

Alzheimer's Disease, Dementia, and Pre-Senile Dementia Supplements and Interventions

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Clinical studies of traditional remedies have found the following supplements (or methods) help prevent or slow the progress of dementia. They are listed by general categories. Some of these work better than others in preventing or slowing dementia. Doses depend on the person's age and clinical setting (for example, whether the person is taking blood thinners or has a medical condition that requires avoiding certain natural "blood thinners" like ginkgo or vitamin E complex). Therefore, it is best to find a medical practitioner familiar with these supplements and methods and who can do the proper testing.

1. Ayurvedic plant derivative **Bacopin** (*Bacopa monniera*), contains bacosides: improve long and short term memory, cognition, learning capacity, anxiety, nerve transmission
2. Black pepper extract **piperine** improves absorption of nutritional compounds, stimulates GGT (involved in amino acid absorption), stimulates glutathione production to repair brain cells, increases serotonin, enhances antioxidant activity of other botanicals
3. **Ginkgo biloba** improves cerebral and peripheral blood flow; inhibits platelet aggregation, improves memory loss, slows progress of Alzheimer's (especially early stages, and has an antidepressant effect).
4. **Vinpocetine** comes from periwinkle flower. It improves cerebral blood flow, increases use of oxygen and glucose, stimulates ATP production, and boosts short-term memory.
5. **Acetyl-L-carnitine** is an amino acid derivative that crosses blood-brain barrier to improve brain function, enhances acetylcholine uptake, inhibits nerve growth reduction, provides alternate energy in low-glucose utilization. When used daily over 12 month period it decreases deterioration in Alzheimer's and fights free radicals.
6. **L-serine** is a non-essential amino acid. (It is made in the body from other amino acids obtained from food.) Ongoing studies show it may help prevent or improve Alzheimer's Disease. Phosphorylated serine (phosphorus attached to serine) has been around for a long time. Because it's not "essential," scientists will say it can't be related to Alzheimer's (since everybody makes it in their bodies). However, L-serine is safe and large doses may be helpful. The dose of L-serine used in studies is 30 (thirty) grams of powder taken daily.
7. **Phosphatidylserine** is an amino acid derivative that makes up nerve cells. It improves nutrient transfer into brain cells and the elimination of wastes (which helps prevent brain dendrite cell loss) and thus helps dementia.
8. **L-arginine** is an amino acid that acts as neurotransmitter or neuromodulator, increases blood flow and decreases arterial thickening, and aids in hormonal synthesis.
9. **Choline** and **Pantothenic Acid** (vitamin B5) make acetylcholine neurotransmitter.
10. **Huperzine A** (extract of Chinese club moss *Huperzia serrata*) prevents breakdown of acetylcholine, aids memory, concentration, focus in adults and adolescents.
11. Major inhibitory neurotransmitters in brain for depression and anxiety: **Glutamine** (major alternative fuel source for the brain when blood levels are low, precursor to GABA. **GABA** has an influence on ADD, ADHD, stress, anxiety, depression, stress-induced illness). Every cell in body has GABA receptor. Inhibits cell from firing, diminishing anxiety-related messages. **Glycine** (sweet to taste, dissolves in water, passes blood-brain barrier, decreases

craving for sugar, calms aggression. **5-HTP** or **L-tryptophan** elevate and optimize serotonin (brain neurotransmitter). Use with caution for those on antidepressants. Vitamin B6 helps metabolize amino acids, thus making all these amino acids work better.

12. **Inositol** helps form cell membranes and affects nerve transmission. May help Alzheimer's.
13. **DMAE** (dimethyl amino ethanol) helps memory, elevates mood, increases learning capacity, safe stimulant (no withdrawal or side-effects unlike coffee or drugs), accelerates brain synthesis of brain neurotransmitter acetylcholine etc.
14. **PABA** is an antioxidant that stimulates tissue healing, supports endocrines, adrenal, pituitary, hormonal balance and normalizes nervous system.
15. **Pregnenolone** is a natural hormone in the body (parent hormone for DHEA and progesterone) that enhances memory, improves concentration, reduces mental fatigue, and keeps brain functioning at peak. Estrogen (Estriol, estradiol, estrone), progesterone, dhea, testosterone, melatonin, and cortisol are hormones that can be applied through creams to skin for good absorption. Saliva or comprehensive urine test from knowledgeable labs are required to determine the deficiencies or excesses. A knowledgeable medical practitioner is required to help monitor and balance the application of which hormones (and how much) is needed. Melatonin and dhea can also be taken orally. The others are best applied as creams.
16. **Silicon** (mineral found in volcanic water and other sources) may help prevent dementia according to a few studies.
17. **Selenium** (in absorbable form like selenomethionine) may help prevent dementia according to a few studies. Dose is very important.
18. **Calcium** is essential for nerve cell function, has calming effect and used in depression; aids in ADD and other cognitive disorders (children and adolescents). Use chelated form.
19. **Magnesium** (reduces anxiety, confusion, etc.). The best form to help dementia is **magnesium threonate**. Studies show a substance that includes the following ingredients works well: L-TAMS (L-Threonic acid Magnesium salt), Vitamin C (Ascorbic Acid), Vitamin D3, and Vitamin B6. L-threonic Acid, (also known as L-Threonate or Magnesium threonate), is classified as a sugar acid or a sugar acid derivative. Sugar acids are compounds containing a saccharide unit which bears a carboxylic acid group. L-threonic Acid is considered to be soluble in water and is acidic. L-threonic Acid can be found throughout numerous foods such as Capers, Muscadine grapes, Black huckleberries, and Pecan nuts. However, supplements provide the optimal doses.
20. **Lithium orotate** (dose is important) helps with brain function.
21. A case described in Rowen's Second Opinion, September, 2004 showed that chelating with **EDTA** and **Desferoxamine**, and using certain vitamins, human growth hormone, along with a few other factors, totally reversed early dementia in a patient.
22. **Piracetam** is a derivative of GABA that helps improve memory and learning while protecting the brain from chemical and physical injuries. Take with **choline** (the major component of acetylcholine) for best results.
23. **SAMe (S-adenosylmethionine)** is precursor to **glutathione, cysteine, taurine, and coenzyme A**. It is a powerful antidepressant and may help with neurological problems. Requires **folate**.
24. **N-acetyl-cysteine (NAC)** is a precursor to **glutathione** (the most powerful antioxidant and free radical scavenger in the cell). To absorb glutathione it must be compounded (different forms) or put into nano "capsules" to assure cellular delivery. Using oral NAC may be easier.

25. **Alpha-lipoic acid (ALA)**, **Buffered Vitamin C**, **Vitamin E Complex** (contains 4 tocopherols and 4 tocotrienols), and **CoQ10** (ubiquinol form) are antioxidants that work together to decrease and prevent the lipid peroxidation and oxidative stress (inflammation) linked to Alzheimer's. **Vitamins C** and **E** (also **Vitamin A** and **zinc**) protect fat cells from oxidation (brain has 60% fat).
26. **Resveratrol** is antioxidant with many helpful effects, including preventing dementia.
27. **Curcumin** in a bioabsorbable form is a powerful antioxidant and anti-inflammatory with many effects. It fights amyloid.
28. **Flavonoids** are antioxidants that help protect brain nerve cells. Take standardized **Rosmarinic acid capsules**.
29. **Quercetin** and **Theaflavin** (from black tea) are anti-inflammatory antioxidants. Research concludes that the best way to take quercetin is in a high dose wrapped within a phytosome (plant-based phospholipid compound) along with theaflavin (from black tea) just once a week (www.lef.org).
30. **Green tea extract (EGCG)** is anti-inflammatory antioxidant that decreases brain amyloid plaques. Take one or two 250 mg capsules daily.
31. **Ashwaganda** (adaptogenic) increases brain antioxidants, improves memory, decreases cognitive decline.
32. **AMPK** is a metabolic regulator that helps many physiological problems, including dementia. To increase AMPK take approximately 500 mg of **Gynostemma extract** and 400 mg of **hesperidin (citrus bioflavonoid)** daily.
33. **Vitamin B6 (P-5-P)**, **Folate (5-MTHF 400 to 10,000 mcg daily)**, and **B12 (methylcobalamin)** work together and are involved in many body processes including brain function and dementia prevention.
34. **Vitamin K** has been suggested as helpful in preventing or treating Alzheimer's.
35. Alzheimer's Disease has been called "diabetes of the brain." Diabetes and insulin insensitivity both show abnormal glucose (sugar) blood levels. The abnormal glucose level leads to "advanced glycation end products," also called AGEs. Correcting glucose and insulin levels is crucial in preventing or treating Alzheimer's Disease. **Vitamins B1 (thiamine)** and **B6** can help decrease AGEs. In Alzheimer's Disease the mildly acidic environment makes zinc and copper toxic to the nervous system. To help protect against this toxicity, **carnosine** can be used. (Carnosine is an amino acid derivative, found mainly in meat. It can be taken as a supplement.) Some research suggests carnosine could help protect against AGEs as well. Fiber also helps balance blood sugar, as do many supplements.
36. **Vitamin D3** (cholecalciferol) helps prevent brain degeneration and decrease damage to improve cognition. Take about 5000 units daily to keep blood test levels between 80 and 100 (test and retest every 6 months until levels are stable at current dose).
37. **EPA** and **DHA** are **omega-3 fatty acids** essential to healthy brain function. Most of the brain is composed of fat.

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