

# Dietary sport supplement shows strong effects in the elderly

November 7 2008

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Beta-alanine (BA), a dietary supplement widely used by athletes and body builders, has been proven to increase the fitness levels of a group of elderly men and women. The research, published in BioMed Central's open access *Journal of the International Society of Sports Nutrition*, suggests that BA supplementation improves muscle endurance in the elderly.

The research was carried out by Jeffrey Stout, PhD from the University of Oklahoma, USA, and a team of colleagues. According to Dr. Stout, "This could have importance in the prevention of falls, and the maintenance of health and independent living in elderly men and women."

BA is an amino acid that, together with histidine, forms the dipeptide carnosine. Carnosine is found in muscle tissue and makes an important contribution to the maintenance of intracellular pH, which is vital for normal muscle function during intense exercise. An increased intake of BA significantly raises muscle carnosine levels.

In this double-blind, randomized controlled trial, 26 elderly men and women were given a 90-day course of BA supplementation or placebo pills. Their fitness levels were tested before and after the course. In the treatment group, 67% of the subjects showed an improvement in their fitness levels, compared to 21.5% of the people receiving the placebo treatment.

The researchers write, "Our data suggest that 90 days of BA supplementation increases physical working capacity in elderly men and women. These findings are clinically significant, as a decrease in functional capacity to perform daily living tasks has been associated with an increase in mortality, primarily due to increased risk of falls."

Source: BioMed Central

Citation: Dietary sport supplement shows strong effects in the elderly (2008, November 7)  
retrieved 25 December 2022 from

<https://medicalxpress.com/news/2008-11-dietary-sport-supplement-strong-effects.html>

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