

# Longevity and healthy aging

Healthy biological aging and longevity involve extending an individual's lifespan and improving health and quality of life while aging. Both genetic and environmental factors, such as diet and lifestyle, may be involved in the process of biological aging.

## Aging and chronic disease

Age-related chronic diseases include cardiovascular diseases (e.g., heart disease and stroke), cancer, type 2 diabetes, and neurodegenerative diseases (e.g., Alzheimer's disease and Parkinson's disease). These chronic conditions are among the leading causes of mortality and contribute to a reduced quality of life. Fortunately, modifiable lifestyle habits can help prevent chronic disease and improve longevity.

### Causes and risk factors

- Air pollution
- Excess alcohol intake
- Genetic susceptibility
- Obesity
- Sedentary lifestyle
- Smoking
- Western diet and lifestyle (e.g., excessive sodium, protein, and caloric intake)



# Supporting longevity

Lifestyle factors, such as a healthy diet, regular physical activity, and moderate alcohol consumption may reduce morbidity and mortality risk.

## Diet

An overall dietary pattern high in fruits, vegetables, fish, and lean meats may support optimal health as you age. The following table summarizes longevity-promoting dietary components, their function, and their common sources.

Dietary component	Function	Sources
<u>B vitamins</u>	Required to metabolize homocysteine, a biomarker of aging and disease	Brown rice Dairy products (e.g., milk, yogurt) Eggs Legumes Nutritional yeast Liver Tuna
<u>Coenzyme Q10 (CoQ10)</u>	Supports cardiovascular health by reducing inflammatory markers and oxidative stress	Broccoli Oily fish (e.g., herring, sardines) Organ meats (e.g., heart, kidney, liver) Peanuts Spinach
<u>Omega-3 fatty acids</u>	Anti-inflammatory; reduces the risk of chronic conditions (e.g., breast cancer, cardiovascular disease, bone loss)	Oily fish (e.g., anchovy, cod, herring, mackerel, salmon, sardines)
<u>Prebiotics</u>	Fermented by gut microbiota to produce protective short-chain fatty acids; promote beneficial bacteria and bacterial diversity, linked to overall health and longevity	Asparagus Certain grains (e.g., oats, wheat) Chicory Garlic Jerusalem artichokes Leeks Onions
<u>Resveratrol</u>	Antioxidant and anti-inflammatory; inhibits glycation associated with cellular damage	Berries (e.g., blueberries, cranberries) Grapes, grape juice Red wine Peanuts

Further, some research suggests that two dietary protocols, [calorie restriction](#) (CR) and [intermittent fasting](#) (IF), may promote longevity by improving cardiometabolic risk factors and promoting weight loss. CR involves reducing caloric intake by 20 to 40% while meeting nutrient requirements. IF involves regularly abstaining from calorie-containing foods and beverages for extended periods of time. Work with your integrative practitioner for support implementing this type of lifestyle change.

## Physical activity

Research in older adults has shown that social activity, such as conversation, and physical activity, such as moderate walking, may protect against cognitive decline. Regular exercise may also support weight loss efforts and protect against cardiometabolic conditions.

## Weight management

Overweight and obesity may increase your risk of arthritis and sleep apnea, as well as result in metabolic changes such as insulin resistance and increased inflammatory compounds. In overweight and obese individuals, weight loss of 5 to 10% improves the metabolic risk factors involved in type 2 diabetes, cardiovascular disease, and other chronic health conditions.

## Sleep

Sleep disturbances may worsen symptoms of an existing medical condition and increase the risk of mood changes. Factors that may contribute to sleep problems at any age include medical conditions, irregular sleep schedules, psychological stress, and exposure to noise or light in your sleep environment. Keep in mind that total sleep time decreases and sleep patterns change naturally as you age.

## Other lifestyle considerations

Smoking cessation has been found to reduce the risk of death from cancer, coronary heart disease, and chronic obstructive pulmonary disease. Avoid excess alcohol consumption; this means limiting daily consumption to one standard drink for women and two for men. A standard drink is defined as a 12 oz (355 mL) regular beer (5% alcohol), a 5 oz (148 mL) glass of wine (12% alcohol), or 1.5 oz (44 mL) of 80 proof distilled spirits (40% alcohol).



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This handout was developed and medically reviewed by Fullscript's Integrative Medical Advisory team.

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Updated: May 2021