Perceptions of protein

A TEAGASC survey of older adults revealed that protein is an underappreciated nutrient among this cohort in Ireland.

Older adults should eat a more protein-dense diet than younger adults, according to a new report issued by the Food Safety Authority of Ireland (FSAI, 2021). Eating enough protein, found in foods such as meat, dairy, eggs and beans, is essential to help preserve muscle mass and physical function to ensure healthy ageing. However, a recent survey of Irish consumers conducted by Teagasc showed that those who need protein most – middle-aged and older consumers – are not aware of the increasing importance of protein in the diet as we age.

Protein important for keeping muscles strong

Beginning in our forties, we start to lose ~1 % of our muscle mass and 2-3 % of our strength per year. Over time, this can lead to a disease called sarcopenia, which is characterised by low muscle mass and strength. Sarcopenia can impair mobility, making it more difficult to independently perform daily physical tasks. Furthermore, it increases the risk of falls, fractures, poor quality of life, and the need for long-term care. The most effective way to prevent sarcopenia is the combination of regular physical activity, especially ability-appropriate resistance exercise (such as lifting weights), accompanied by a nutritious diet that provides adequate protein.

Compared to younger adults, older adults are less efficient at using the protein they eat to build new muscle, so they may need to eat more protein to help preserve their muscle mass as they age. In order to stimulate muscle building, older adults are encouraged to eat a moderate serving of high-quality protein-rich foods at each meal. High-quality protein foods include meat, poultry, fish, milk, yoghurt, and eggs, and to a lesser extent, beans, peas, lentils and nuts. In addition, consuming protein after exercise enhances the muscle-building effects of the exercise.

Lack of awareness

A survey recently conducted by Teagasc explored attitudes to food and health among 513 men and women aged 45 to 81 years living in Ireland. As part of this survey, people were asked about protein in the diet. A total of 63 % of the respondents believed that older people do not need more protein than younger people. In addition, a substantial proportion of the individuals (36 %) did not perceive protein as being an important part of their diet. Those who did not recognise the importance of protein experienced slightly lower physical ability, perceived their diets as less healthy, used convenience more when preparing meals, were less influenced by advertising, and had lower income and education compared to individuals who did identify protein as being an important part of their diet (**Figure 1**).

Overall, the respondents rated taste as the most important motivating factor when choosing food, followed by health, cost, convenience and, lastly, sustainability. However, among those who did not identify protein as being important in their diet, cost and convenience were slightly more important, while health and sustainability were more important in those who recognised protein as important.

How much protein do we need?

The amount of protein we need each day depends on our age, body weight, activity levels, and health status. The FSAI recommends that healthy older adults should consume 0.75 g of protein per kg body weight each day.

This would correspond to 53 g of protein for a person weighing 70 kg, which, in food terms, would be equivalent to a glass of milk at breakfast, two eggs and a yoghurt at lunch, and a small salmon fillet at dinner. This



FIGURE 1: Comparison of characteristics between middle-aged and older adults who perceive protein as important in their diet and those who do not perceive it as important.

is taken a step further for older adults at risk of sarcopenia, for whom the FSAI recommends protein intakes that are 25-50 % higher than the recommendation for healthy older adults. Importantly, previous research conducted at UCD, within the Department of Agriculture, Food and the Marine-funded Nutrimal Programme led by Helen Roche and Clare Corish, has shown that more than half of independent-living older Irish adults have some impairment in strength, muscle mass and/or physical performance. Therefore, this higher protein intake recommendation is applicable to a relatively large proportion of older adults in Ireland. Thus, clear and targeted public health messaging is needed to communicate these protein guidelines effectively for healthy ageing.

Conclusion

Consuming sufficient dietary protein is required to optimise healthy ageing. A substantial proportion of middle-aged and older consumers in Ireland do not identify protein as being an important aspect of their diets. Clear public health campaigns are required to communicate the importance of protein to support healthy ageing. Campaigns should also highlight tasty, convenient and cost-effective ways to include sufficient protein in the diet in order to influence food choice among consumers who are less motivated by health. In addition, opportunities exist for the food industry to produce tasty, protein-dense products targeted at the older adult market to both promote and facilitate healthy ageing.

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Authors

Caoileann Murphy

Marie Skłodowska-Curie/Teagasc Research Leaders 2025 Fellow, Agrifood Business and Spatial Analysis, Rural Economy and Development Programme, Teagasc Food Research Centre, Ashtown, Dublin 15

Sinead McCarthy

Research Officer, Agrifood Business and Spatial Analysis, Rural Economy and Development Programme, Teagasc Food Research Centre, Ashtown, Dublin 15

Correspondence: sinead.mccarthy@teagasc.ie

Helen Roche

Full Professor of Nutrigenomics, Director of UCD Conway Institute of Biomolecular and Biomedical Sciences, University College Dublin

Clare Corish

Associate Professor in Clinical Nutrition and Dietetics, School of Public Health, Physiotherapy and Sport Science, University College Dublin

