

# FOREFRONT

IN THE MIX  
ON THE PULSE

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## DEFY AGE RELATED MUSCLE LOSS AND IMPROVE BODY COMPOSITION

BODYBALANCE™

AS PUBLISHED IN THE BRITISH JOURNAL OF NUTRITION



- Improve body composition
- More muscle, less fat, more strength
- Maintain freedom and independence



# BODYBALANCE™

## performance peptides and sarcopenia

Sarcopenia has been defined as the age associated loss of muscle-mass and muscle performance along with an increase in body fat.<sup>1)</sup> Muscle loss is a natural consequence of aging. 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>

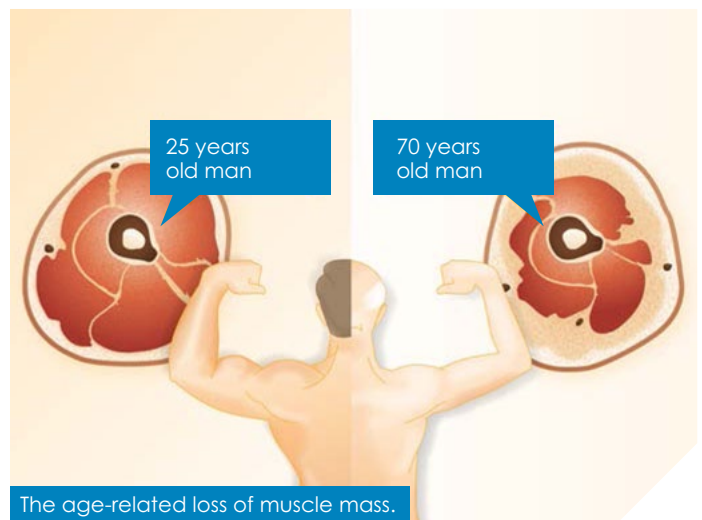
Another consequence of growing older is diminished strength. The body becomes frail – making normal daily activities a challenge and threatening the very core of independent living.

### Delay and counteract the onset of sarcopenia – clinically studied benefits

Scientists and health professionals often recommend a combination of physical exercise and optimized nutrition/ nutritional supplementation to delay and counteract the onset of sarcopenia. A healthy and balanced diet in combination with a targeted nutrient supplementation and resistance exercise are crucial factors for maintaining muscle mass, strength and body composition.

GELITA has developed BODYBALANCE™, specific Bioactive Collagen Peptides®, clinically studied in a recently published trial in the British Journal of Nutrition<sup>3)</sup>. This is the first study that investigates the effects of collagen peptides on body composition and muscle strength.

### Muscle cross-section of a 25 years old man compared to a 70 years old man



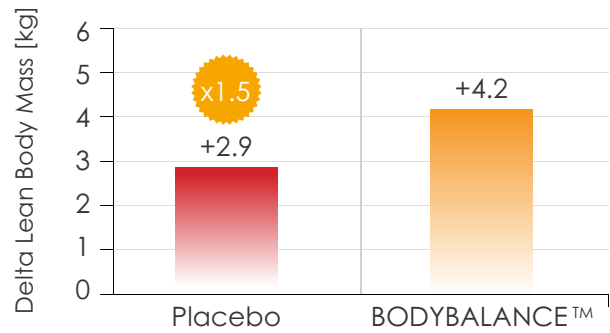
1) Evans WJ. What is sarcopenia? J Gerontol A Biol Sci Med Sci. 1995; 50, 5-8

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



### Figure 1: Change in lean body mass (muscle)

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.



The randomized, placebo controlled, double blinded study included 60 sarcopenic men aged 65 and older (average 72 years). During the twelve weeks study period all participants completed a resistance exercise program (pull down, leg press, bench press and back press) three times per week. In addition one group supplemented daily with 15g BODYBALANCE™ and the other group with a placebo.

The study demonstrated that supplementation with specific collagen peptides further 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 placebo. The gain in muscle mass was about 50% higher, while the power output increased by about 100%.

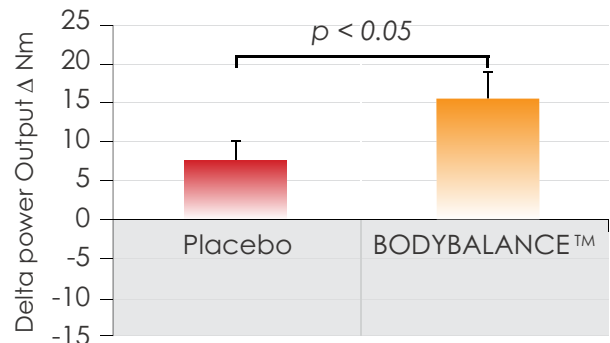
The reduction in body fat was also statistically significantly higher with BODYBALANCE™ supplementation.

The BODYBALANCE™ group lost about 50% more fat mass compared to placebo (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, positively influence body composition and fight the onset of sarcopenia. In 3 months one could gain the muscle mass lost in 10 years of natural aging.

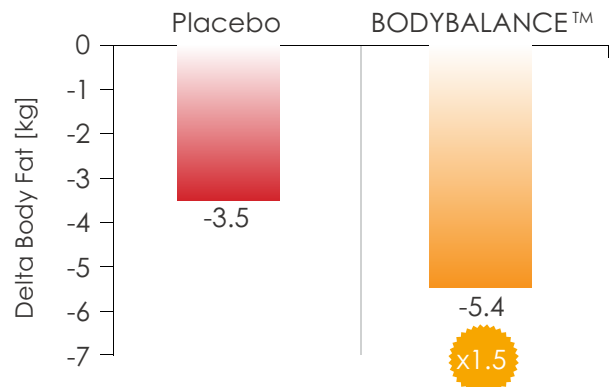
### Figure 2: Change in muscle strength

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.



### Figure 3: Change in body fat

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.







**BODYBALANCE™ performance peptides – rapid absorption and superior technological benefits.**

- BODYBALANCE™ collagen peptides are easily digested and rapidly absorbed in the body (Fig. 4).
- BODYBALANCE™ is pure collagen protein, allowing for clean label products.

Due to its excellent technical and sensory properties, BODYBALANCE™ can be used in a wide range of foods and dietary supplements. Near-water concepts and other ready to drink beverages, shots, gels, bars or any kind of powder formulations easily fit the scientifically substantiated daily dose, allowing for an easy incorporation into daily life.

**Make innovative product ideas a reality!**

BODYBALANCE™ can enhance beverages and functional bars. But it can also be sold as protein powder – pure or mixed with other functional ingredients



**GET IN TOUCH:**

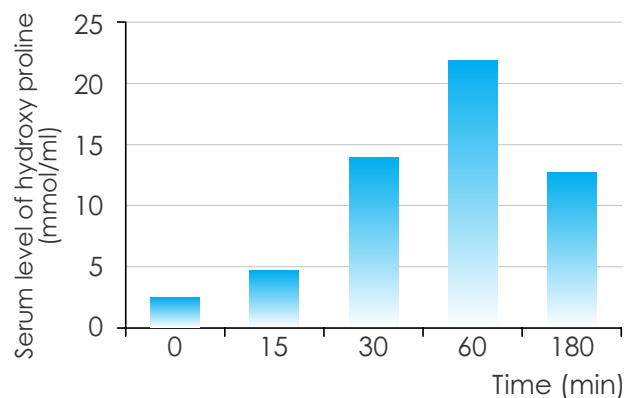
T: 01787 478 855 M: 07771 630 486

3) 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

\* Statements in this brochure have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease. It is the sole responsibility of the producer/marketer of the finished product to ensure that claims made are according to relevant regulations.

GELITA does not warrant the regulatory sufficiency of the above information to support marketing claims.

**Figure 4: Excellent and rapid absorption of collagen peptides**



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