

older adults with or without diabetes. However, older adults may experience unique challenges that impact their ability to follow a healthy diet (*i.e.*, finances, buying food, preparing meals) or have a higher risk of malnutrition due to taste and smell alteration, dysphagia, deficient dentition, gastrointestinal dysfunction, anorexia, cognitive dysfunction, and/or depression (40, 102).

- 4.4 In patients aged 65 years and older with diabetes, we recommend assessing nutritional status to detect and manage malnutrition. (1⊕⊕⊕⊕)

Technical remark: Nutritional status can be assessed using validated tools such as the Mini Nutritional Assessment and Short Nutritional Assessment Questionnaire.

Evidence

Many studies support early screening for malnutrition in older patients, especially those at high risk for malnutrition (acute care-admitted patients and home-care residents) (103, 104). Malnutrition is an important problem in the older adult population and has potentially serious consequences, such as prolonged hospitalization, increased costs, and a higher number of readmissions (105, 106). Therefore, early detection and management of malnutrition are crucial for preventing future complications. Moreover, a number of screening tools are already available to assess nutritional status, and certain assessments, such as the Mini Nutritional Assessment and Short Nutritional Assessment Questionnaire, can be easily administered to older individuals.

- 4.5 In patients aged 65 years and older with diabetes and frailty, we suggest the use of diets rich in protein and energy to prevent malnutrition and weight loss. (2⊕⊕⊕OO)

Evidence

Low-quality studies suggest that consuming energy-dense and protein-rich food could improve food consumption and prevent weight loss and malnutrition risk. Approximately 40% of older adults do not meet the recommended 0.8 g/kg protein intake requirement. The PROT-AGE study group has recently recommended an average daily intake in the range of 1.0 to 1.2 g/kg body weight/d for healthy older people and even 1.2 to 1.5 g/kg body weight/d in older patients with acute or chronic diseases. Furthermore, experts have proposed a protein intake of at least 1.5 g/kg/d (15% to 20% of the total caloric intake) in sarcopenic or cachectic older individuals (107). Studies on specific nutrients (protein supplements, branched-chain amino acids, creatine) have not shown consistent benefits (108), although the Society

for Sarcopenia, Cachexia, and Wasting Diseases recommends measuring 25-hydroxyvitamin D levels and replacing them if low in all sarcopenic patients (109).

Nutrition plans for patients with diabetes are generally individualized healthy diets based on preferences, abilities, and treatment goals. We must emphasize healthful eating patterns consisting of nutrient-dense, high-quality foods rather than specific nutrients to improve overall health regarding body weight; glycemic, BP, and lipid targets; and reductions in the risk of diabetes complications (101). The Mediterranean (110), Dietary Approaches to Stop Hypertension (DASH) (111, 112), and plant-based (113) diets are all examples of healthful eating patterns.

Dietary guidelines recommend an increase in fiber intake of 25 to 35 g/d (114). Choosing vegetables, legumes, whole grains, and high-fiber breakfast cereals is the best way to increase fiber consumption, although increasing fiber should be avoided in cases of delayed gastric emptying (gastroparesis). Additionally, meeting fluid intake recommendations is important for preventing constipation and fecal impaction in older adults (115).

People with diabetes should limit their sodium consumption to <2300 mg/d. Palatability, availability, affordability, and the difficulty of achieving low-sodium recommendations in a nutritionally adequate diet are all important considerations (116). Additionally, older adults are much more likely to suffer the adverse effects of alcohol due to changes in their ability to metabolize alcohol, particularly those taking multiple medications and those who are at increased risk of adverse events (117, 118).

- 4.6 In patients aged 65 years and older with diabetes who cannot achieve glycemic targets with lifestyle modification, we suggest avoiding the use of restrictive diets and instead limiting consumption of simple sugars if patients are at risk for malnutrition. (2⊕OOO)

Technical remark: Patients' glycemic responses to changes in diet should be monitored closely. This recommendation applies to both older adults living in the community and those in nursing homes.

Evidence

For nursing home residents, some studies (119–121) suggest that it is better to use regular diets for nursing home residents with diabetes. Diets tailored to a patient's culture, preferences, and personal goals might increase quality of life, satisfaction with meals, and nutritional status (119, 120). Moreover, short-term substitution of