



Managing Cardiovascular Health to Lower the Risk of Alzheimer's Disease

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DESCRIPTION

Alzheimer's disease is often viewed as a condition limited to the brain, yet growing evidence shows that the health of the heart and blood vessels has a strong influence on cognitive aging. The brain relies on a complex network of blood vessels to deliver oxygen and nutrients while removing waste products. When this system is compromised, brain cells may suffer damage over time, increasing vulnerability to memory loss and impaired thinking. For this reason, maintaining cardiovascular health has become an important focus in strategies aimed at reducing the risk of Alzheimer's disease. High blood pressure is one of the most common cardiovascular conditions associated with cognitive decline. When blood pressure remains elevated for many years, it can damage the delicate lining of blood vessels, including those that supply the brain. This damage reduces the efficiency of blood flow and may lead to small areas of tissue injury that accumulate over time. These changes can interfere with communication between brain cells and gradually affect memory and decision-making abilities. Managing blood pressure through lifestyle adjustments and medical care may therefore support long-term cognitive health.

Cholesterol levels also influence brain function. Excessive levels of certain blood lipids contribute to the narrowing and stiffening of arteries, a process that restricts blood flow. Reduced circulation limits the delivery of oxygen and glucose to brain tissue, which are essential for normal cognitive function. Balanced eating habits, regular movement and medical guidance when necessary can help maintain healthy cholesterol levels and support blood vessel function. Blood sugar regulation plays a similar role in cognitive aging. Persistently elevated blood sugar can damage blood vessels

and nerves throughout the body, including those in the brain. Individuals with poorly controlled diabetes are at greater risk of developing cognitive impairment later in life. Stable blood sugar supports efficient energy use by brain cells and reduces inflammatory responses that may affect memory-related regions. Preventive strategies often emphasize early detection and management of metabolic conditions to protect both physical and cognitive health. Smoking presents another significant risk factor for both cardiovascular disease and cognitive decline. Tobacco use damages blood vessels, reduces oxygen availability and increases inflammation. These effects place additional strain on the brain and accelerate age-related changes. Avoiding tobacco use or quitting at any stage of life can provide benefits for circulation and brain function. Even later-life cessation may reduce further damage and support healthier aging. Dietary patterns influence cardiovascular health in multiple ways. Diets that emphasize whole foods, including fruits, vegetables, whole grains and healthy fats, support blood vessel flexibility and reduce inflammation. Limiting excess salt, added sugars and highly processed foods may help maintain stable blood pressure and metabolic balance. Eating habits that support heart health often align closely with those associated with better cognitive outcomes.

Physical movement strengthens the heart and improves circulation, directly benefiting the brain. Regular activity supports the elasticity of blood vessels and promotes efficient blood flow. It also helps regulate weight, blood sugar and cholesterol levels, creating a supportive environment for brain health. Even moderate activity, such as walking or light aerobic exercise, can provide meaningful benefits when practiced consistently. Stress management also contributes to cardiovascular and cognitive health. Chronic stress increases blood pressure and promotes inflammatory responses that

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affect blood vessels. Over time, these effects may compromise brain circulation. Relaxation practices, social support and balanced daily routines can help regulate stress responses and protect both heart and brain function.

CONCLUSION

In conclusion, cardiovascular health and brain health are deeply connected. Conditions that damage blood vessels can

impair brain function over time, increasing the likelihood of cognitive decline. Managing blood pressure, cholesterol, blood sugar and lifestyle habits such as diet, movement and tobacco use offers a practical approach to reducing Alzheimer's risk. Supporting heart health across the lifespan may therefore play a meaningful role in preserving memory, independence and quality of life in older age.