Press release

Preventing sarcopenia is possible

Sarcopenia is one of the most significant causes of disability in elderly people. It affects quality of life, increases the risk of disability and loss of independence and even mortality, making it a major public health problem. However, its potentially dramatic consequences are not inevitable. Muscle is a living tissue, consisting of 20% protein, which is continually renewed. Muscle is subject to two opposite phenomena of breaking down and rebuilding, called proteolysis and proteosynthesis. With advancing age, there is an imbalance, which means that the muscle mass gradually reduces: between 50 and 80 years of age, muscle mass loss is around 30%. If this reduction is significant and is accompanied by a reduction in muscle mass AND strength, it is called sarcopenia. Its prevalence varies depending on the study and the definitions used but it can reach 29% in the elderly population living at home and more in a retirement home.

It is in this context that more than 400 scientists and health professionals, gathered for the World Congress on osteoporosis and bone diseases (WCO-IOF-ESCEO1) held in Malaga, Spain, had the opportunity at a symposium* arranged by Cerin, EMF and GDP the state to hear the latest scientific data on sarcopenia.

What are the strategies to combat sarcopenia?

Prof. Jean-Yves Reginster, President of ESCEO, said if we cannot do anything against advancing age, it is essential to act on certain risk factors such as the combined action of appropriate and resistance exercise (dumbbells, elastic straps, etc.) and an increased protein intake in older adults which will limit or delay sarcopenia. Living longer is good but living longer in good health is better and less expensive.”

For around ten years, a number of experts have put forward the benefit of these prevention strategies as demonstrated by Prof. Alfonso J. Cruz Jentoft of Madrid University in Spain: “the protein requirement of older adults is 1 g to 1.2 g/kg bodyweight/day from 60-65 years of age (vs. 0.8 g/kg/day in young adults), and more if there is an associated condition. A senior elderly weighing 60 kg therefore needs 60 to 72 g of protein per day.” These days, the best approach to promoting muscle synthesis is through “the intake of proteins of high nutritional value such as “fast” proteins and proteins rich in a specific amino acid (leucine) found in large quantities in milk and whey, and in the distribution of this intake over each meal, including dinner and before sleep” added Dr. Lex Verdijk of Maastricht University, Netherlands.

For a long time we considered bone and muscle separately; over the last few years the concept of a “bone/muscle” functional unit has emerged based on an accumulation of case studies. For Dr. Véronique Coxam, from the INRA in Clermont- Ferrand “bone and muscle have close biological interactions. Muscle is able to synthesize a number of molecules which modulate bone metabolism. In contrast, immobilization results in muscle atrophy which triggers the production of substances stimulating bone resorption. In turn, bone cells can exert an effect on muscle cells.” The OSTPR-FPS2 study reveals that sarcopenia multiplies the risk of falls and fractures by a factor of 2 to 3.

Sarcopenia is not a fatality if you combine regular and appropriate resistance exercise with overall appropriate protein intake including dairy proteins in elderly and if we include in the prevention and management strategy the notion of a bone/muscle unit by considering nutrients such as calcium and vitamin D.

1 World Congress on Osteoporosis, osteoarthritis and musculoskeletal diseases
2 Sjöblom S Maturitas 2013; 75(2): 175-80

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*The satellite symposium is organized by the joint action of the European Milk Forum (EMF), CERIN and Global Dairy Platform.

About CERIN
CERIN, centre for nutritional research and information, is the health department of the dairy joint trade organization. CERIN aims to provide health professionals and public health professionals as well as journalists with complete and validated nutritional information on milk and dairy products, but also on all the major topics of nutrition and health, nutritional requirements of population groups and the nutritional prevention of conditions.
Website: http://www.cerin.org/

About the European Milk Forum (EMF)
Created in 2011, the European Milk Forum is the first pan-European non-profit organisation developing information and promotion campaigns on milk and dairy. “Milk, Nutritious by Nature” is a science-based program aimed at creating awareness of the nutrient richness of milk and dairy and at underlining milk and dairy’s contribution to a healthy and balanced diet. The campaign is currently running in Austria, Belgium, Denmark, France, Ireland, Northern Ireland, Norway and the Netherlands.
Website: www.milknutritiousbynature.eu