fatigue in 10 recreationally active women. Participants were assessed for isometric handgrip strength/endurance, and completed four sets of sixteen knee flexion/extension exercises at baseline and following 7 days each of two diets.

During the initial 7-day period participants followed a diet of 55% carbohydrate, 15% protein and 30% fat. The diet was changed to 30% carbohydrate, 40% protein, and 30% fat during the second week.

Heart rate response to training, arterial blood pressures, blood lactate and glucose levels, in addition to fatigue were assessed during training.

While consuming a high-protein diet, participants lost more weight and body fat than during the low-protein diet. Respiratory Exchange Ratio was also lower following the high-protein diet indicating greater use of fat for energy. No differences in any other measures were identified. Consequently, high-protein may be better for fat loss when compared to the traditionally recommended dietary composition.

Dipla, K., et al (2008) An isoenergetic high-protein, moderate-fat diet does not compromise strength and fatigue during resistance exercise in women. Br J Nutr. 100(2):283-6