Abstract

Title: A systematic overview of the recommended amount of protein in elite sports and its

reflection in the vegan diet

Goals: The aim of this work will be to identify whether there are vegan elite athletes who

have participated in national / international competitions in sports such as weightlifting,

strongman, powerlifting and placed third. Compare the individual recommendations for the

volume of protein in the diet based on the vegan diet, and in this sense compare

recommendations for the use of the vegan diet in elite sports.

Method: This work is processed in the form of an overview study. The search for analysis

was selected using the keywords: vegan elite athletes, vegan nutrition, elite sports nutrition,

protein nutrition, strength sports. A total of 1077 studies formed the basis for the narrower

selection of a total of 12 suitable studies for mutual comparison. The basic method is meta-

analysis.

Results: The average recommended values for protein intake are 1.8 ± 0.3 g / kg body

weight. A total of 66% of the 12 analyzed studies agreed with the statement that vegan

nutrition offers opportunities for the full representation of the protein component in the diet

and thus creates the necessary prerequisites for achieving high sports performance. However,

careful comprehensive diet design is required. A total of 42% of studies recommend the

implementation of a nutritional supplement through protein powders and 60% of studies

rather recommend the intake of other supplements in the form of vitamins and minerals - they

mainly agree in B12, D, omega 3 fatty acids.

Conclusion: We found that on average, the recommended values for protein intake for

strength athletes are 1.8 ± 0.3 g / kg, which is close to the recommendations. Vegans should

consume slightly higher amounts of protein due to poorer absorption of plant proteins. Further

research is needed in the area of vegan diet. Weightlifting is represented by Kendrick Farris,

strongmen include Patrick Baboumian and female representative in powerlifting is Yolanda

Presswood.

Key words: diet, elite sport, protein, strength sports, supplementation