

Does increasing the minimum protein intake in the elderly population prevent a loss of muscle mass?

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Introduction

In our society today, there are serious complications due to increased life expectancy at ages 65 and older.

The recommended dietary allowance suggests 0.8 g/kg/day of protein. Unfortunately, with age comes insufficient protein intake due to anabolic resistance (3).

In addition, the data suggests that malnutrition and sarcopenia has increased over the years in the elderly community.

There is evidence that if we were to increase the amount of protein per kilogram in our population, we would see an increase in strength, function and muscle mass in the elderly community (4).



Aim

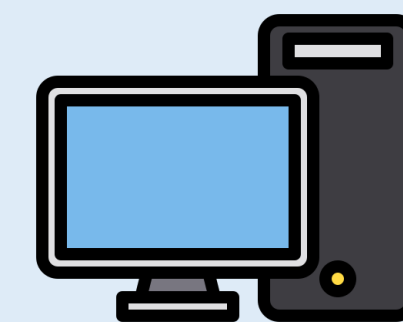
The objective is to analyze how increasing the minimum protein intake of 0.8g/kg/day prevents a loss of skeletal muscle mass in the elderly community.



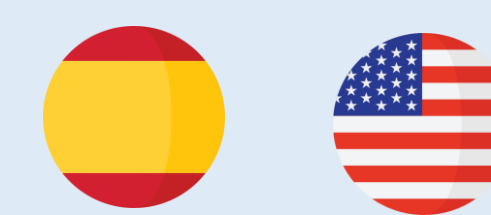
Methodology



Narrative
Literature
Review



PubMed
CINAHL



2016-2022

Results

1. Anabolic resistance and Sarcopenia

Higher protein intake is considered essential with this age group due to six studies that showed elderly consuming 20g of casein protein and decreased in muscle protein synthesis. Preventing the probability of sarcopenia long term.

3. Malnutrition

Evaluation Tools:

- Nutritional mini-measurement
- Comprehensive nutritional assessment
- Malnutrition screening tool
- Nutritional risk screening

Intervention:

- Spread feeding strategy



2. Protein Quality and Muscle Protein Synthesis

Older adults have a lower anabolic response and less sensitivity to amino acid absorption.

The priority should be to consume a high amount of fast-digesting protein such as leucine throughout the day to promote stimulation of muscle protein synthesis, specifically animal based (3).

4. Essential Amino acids

Leucine: 2.8g daily for elderly

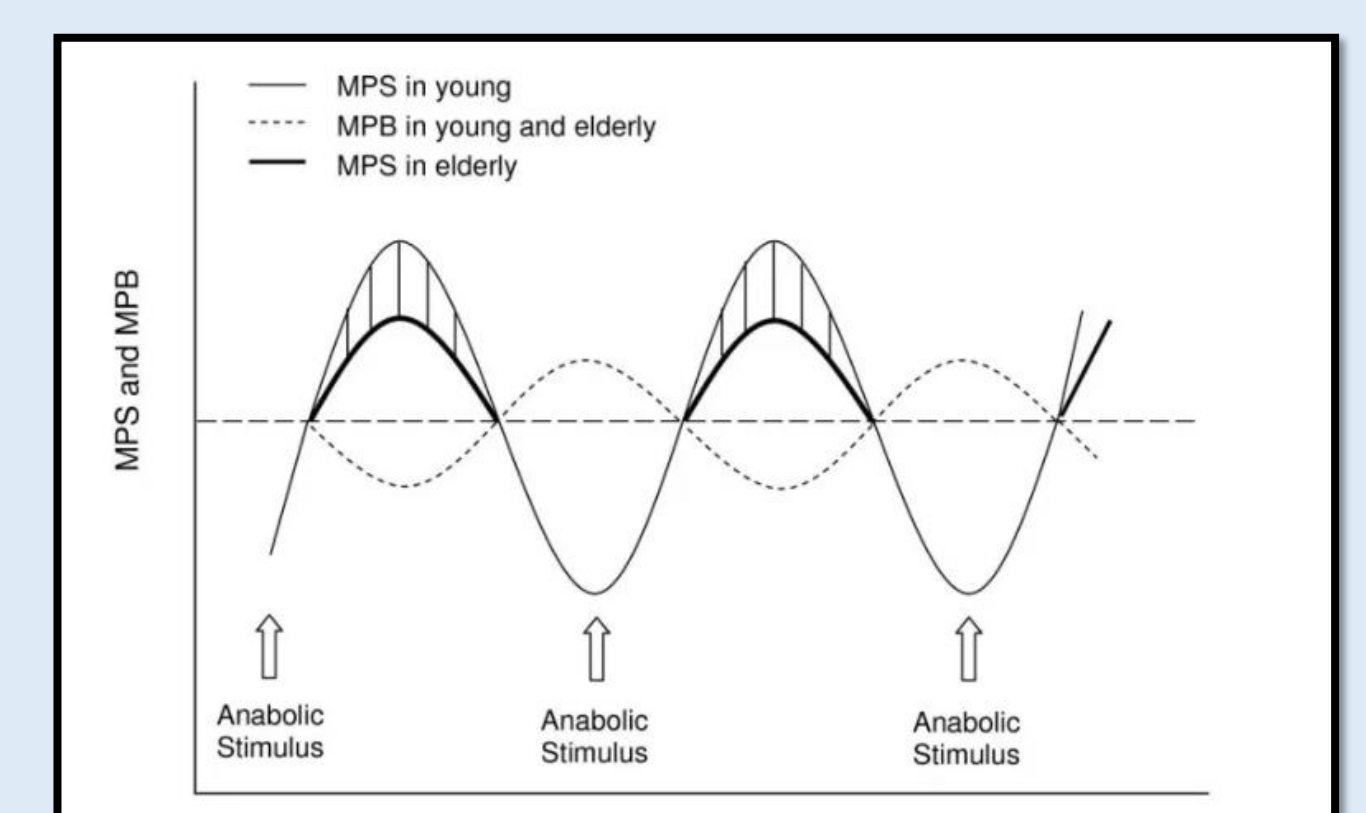
Vitamin D: 800 IU daily

5. Physical activity and high protein diet

A high protein diet plan combined with resistance training has shown to be the most effective in improving the maintenance of muscle mass in elderly (16).

6. Daily protein requirements

Data reveals that experts in nutrition and healthy ageing promote an increase of protein by 1.2- 2.0g/kg/day depending on each individuals health condition (12).



Conclusion

It has come to the conclusion that elderly require a greater amount of protein intake than the minimum recommended dietary allowance of 0.8 g/kg/day. Protein consumption of 1.2-1.5g/kg/day in elderly people is optimal for decreasing anabolic resistance and reaching muscle protein synthesis daily. The studies promote an active lifestyle combined with a high protein diet in order to prevent muscle loss. Complications such as malnutrition, anabolic resistance and sarcopenia can be prevented through a holistic nursing assessment and treatment plan. Nurses have the ability to monitor meal distribution, protein quality and environment.



Bibliography

