

## Satellite Symposium for Euro Global Summit & Medicare Expo on

## Weight Loss



## Dietary protein and essential amino acids supplementation for athletesbodybuilders: from requirements to optimum adaptation

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The main belief in resistance-trained athletes/bodybuilders is that it is needed to generate more muscle protein. There is a good rationale for recommending to athletes protein intakes that are higher than the RDA. Our purpose was to present the efficiency of recent clinical examinations of protein and essential amino acids supplements used by novice, amateur and world-class bodybuilders to gain muscle mass, strength and to present any possible adverse effects.

On the basis of nitrogen balance measurements, the recommended protein intake to maximize muscle protein synthesis is 1.3-1.8 g/kg per day consumed as 3-4 nitrogenous meals. Sports nutrition scientists have accepted that protein intakes during early stage of intensive training in novice bodybuilders is 1.6-1.8 g/kg per day. Protein increases from 1.35 to 2.6 g/kg per day do not increase muscle mass gains during the first month of bodybuilding training (1.5 hrs/day, 6 days/week).

Amateur bodybuilders may require slightly more protein than sedentary people. A well balanced diet would be achieved with a few corrections in food such as total calorie intake and protein quality. "Breads and cereals" and "milk and dairy products" revealed to be the most important groups. Protein supplements contributed 13% (18-22%) of total protein intake. It's dubious whether extra dietary protein supplementation will help someone to achieve athletic goals.

A world-class bodybuilders during 8-week pre-competition period achieved athletic goal by following high energy (54 kcal/kg/day), carbohydrate (76% of DEI) and protein (19%) diet. The exercise strategy included 2 hrs of aerobic and 3 hrs of weight training. Recent scientific findings are supported claims that excessive protein supplementation can lead to dehydration, liver and kidney changes. The most effective way to increase strength and bulk is to perform sport-specific resistance exercise training with the provision of adequate energy, carbohydrate, and protein.

## Biography

Andrej B. Simovski is born in Skopje, Macedonia. He is Bachelors Degree of Nutrition (expected), Faculty of Technology and Technical Science Veles at the University "St.Clement Ohridski" in Bitola, Macedonia. Language skills: english, macedonian and serbian. Participant at the international projects, working on logistic support at annual conferences, workshops and continual medical education, creating power point presentations/posters at national campaigns, video materials and the website www.nosmoking.cjb.net . Also, he was translator of materials and case study, preparing the materials (agenda, sertificates, invitation letters, photocopying), brochures handing, taking part in organizing eco activities, organizing an exhibition and public education counselling as a Secretary of the NGO Public Health National organization for health promotion.

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