PROMISS
Nutrition for healthy ageing

Press Release

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Across Europe, one out of five older adults living at home is malnourished, or at risk of protein-energy malnutrition. Improving protein intake might prevent malnutrition. Many older persons today do not meet the current Recommended Dietary Allowance (RDA) of protein intake, which may lead to mobility limitations, loss of muscle strength, and increases the risks of chronic protein-energy malnutrition. There is growing evidence that adequate protein intake is crucial in old age, which makes it essential to recognize low protein intake, and to intervene to prevent malnutrition. These are the issues at the core of the PROMISS research.

Malnutrition is a serious problem for public health, as well as a tangible social and economic issue with significant repercussions for individuals and society as a whole. The PROMISS project successfully recorded accurate protein intake data from a unique and largely understudied age group, capturing characteristics of older adults at risk, food intake, including protein rich food products, timing of intake over the day and nutritional quality of their diets.

The PROMISS results suggest that higher protein intake in older persons may preserve muscle strength and physical performance and prevent the development of malnutrition. These results also suggest that the RDA of protein intake (≥0.8 g/kg/d) might be too low and that a protein of ≥1.0 g/kg/d might be more effective.

Most protein is consumed at lunch (about 35%) and at dinner (about 21%). PROMISS results show that cconsumption of at least 20g of protein (for example 3 slices of bread with cheese or ham, or 200 g cooked pasta and 2 eggs) within any one eating occasion was predictive of a protein intake ≥0.8 g/kg/d (RDA). These results suggest that **dietary strategies should focus on achieving at least a protein intake of 20g on one eating occasion.** In people with a protein intake reaching the RDA, meat and meat products contributed 6% more to protein intake, while cereals and cereal products contributed less to protein intake. Higher consumption of cereals and cereal products, meat and meat products, and milk and milk products were associated with a lower chance of having a low protein intake.

Older adults at risk

Significant predictors of higher protein intake are: being female, having a higher energy intake, and higher tooth count. Significant predictors of lower protein intake include drinking alcohol and having swallowing problems. Older persons reporting a poor or a good appetite, compared to those reporting a very good appetite, have a lower intake of protein, even after adjusting for their lower total energy intake, as well as their daily number of servings of the food group 'meat, fish, poultry, beans and egg'

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being generally lower. In older people with a poor appetite the daily number of servings of '(whole) grains' and 'milk, yoghurt, cheese' food groups is generally lower compared to those with a very good appetite.

The innovation in PROMISS the wide range of perspectives for coping with malnutrition that it brings: PROMISS will develop sustainable dietary and physical activity strategies, new food concepts and new food products to prevent protein-energy malnutrition. PROMISS intends to help older people increase their protein intake, and meet the protein recommendation, thus preventing malnutrition and enhancing active and healthy life when ageing.

Partnership

A consortium of 24 partners, experts in the fields of epidemiology, clinical trials, geriatrics, nutrition, physical activity, microbiomics, behavioural sciences, and ageing, have been able to join forces thanks to European funding. PROMISS is a RIA – Research and Innovation Action project, funded by the Horizon2020 Programme. It runs for 5 years, from April 2016 till March 2021, with overall funds of 6,915,506.25 EUR.

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