



## Nutrition and healthy aging: Dietary strategies for promoting longevity

10.56238/isevmjv3n2-036

Receipt of originals: 03/12/2024

Acceptance for publication: 04/20/2024

**Brunette Paccola**

### ABSTRACT

As the population ages, nutritional needs change, and maintaining an adequate diet can become a complex task for many seniors. In the United States, the number of people aged 65 and over has grown significantly, from 37.8 million in 2007 to 50.9 million in 2017, and is expected to reach 94.7 million by 2060. With increasing longevity, the elderly are more vulnerable to age-related chronic diseases. According to the Centers for Disease Control and Prevention, approximately 28.1% of elderly Americans suffer from heart disease, 26.8% have diabetes, and 19.3% are diagnosed with cancer.

**Keywords:** Nutrition, Healthy Aging, Longevity, Dietary Strategies.

### INTRODUCTION

As the population ages, nutritional needs change, and maintaining an adequate diet can become a complex task for many older adults. In the United States, the number of people aged 65 and over has grown significantly, from 37.8 million in 2007 to 50.9 million in 2017, and is expected to reach 94.7 million by 2060. With increasing longevity, the elderly are more vulnerable to age-related chronic diseases. According to the Centers for Disease Control and Prevention, approximately 28.1% of elderly Americans suffer from heart disease, 26.8% have diabetes, and 19.3% are diagnosed with cancer.

Several physiological factors, such as the decline in appetite caused by health conditions, chronic pain, and lower energy demand with advancing age, in addition to changes in the senses, such as smell, taste, and sight, directly influence food intake. Additionally, modifications to the digestive system can impair the absorption of essential nutrients, increasing the risk of deficiencies and malnutrition.

These nutritional challenges are also amplified by social and economic issues faced by many older adults. Reduced incomes, increased medical expenses, and lack of mobility can make it difficult to access healthy food, increasing the risk of malnutrition. In addition, social isolation, common in this age group, and the loss of close relationships can lead to inappropriate eating behaviors, such as decreased meal frequency and low intake of essential foods.

While the importance of a balanced diet in old age is widely recognized, studies on nutrition tend to focus on younger populations, leaving gaps in understanding the specific needs



of older adults. Research often addresses aspects such as socioeconomic status and social support networks, but is insufficient to cover all the factors that influence the diet of older adults in the United States.

Many people in food-insecure households face major challenges in maintaining a balanced diet and an adequate food supply. Individual and environmental factors also influence diet quality. For example, positive attitudes towards healthy eating and the creation of a healthy food identity have been linked to a higher intake of fruits and vegetables. The environment also exerts an influence, and the perception of the availability of healthy foods and, to a lesser extent, access to supermarkets are associated with increased intake of these foods. In 2016, it was estimated that inadequate dietary patterns accounted for about 11% of disability-adjusted life years and more than 529,000 deaths in the US, most of which were attributed to cardiovascular disease.

Several health organizations, including the Dietary Guidelines for Americans (DGA), recommend a balanced eating pattern, with a focus on fruits, vegetables, whole grains, and low-fat dairy products. However, there is a great disparity between the recommendations and the eating habits of the population. Currently, more than three-quarters of Americans don't consume the recommended daily amount of fruit, about 90 percent don't meet the vegetable intake goal, and nearly all fall below the recommendation for whole grains. In addition, about 80% do not consume the adequate amount of dairy products.

To overcome this gap, it is necessary to adopt a multifaceted approach, involving public policies, education and community initiatives. The following are some viable solutions:

- **Comprehensive and Accessible Nutrition Education**

One of the key strategies is to strengthen nutrition education, not only in schools, but also in communities and work environments. Educational programs that teach about the importance of a balanced diet and how to make healthy food choices can help the population improve their eating habits. Additionally, it is important to ensure that this information is tailored to different age groups and health conditions, with a special focus on older adults, who may face specific barriers such as difficulties in food preparation or limited access to fresh ingredients.

- **Incentives for Access to Healthy Food**

Improving access to fresh, healthy foods, such as fruits, vegetables, and whole grains, is crucial. One solution would be to create financial incentives for supermarkets and local markets in low-income areas to increase the supply of nutritious food. Government



subsidies for smallholder farmers and community markets can also make fresh food more affordable and increase its availability in underserved communities. Additionally, programs such as SNAP (Supplemental Nutrition Assistance Program) can be expanded to include even more incentives for purchasing healthy foods by offering discounts or bonuses when purchasing fruits and vegetables.

- **Community Initiatives and Local Partnerships**

Communities can play a vital role in improving dietary standards by creating community gardens, fresh food distribution programs, and nutrition awareness campaigns.

Partnerships with local organizations, such as schools, community centers, and churches, can help increase the reach of these initiatives. Additionally, community events focused on healthy cooking, nutrition fairs, and hands-on cooking classes can encourage active engagement by the population, helping people learn new ways to prepare nutritious food with affordable ingredients.

- **Reforms in Public Policies**

Government support through policies that encourage the consumption of healthy foods is essential. This includes creating legislation that reduces taxes on nutritious foods, while also increasing taxes on highly processed products that are high in sugar or fat. Public health campaigns, such as those promoting the reduction of consumption of soft drinks and processed foods, have already demonstrated effectiveness, and their expansion could achieve an even greater impact. Policies that encourage organic and sustainable food production can also improve diet quality while protecting the environment.

In conclusion, promoting healthy eating among the population, especially among the elderly, is essential to reduce the risk of chronic diseases and improve quality of life. While there are significant challenges, such as food insecurity and limited access to healthy food, comprehensive solutions involving public policy, nutrition education, technological innovation, and community initiatives can help overcome these barriers. By encouraging balanced food choices and ensuring that everyone has access to nutritious food, we can move towards a healthier and longer-lasting society, aligned with nutritional recommendations and the promotion of well-being at all stages of life.



## REFERENCES

1. Choi YJ, Crimmins EM, Kim JK, Ailshire JA. Ingestão de alimentos e nutrientes e qualidade da dieta entre americanos mais velhos. *Nutrição em Saúde Pública* . 2021;24(7):1638-1647. doi:10.1017/S1368980021000586.
2. Administração sobre Envelhecimento ( 2018 ) Perfil de americanos mais velhos. <https://acl.gov/sites/default/files/Aging%20and%20Disability%20in%20America/2018OlderAmericansProfile.pdf>
3. Centros de Controle e Prevenção de Doenças ( 2020 ) Relatório nacional de estatísticas sobre diabetes 2020: estimativas de diabetes e sua carga nos Estados Unidos. <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>
4. Pilgrim , AL , Robinson , SM , Sayer , AA et al . ( 2015 ) Uma visão geral do declínio do apetite em pessoas mais velhas .*Nurs Older People* 27 , 29–35.
5. Rémond , D , Shahar , DR , Gille , D et al . ( 2015 ) Compreendendo o trato gastrointestinal de idosos para desenvolver soluções dietéticas que previnam a desnutrição . *Oncotarget* 6 , 13858 – 13898.
6. Pooler , JA , Hartline-Grafton , H , DeBor , M et al . ( 2019 ) Insegurança alimentar: um determinante social chave da saúde para adultos mais velhos . *JAM Geriatr Soc* 67 , 421–424.
7. Boulos , C , Salameh , P & Barberger-Gateau , P ( 2017 ) Isolamento social e risco de desnutrição entre idosos . *Geriatr Gerontol Int* 17 , 286 – 294
8. Pieroth , R , Rigassio Radler , D , Guenther , PM et al . ( 2017 ) A relação entre apoio social e qualidade da dieta em adultos de meia-idade e idosos nos Estados Unidos . *J Acad Nutr Diet* 117 , 1272 – 1278.
9. Coleman-Jensen , A , Rabbitt , MP , Gregory , CA et al . ( 2016 ) Segurança alimentar das famílias nos Estados Unidos em 2016, Relatório de Pesquisa Econômica nº ERR-237 . Washington, DC : Departamento de Agricultura dos EUA, Serviço de Pesquisa Econômica.
10. Gupta NR, Freedman DA. A segurança alimentar modera a relação entre o ambiente alimentar percebido e a qualidade da dieta entre adultos em comunidades com baixo acesso ao varejo de alimentos saudáveis. *Nutrição em Saúde Pública* . 2021;24(10):2975-2986. doi:10.1017/S1368980020001317
11. Ma , X , Blake , CE , Barnes , TL et al . ( 2018 ) O que a identidade alimentar de uma pessoa acrescenta às influências ambientais na ingestão de frutas e vegetais? *Apetite* 120 , 130 – 135
12. Allcott , H , Diamond , R & Dube , JP ( 2018 ) A Geografia da Pobreza e Nutrição: Desertos Alimentares e Escolhas Alimentares nos Estados Unidos . Cambridge, MA : National Bureau of Economic Research
13. U.S. Department of Health and Human Services & U.S. Department of Agriculture (2015) 2015–2020 Dietary guidelines for Americans. 8th edition. <http://health.gov/dietaryguidelines/2015/guidelines/>