

## nutrimeo: Collagen peptides for improved body shaping



Advanced adult age is associated with profound changes in body composition. A principal component is a decrease in skeletal muscle mass. This age-related loss in skeletal muscle has been referred to as sarcopenia.<sup>1)</sup>

Sarcopenia is directly associated with a loss of muscle strength and an increase in body fat. With a sedentary lifestyle, researchers estimate the loss of muscle mass to be:

- Up to 8 % per decade in the age range 40-70 years
- Up to 15 % muscle loss per decade after the age of 70<sup>2)</sup>

The current recommended dietary allowance (RDA) for

protein is 0.8 g/ kg/ day. It has been estimated that approximately 40 % of people over the age of 70 do not meet the RDA.<sup>3)</sup>

Scientists and nutritionists often recommend a combination of physical exercise and optimized nutrition and / or nutritional supplementation to fight the onset of sarcopenia.

In order to maintain muscle mass, strength and body composition, the following factors are extremely important:

- A healthy and balanced diet
- with a targeted nutrient supplementation
- Resistance exercise

**nutrimeo** is now offering innovative health food solutions that support healthy aging.

In cooperation with the GELITA AG, the experts at nutrimeo have developed a functional ready-to-drink product that contains BODYBALANCE®, a specific Bioactive Collagen Peptides.

BODYBALANCE® has been clinically studied, and the results published in the British Journal of Nutrition.<sup>4)</sup> This is the first study that has investigated the effects of collagen peptides on body composition and muscle strength.

The study demonstrated that a supplementation with specific collagen peptides further

1) Evans WJ. What is sarcopenia? J Gerontol A Biol Sci Med Sci. 1995; 50, 5-8

2) Estimation based on: Rom et al. Lifestyle and Sarcopenia – Etiology, Prevention & Treatment. Rambam Maimonides Med. J. 2012 October 3(4) e0024

3) Burton LA, Sumukadas D. Optimal management of sarcopenia. Clin Interv Aging. 2010;7:217–28.

4) Zdzieblik, D. et al 'Collagen peptide supplementation in combination with resistance training improves body composition and increases muscle strength in elderly sarcopenic men: a randomized controlled trial', doi: 10.1017/80007114515002810, British Journal of Nutrition, 2015

5) Conclusion GELITA AG, Uferstr. 7 · 69412 Eberbach · Germany

increased the benefits of resistance training in elderly people affected by muscle loss.

The BODYBALANCE® group showed a statistically significantly higher increase in lean body mass/muscle (Fig. 1) and muscle strength (see Fig. 2) compared to the placebo group. The gain in muscle mass was about 50 % higher, while muscle strength, measured as power output, increased by about 100%.

The reduction in body fat was also statistically significantly higher with BODYBALANCE® supplementation.

The BODYBALANCE® group lost about 50 % more fat compared to the placebo group (Fig. 3).

In conclusion, the study results demonstrate that the combination of resistance exercise and specific collagen peptides supplementation is well suited to increase strength, to influence body composition and to fight the onset of sarcopenia. Within three months a person could gain the muscle mass he or she has lost in 10 years of natural aging.<sup>5)</sup>

Because the product developers at nutrineo also care for aging consumers, they have created a protein pudding with the benefit of a second collagen peptide. The delicious protein dessert has been fortified with BODYBALANCE® and FORTIGEL®.

FORTIGEL® activates the growth of new cartilage, alleviates joint discomfort and

helps to keep the joints supple and flexible. Since elderly people often have problems with an adequate fluid intake (insufficient drinking behavior), a 'dessert' format was chosen instead of a drink. This product makes it easier for the consumers to integrate additional healthy nutrients into their daily routine and eating plan. Furthermore, high quality protein and vitamin ingredients promote the regeneration of muscles and serve as preventive measure for supporting a healthy and active lifestyle.

"Emerging trends in development include protein drinks, sports nutrition as well as dietary food. We are also seeing an increased demand for protein-containing products with added value for the food retail trade amongst others", explains Verena Claus, Product Manager at nutrineo. "Based on these insights, we have developed the health food solutions with Bioactive Collagen Peptides."

We are committed to translating ideas into the right products which can be presented to our customers as concepts that are ready for the market."

nutrino is the brand of the Health Food Division of Uelzena eG. nutrino is a full service company, solution provider and contract manufacturer for companies offering weight management and sports nutrition products. The unit belongs to the Uelzena Group that was founded in 1952, employ a staff of 663 and generates an annual turnover of currently more than 526m Euros.

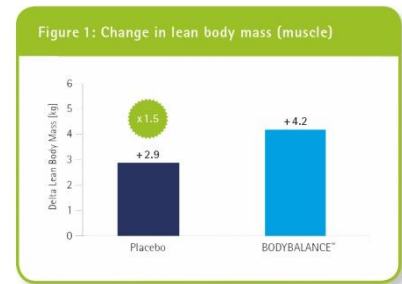


Fig.1: Change in lean body mass (muscle) after 12 weeks intervention compared to start of the trial. Intervention: 3 times per week, 1 hour resistance exercise and daily BODYBALANCE® or placebo supplementation.

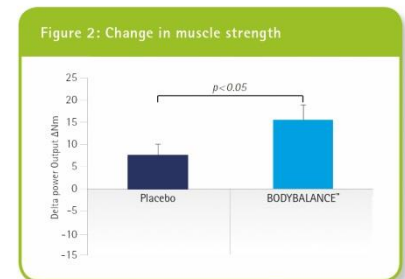


Fig.2: Change in muscle strength after 12 weeks intervention compared to start of the trial. Intervention: 3 times per week 1 hour resistance exercise and daily BODYBALANCE® or placebo supplementation.

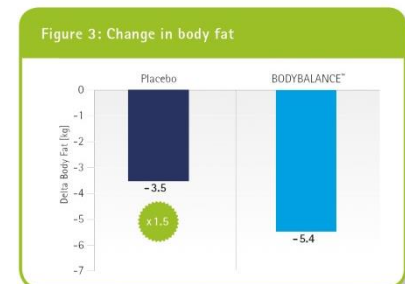


Fig.3: Change in body fat after 12 weeks intervention compared to start of the trial. Intervention: 3 times per week 1 hour resistance exercise and daily BODYBALANCE® or placebo supplementation.

**Food Matters Live**  
Join our lecture on 22th November 2016/ Gallery room 1/ 11.30 am or visit our booth 149/ ExCeL, London

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