







Dementia and Nutrition

An aging population globally faces a cruel irony thanks to lifespan extension brought about via improvements in public health and health care. Living longer means a worldwide increase in patients with chronic disease, including dementia. This global epidemic of dementia cannot be ignored or neglected any longer. The gravity of the situation means it should be recognized as a public health priority everywhere. A syndrome affecting memory, thought, and behavior which also impedes the ability to perform everyday activities, dementia usually develops slowly over time and originates from a variety of brain illnesses, including Alzheimer's disease, vascular dementia, and others. Significant evidence has accumulated to suggest that dementia has a lifelong trajectory comparable to several other chronic diseases occurring later in life. The risk for developing this disease clusters around specific developmental epochs with effects building, though sometimes hidden due to relatively long latent periods before the onset of clinical dementia syndromes.

Diet and nutrition play an important role in maintaining health and well-being. Good nutrition contributes to healthy brain development, which may protect against the onset of dementia in later life. Mechanistic evidence and animal models also suggest that nutrients can be directly implicated in modifying and reducing brain damage. Micronutrients and macronutrients are both involved in modulating the production and activity of neurotrophins (proteins implicated in the development, function, and survival of neurons), having vasoprotective effects, and favor the clearance of β -amyloid (the main substrate contributing to cerebrovascular lesion and neurotoxicity in Alzheimer's disease). Sufficient nutrient intake remains critical in protecting against micronutrient deficiencies potentially harmful to the brain. Malnutrition results from an inadequate nutrient intake compounded in older adults due to diminished ability to digest, absorb, and metabolize nutrients from foods. To help prevent dementia, oral nutritional supplementation (ONS) is very important, especially in the elderly with or at risk for under-nutrition.

Nutrients	Potential Nutrient Function	Recommendation
Vitamin B complex	<ul style="list-style-type: none"> Plays a key role in cell metabolism Not synthesized adequately in humans, needs primarily acquired through diet Deficiency may: cause elevated homocysteine levels, and is associated with cognitive decline Elders face higher risk of vitamin B deficiency, therefore, B complex supplementation is highly recommended. 	 B strong
Multiple antioxidants	<p>Neural inflammation and oxidation damage are thought to be key mechanisms in the development of dementia. Oxidative stress directly damages cell components, resulting in damage to synapses and nerve cell death. Nutrients with antioxidant properties such as vitamin C and E and flavonoids are thought to act against neurodegeneration by limiting the production of toxic substances and reducing damage by free radicals.</p>	 Prime Shield
Omega-3 fatty acid	<ul style="list-style-type: none"> Not synthesized in human body Obtained from dietary sources Implicated in neuronal growth and influences synapse formation Affects the vascular, inflammatory, and amyloid pathways of dementia Important in treatment of vascular dementia, Alzheimer's disease and mixed forms. 	 Omega Rich
Coenzyme Q₁₀	<ul style="list-style-type: none"> Much evidence to strongly support mitochondrial dysfunction and oxidative stress as major contributors to pathogenesis of neurodegenerative diseases Essential cofactor in mitochondrial respiratory chain Involved in regulating cell metabolism Potential neuro-protective effect. 	 Oxy Rich
Lecithin	<p>Lecithin is crucial for the health of cell membrane and also plays a role in neurotransmitter synthesis.</p>	 NH Lecithin
Ginkgo Biloba extract	<p>Flavonoids from ginkgo biloba extract can quench or remove free radicals; protects blood vessel, endothelial cells; improves brain circulation, and cognitive function.</p>	 Prime Ginkgo & Liquid Ginkgo