## Protein and cognition: Increased intake in older age linked with reduced risk of impairment \_ China data

By Si Ying Thian 01-Feb-2023 - Last updated on 01-Feb-2023 at 01:28 GMT



Increasing protein intake appears to reduce the risk of cognitive impairment in older age, while an extreme decline in animal-based protein consumption is linked with a 48%increase, new data from a long-term China study suggests.

To assess how protein intake from different food groups affects cognitive function among older adults, a cohort study was conducted based on randomly sampled data collected from 6951participants aged 65 and older from China who do not have a cognitive impairment or dementia.

Previous research has shown that protein is a pertinent nutrient for cognitive functioning:

"Proteins are the building blocks for muscles, and inadequate protein intake might increase the risk of frailty and sarcopenia, which are closely related to cognitive impairment," the paper states.

The research found that older people who experienced an extreme decline in animal-based protein intake had a 48% higher risk of cognitive impairment, compared to those whose intake was relatively stable.

On the flip side, the study suggests that plant-based protein may have a more substantial impact on cognitive function prior to old age than animal-based protein.

The academics noted that unlike protein from red meats, plant-based sources are not associated with adverse neural consequences due to low-grade systemic inflammation. This could, therefore, the cognitive benefits of higher plant-based protein intake, however, were more significant for rural residents and participants with an unfavourable economic status.

While the researchers noted that greater protein intake was needed as people age, more studies are needed to ascertain optimal levels and sources.

They wrote: "Older adults need more dietary protein to counteract inflammation and catabolism associated with chronic and acute diseases that often occur with ageing, and they have a declining anabolic response to protein intake."

"However, it should be noted that currently, regarding to cognitive function, there is no specific recommendation for protein intake for older adults. Additional research is needed to develop definite conclusions of protein intake for maintaining optimal cognitive function in older adults."

The main limitations of the study included the bias of self-reported data, the lack of quantitative information, the loss of cases to follow-up on, and the design of the survey limited to only two-timepoints.

"Among Chinese older adults, we observed a negative association between improvement in protein intake and risk of cognitive impairment, and extreme decline in protein intake increased the risk of cognitive impairment. Unlike other studies, our investigation highlights the role of improvement and decline in protein intake on cognitive performance in older adults. In addition, the impact of protein intake from different food groups on cognitive function may be affected by the characteristics of older adults," the authors concluded.

Authors: Xu, X., et al