

Managing deficiencies and enhancing quality of life in the elderly

Brain MEG*

Department of Nutrition and Food Systems, University of New Hampshire, Durham, United States of America

Received: 25-November-2024, Manuscript No. CNHD-24-154613; **Editor assigned:** 27-November-2024, PreQC No. CNHD-24-154613 (PQ); **Reviewed:** 11-December-2024, QC No. CNHD-24-154613; **Revised:** 17-December-2024, Manuscript No. CNHD-24-154613 (R); **Published:** 24-December-2024, DOI: 10.12873/0211-6057.44.04.232

DESCRIPTION

As individuals age, their nutritional needs undergo significant changes, often leading to increased vulnerability to nutrient deficiencies. Managing these deficiencies is essential not only for the prevention of malnutrition but also for enhancing the overall quality of life of older adults^[1]. Adequate nutrition plays a major role in maintaining health, promoting vitality and preventing or mitigating the effects of chronic diseases, which are common in older populations. With aging, physiological changes occur that can affect both appetite and nutrient absorption. Reduced stomach acid, slower digestion and changes in taste and smell can make food less appealing, leading to a decline in appetite and unbalanced diets^[2,3].

Additionally, older adults often experience a decreased ability to absorb essential nutrients like vitamin B12, calcium and iron, which can lead to deficiencies if not properly managed. This is compounded by age-related conditions such as diabetes; hypertension and cardiovascular disease, which may require dietary modifications, further complicating the nutrition of older adults. The impact of nutrient deficiencies in the elderly can be profound^[4-6]. Vitamin D deficiency, for instance, can lead to weakened bones, increasing the risk of fractures and osteoporosis. Similarly, a lack of calcium can worsen this issue, contributing to bone thinning and muscle weakness. Iron deficiency can result in anaemia, causing fatigue and reducing the body's ability to fight infections.

In some cases, supplementation may be necessary. Vitamin

D supplements, for example, are often recommended for older adults who have limited sun exposure or struggle to absorb enough from food sources. Similarly, iron and B12 supplements may be prescribed for those with deficiencies^[7]. It is important, however, that these supplements be used under the guidance of a healthcare professional, as excessive intake of certain nutrients can lead to other health complications. Moreover, insufficient intake of omega-3 fatty acids and antioxidants can negatively affect cognitive function, contributing to memory loss and an increased risk of diseases such as Alzheimer's. These deficiencies not only diminish physical health but also impair mental and emotional well-being, contributing to a lower quality of life^[8].

Beyond addressing deficiencies, improving nutrition can significantly enhance the quality of life for the elderly. A balanced diet supports energy levels, which can reduce fatigue and improve mobility, allowing seniors to remain active and independent. Good nutrition also helps to preserve cognitive function, preventing or delaying the onset of dementia and improving mental clarity^[9,10]. Social connections surrounding meal times can further enhance quality of life, as shared meals often provide a sense of community and emotional support. Regular physical activity, combined with a nutritious diet, can also combat weakness, improve muscle mass and reduce the risk of falls. For individuals with chronic diseases, dietary modifications and nutritional support can help manage conditions more effectively, reducing symptoms and preventing complications.

CONCLUSION

Managing nutritional deficiencies in the elderly is not merely about addressing deficiencies but also about promoting an overall healthier, more fulfilling

Correspondence to:

Brain MEG, Email: brainmeg@edu.ac.us

life. For instance, a low-sodium diet can help manage hypertension, while a heart-healthy diet can prevent or alleviate the effects of cardiovascular diseases ^[11]. Through proper diet, supplementation when necessary and a focus on maintaining both physical and mental well-being, older adults can enjoy a higher quality of life. Health professionals, caregivers and families play an essential role in ensuring that the elderly receive the appropriate care and nutrition, ultimately contributing to a longer, healthier life.

REFERENCES

1. Cabrera VE, Kalantari AS. Economics of production efficiency: Nutritional grouping of the lactating cow. *J Dairy Sci.* 2016; 99(1):825-841.
2. Bourn D, Prescott J. A comparison of the nutritional value, sensory qualities, and food safety of organically and conventionally produced foods. *Crit Rev Food Sci Nutr.* 2002; 42(1):1-34.
3. Calsamiglia S, Hernandez B, Hartnell GF, Phipps R. Effects of corn silage derived from a genetically modified variety containing two transgenes on feed intake, milk production, and composition, and the absence of detectable transgenic deoxyribonucleic acid in milk in Holstein dairy cows. *J Dairy Sci.* 2007; 90(10):4718-4723.
4. Holter JB, Urban Jr WE, Hayes HH, Davis HA. Utilization of diet components fed blended or separately to lactating cows. *Journal of dairy science.* 1977; 60(8):1288-1293.
5. Khalili H, Kuusela E, Saarisalo E, Suvitie M. Use of rapeseed and pea grain protein supplements for organic milk production. *Agric. Food Sci.* 1999; 8(3):239-252.
6. Migliorati L, Speroni M, Lolli S, Calza F. Effect of concentrate feeding on milking frequency and milk yield in an automatic milking system. *Ital. J. Anim. Sci.* 2005; 4:221-223.
7. Rizzi A, Raddadi N, Sorlini C, Nordgrd L, Nielsen KM, Daffonchio D. The stability and degradation of dietary DNA in the gastrointestinal tract of mammals: Implications for horizontal gene transfer and the biosafety of GMOs. *Crit Rev Food Sci Nutr.* 2012; 52(2):142-161.
8. Aharoni Y, Henkin Z, Ezra A, Dolev A, Shabtay A, Orlov A, et al. Grazing behavior and energy costs of activity: A comparison between two types of cattle. *J Anim Sci.* 2009; 87(8):2719-2731.
9. Doyle PT, Francis SA, Stockdale CR. Associative effects between feeds when concentrate supplements are fed to grazing dairy cows: A review of likely impacts on metabolisable energy supply. *Aust. J. Agric. Res.* 2005; 56(12):1315-1329.
10. Antaya NT, Ghelichkhan M, Pereira AB, Soder KJ, Brito AF. Production, milk iodine, and nutrient utilization in Jersey cows supplemented with the brown seaweed *Ascophyllum nodosum* (kelp meal) during the grazing season. *J Dairy Sci.* 2019; 102(9):8040-8058.
11. Phillips CJ, Rind MI. The effects on production and behavior of mixing uniparous and multiparous cows. *J Dairy Sci.* 2001; 84(11):2424-2429.