

Nutritional Considerations for Older Adults

[See online here](#)

With the advancement of age, older adults go through changes that have an impact on their nutrition. Changes can be physical, psychological, health-related or social. The extent of change varies among different individuals. Senior citizens can enjoy a quality of life despite these changes, given that they are healthy. Malnutrition is a result of not getting adequate caloric intake and nutrients. Older people are at a greater risk of developing malnutrition. Moreover, if this is combined with disease, it would lead to the spiral of dependence and hospitalization.



Definition

Malnutrition refers to inability of the body to absorb enough nutrients from foods.

Importance of Nutrition

Malnutrition leads to many problems such as:

1. Unintentional weight loss
2. Muscle weakness and fatigue
3. Depression, memory loss, and other mental problems

4. Immunosuppression
5. Anemia

Etiology of Malnutrition

There are different causes of malnutrition in older people.

Non-physiological causes of suboptimal nutrition

Convivial factors

- Low socioeconomic status
- Inability to prepare and cook food
- Not able to feed oneself
- Failure to cater to ethnic food preferences
- Living a life of isolation (social isolation can lead to a decreased nutrient intake and also depression)

Psychological factors

- [Cholesterol](#)
- Alcoholism
- [Dementia](#) or [alzheimer's disease](#)
- Bereavement
- Depression
- Phobia

Medical factors

- [Anorexia](#) (anorexia of aging describes the physiological decrease in appetite and food intake that accompanies normal aging, which may result in undesirable weight loss.)
- Early satiation
- Malabsorption
- Increased metabolism
- Cytokine-mediated
- Impaired functional status
- Cancer
- Alcoholism
- [Cardiac failure](#)
- Chronic obstructive airway disease
- Infection
- Dysphagia
- [Rheumatoid arthritis](#)
- [Parkinson's disease](#)
- Hypermetabolism (e.g., [hyperthyroidism](#))
- Malabsorption syndromes
- Gastrointestinal symptoms: dyspepsia, atrophic gastritis, vomiting, [diarrhea](#), and constipation
- Poor dentition

Medications

- Nausea/vomiting: [Antibiotics](#), opiates, digoxin, theophylline, and non-steroidal anti-inflammatory agents (NSAIDs)

- **Anorexia:** Antibiotics and digoxin
- Decreased sense of taste: Metronidazole, [calcium channel blockers](#), angiotensin-converting enzyme inhibitors (ACE), and metformin
- Early satiety: [Anticholinergic drugs](#) and sympathomimetic agents
- Reduced feeding ability: Sedatives, opiates, and psychotropic agents
- Dysphagia: Potassium supplements, NSAIDs, biphosphonates, and prednisolone
- Constipation: Opiates, iron supplements, [and diuretics](#)
- **Diarrhea:** Laxatives and antibiotics
- Hypermetabolism: Thyroxine and ephedrine

Nutritional frailty and **sarcopenia** are common among older adults.

Good Nutrition for Seniors

Nutrient needs must be met on fewer calories by:

- Eating more dietary fiber
- Having a variety of nutritious foods
- Consuming enough fluids
- Maintaining health and nutritional status
- Addressing any barriers to healthy eating
- Staying physically active, if possible
- Preventing or treating chronic diseases
- Minimizing food-drug interactions

Aging and dehydration

Fluid intake recommendations:

- Approx. 3.7 l/day for men
- Approx. 2.7 l/day for women

However, older adults find it difficult to maintain the fluid balance. **This is because of the following factors:**

- A reduced sense of thirst in older people leads to drinking fewer fluids.
- Poor mobility, poor bladder control, and illnesses can cause them to drink less fluid.
- Water loss as a result of diarrhea and poor absorption from the intestines.
- Use of diuretics and laxatives increase the risk for [dehydration](#).
- Use of medications that increase the fluid needs of the body.

Estimated calorie needs for adults 51 years and older

	Women	Men
Sedentary	1,600	2,000
Moderately active	1,800	2,200 - 2,400
Active	2,000 - 2,200	2,400 - 2,800

Estimated protein needs for individuals 51 years and

older

The recommended daily allowance for protein in adults who are 51 to 70 years or > 70 years of age is **1.0-1.6 g/kg/day**.

As the caloric needs are decreased in older people, the need for some nutrients increases, such as **vitamin B6, calcium, and vitamin D**. This is why older people face the challenge of the nutritional needs and, therefore, they need to consume a **variety of nutrient-dense foods** on a daily basis. These types of foods contain more vitamins and minerals and have fewer calories. **Examples of nutrient-dense foods are:**

- Fruits and vegetables
- Wholegrain bread
- Lean meats
- Low-fat dairy products
- Fortified cereals

Foods to take with precaution

- Refined grains
- [Cholesterol](#)
- Saturated fats
- Trans fats
- Food containing added sugars and high salt

How to improve one's wellness

Intake of healthier foods

Foods rich in nutrients include fruits, vegetables, and whole grains. This is also coupled with limiting the intake of solid fats, sugars, and alcohol.

Frequent intake of snacks

This gives extra nutrients and calories in between meals. It is more helpful in older adults who get full easily before they eat enough food.

Intake of supplements in diet

Supplements maximize the amount of absorbed nutrients and flavor of some foods thus encourage more intake.

Frequent exercises

This helps to improve one's appetite as well as maintaining strength and energy.

Social activities

Encourage exercises among partners and encourages physical exercises.

Hypertension in the Elderly

[Hypertension](#) is more prevalent in older adults. Keeping blood pressure in the normal range is important

Guidelines to help prevent high blood pressure

- Maintaining a healthy weight
- Including fruits, vegetables, and low-fat dairy foods
- Choosing foods with less sodium. Older Americans are encouraged to keep sodium intake to 1500 mg a day
- Limited alcohol intake
- Physical activity
- Greater quantities of sodium are often added to processed and prepared foods. These foods should be avoided.

Diabetes and Older Adults

It is imperative for older adults with [diabetes](#) to get their **blood glucose levels checked** and prevent the disease.



[Image:](#) "Overview of the most significant possible symptoms of diabetes." by Mikael Häggström. License: [Public domain](#)

Preventing type 2 diabetes

- Maintaining a healthy weight
- Consuming plenty of fiber
- Eating appropriate portion sizes
- Being physically active, if possible

Goals for old people with diabetes

- Following a special dietary plan designed by GP
- Taking prescribed medicines
- Being physically active
- Maintaining a healthy weight
- Aiming for blood glucose levels within the recommended range

Osteoporosis in the Elderly

The risk of [osteoporosis](#) increases with old age. It is an important cause of bone fractures in older age groups.

Prevention of osteoporosis

- Regular intake of milk
- Intake of vitamin D (source: fatty fish and fortified milk)
- 1200 mg of calcium each day (sources: low-fat milk, cheese, and yogurt)
- Regular physical activity

Vitamin and mineral supplements

It is challenging for the older age groups to meet the nutritional demands through food, especially during illness; therefore, multivitamin supplements can be used, based on the GP's prescription. However, they are **not a substitute to natural eating**.

Medicines and Older Adults

Due to a higher incidence of chronic illnesses among older people, they consume a higher proportion of medications. Due to **decreased liver and renal functions** in old age, these medicines have **more adverse effects** on old age group as compared to the rest of the population.

Common side effects of medicines:

- [Diarrhea](#) or constipation
- Dizziness
- Decreased appetite
- Mood changes
- Blurred vision
- Skin rashes

The risk of overmedication

There are more risks of overmedication in older adults. Risk factors are:

- Old age
- Female
- Failure to follow the physician's prescriptions
- Reduced blood flow to kidneys
- Less effective kidney functions resulting in medicines remaining in the body for a longer time
- Adverse drug reactions history
- The use of multiple medicines

To prevent overmedication, the caretaker of older people should keep the information of all the medicines that are prescribed.

Poor Appetite in Old Age Groups

A poor appetite is a common complaint of older adults. **The following are the causes of poor appetite:**

- Grief and anguish
- No social gathering for lunch
- Acute or chronic illness
- Sensory changes in vision, taste, and smell
- Medicines that affect the appetite

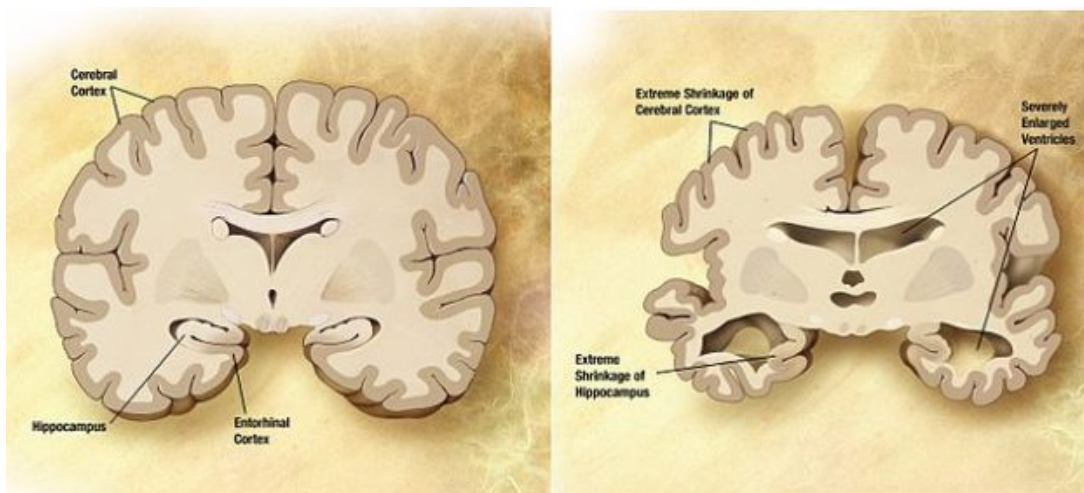
Helping older adults with a poor appetite

- Providing foods that are high in calories or nutrition, such as milk, soup or hot chocolate, rather than tea or coffee
- Use of herbs and spices to enhance the flavor of food
- Adding variety and color to the food
- Encouraging older adults to eat smaller and frequent meals instead of large meals at one time

Cognitive Impairments

Cognitive impairment in older adults is very common, and it can range from minor memory loss to [dementia](#). **Causes may include:**

- [Stroke](#)
- [Alzheimer's disease](#)
- Neurological disorders
- Nutritional deficiencies



Comparison of a normal aged brain (left) and the brain of a person with Alzheimer's (right). Differential characteristics are pointed out.

As a result of such impairment, these individuals have:

- A diminished attention span
- An increased risk of choking
- Inability to recognize thirst
- Inability to recognize hunger

- Confusion about meal times
- Confusion about how to use utensils

Dental Issues

Problems with **chewing** of food cause older adults to eat fewer quantities of foods that are essential for proper health.

Fresh fruits and vegetables are important sources of [vitamins](#), minerals, and fiber. **Ill-fitting dentures** and **missing teeth** prevent older people from eating these foods.

The following are the considerations for promoting dental health of older age groups:

- Daily brushing and flossing of teeth
- Brushing or rinsing of the mouth after every meal
- Increased intake of calcium- and phosphorus-rich foods should be encouraged
- Stimulating the release of saliva by serving a variety of firm and fibrous foods
- Making sure that older adults have regular visits to their dentist

Addressing the chewing difficulties in older adults

- Providing water or other fluids with foods to allow for easy swallowing
- A soft diet should be given if more teeth are missing
- Tender meat cuts
- Soft foods rich in proteins, such as eggs, yogurt, milk, and cheese
- Vegetables and fruits with removed peels
- Cooked vegetables and fruit juices
- Rice, pasta, and cooked cereals
- Pureed food, if required

Based on all these factors, older people are a sensitive group. They need more care with proper diet administration plans.

References

[Physical Activity and Special Considerations for Older Adults](#) via nap.edu

Stanley, K. (2014). Nutrition considerations for the growing population of older adults with diabetes. *Diabetes Spectrum*, 27(1), 29–36. doi:10.2337/diaspect.27.1.29

[Nutrition and older adults](#) via nutritionaustralia.org

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