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Geriatric nutrition and sustainable diets: A pathway to healthy aging and environmental stewardship.

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Introduction

Geriatric nutrition has emerged as a critical area of public health and clinical practice, given the rapid global increase in the elderly population. Nutritional needs evolve significantly with age due to physiological changes, chronic disease risks, and reduced metabolic rates. Older adults require a carefully balanced diet that not only addresses age-specific nutrient deficiencies but also supports functional independence and overall quality of life. At the same time, the concept of sustainable diets is gaining attention, emphasizing dietary patterns that promote both individual health and environmental preservation. The integration of these two areas geriatric nutrition and sustainable diets—offers a comprehensive approach to healthy aging in a resource-conscious world [1].

The nutritional challenges in older adults often revolve around ensuring adequate protein for muscle maintenance, sufficient vitamins and minerals to prevent deficiencies, and energy balance to avoid both malnutrition and obesity. Many older individuals face reduced appetite, chewing or swallowing difficulties, and altered taste perception, which can compromise food intake. This makes the nutrient density of foods a key factor in geriatric nutrition. Sustainable diets, rich in plant-based proteins, seasonal produce, and minimally processed foods, can provide these nutrient requirements while reducing environmental strain [2].

Sustainable diets prioritize local, fresh, and minimally processed foods that have lower ecological footprints. For elderly individuals, this approach not only supports planetary health but can also offer fresher, more flavorful foods, enhancing appetite and enjoyment. By incorporating diverse plant sources, whole grains, legumes, nuts, seeds, and moderate amounts of sustainably sourced animal products, such diets can meet the macronutrient and micronutrient needs of older adults without relying heavily on resource-intensive foods.

Protein intake is a particularly important issue in geriatric nutrition, as sarcopenia—the loss of muscle mass and strength—is a common concern with aging. Sustainable diets can address this through plant-based protein sources such as lentils, chickpeas, soy products, and quinoa, complemented by sustainably raised poultry, eggs, and dairy. Combining different plant proteins throughout the day can ensure a complete amino acid profile, supporting muscle maintenance and overall vitality in elderly populations [3].

Micronutrients, including calcium, vitamin D, vitamin B12, and iron, are essential for healthy aging. While plant-based diets provide many of these nutrients, careful planning is required to ensure adequate intake, especially for nutrients more abundant in animal products. Fortified foods, responsible supplementation, and varied dietary sources are key strategies. Sustainable diets can be adapted to include these nutrients without compromising their environmental goals, making them both health-promoting and planet-friendly.

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Hydration is another critical aspect of geriatric nutrition often overlooked in dietary planning. Older adults are more susceptible to dehydration due to diminished thirst perception. Sustainable dietary patterns that incorporate water-rich fruits, vegetables, soups, and herbal teas can help maintain hydration levels. Local and seasonal produce not only improves nutritional value but also aligns with environmental sustainability goals, making hydration strategies part of a broader eco-conscious approach [4].

Beyond physical health, geriatric nutrition and sustainable diets also intersect with mental well-being. Social dining experiences, gardening, and cooking with fresh, local ingredients can foster community engagement and cognitive stimulation among older adults. These activities also encourage intergenerational knowledge-sharing about sustainable eating practices, creating cultural continuity and reinforcing sustainable habits.

Healthcare systems and policymakers play a crucial role in promoting the dual benefits of geriatric nutrition and sustainable diets. Nutrition education, subsidies for fresh produce, and community-based meal programs can make such diets more accessible to older adults, particularly in underserved areas. Integrating sustainability into public nutrition guidelines ensures that dietary recommendations benefit both individuals and the environ [5].

Conclusion

Geriatric nutrition and sustainable diets are deeply interconnected, offering a shared path toward healthier aging and environmental preservation. By emphasizing nutrient-dense, locally sourced, and minimally processed foods, older adults can meet their unique dietary needs while contributing to global sustainability goals. This synergy benefits not only the individual through improved health, vitality, and quality of life—but also society at large, by fostering a more sustainable and resilient food system. The future of aging well lies in diets that nourish both the body and the planet.

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