

Ginkgo biloba

60 mg

Tablets



Product Summary:

Ginkgo biloba is one of the oldest known therapeutic herbs. Studies have shown that ginkgo increases blood flow and circulation in the brain, helping to improve memory and cognitive function, as well as improve circulation throughout the body.

Properties/Uses:

The claim as approved by the *Natural Health Products Directorate* (NHPD): Helps enhance memory and cognitive function in an aging population. Supports healthy peripheral circulation.



NERVOUS





Pharmacology:

The *Ginkgo biloba* tree is one of the oldest living trees and has long been held sacred for its therapeutic value. Its use as a memory enhancer dates back to 2800 BCE, where it appears in an ancient Chinese book compiling reputable herbs.

Ginkgo biloba has since also become known for its ability to improve general circulation, and especially microcirculation.¹ Microcirculation accounts for the actual perfusion of our tissues with the oxygen and nutrients carried in the blood. Anything that improves microcirculation, improves the life and health of our tissues, and their expected performances.

Due to improved blood flow to and in the brain, it is used for enhancing memory performance. It also contains potent antioxidants and acts as free-radical scavenger. In this manner, *Ginkgo biloba* stabilizes cerebral brain cells.² Memory and other cognitive performance depend on intact neuron membranes. These are made from specialized proteins and fats, which are vulnerable to oxidation and free-radical damage.

Ginkgo biloba is prescribed in Europe as a treatment of insufficient blood flow, cerebral insufficiency, memory deficits, disturbances in concentration, depression, dizziness, tinnitus, vertigo, headache, intellectual deficit, and intermittent claudication.

In a large clinical trial conducted in the United States, the efficacy of *Ginkgo biloba* extract in patients with mild to severe dementia was assessed over a one-year period. The findings from this trial indicated that the *Ginkgo biloba* extract group exhibited 'modest' improvements.³ Many European studies for the treatment of cognitive dysfunction have noted improvements in cognitive functions such as memory, learning rate, speed of information processing and attention.⁴ Other clinical trials with *Ginkgo biloba* have demonstrated statistically significant reductions in the major symptoms of cerebral vascular insufficiency, including impaired short-term memory, lack of vigilance, mental confusion, non-Alzheimer's dementia, and depression.⁵ Furthermore, studies have shown improvements in cognitive function and memory for healthy older adults taking *Ginkgo biloba*.⁴

In the case of Alzheimer's disease, *Ginkgo biloba* has been documented to improve the quality of life in the early stage of the disease. However, it has not been found to ultimately address the underlying cause. The earlier it can be introduced, the longer will be the postponements of cognitive and other neurological failings.⁶

Reports stating theoretical benefit have been given on *Ginkgo biloba* for treating tinnitus.^{6,7} Treatment failures have been attributed to late use of *Ginkgo biloba* and under dosing.⁷ *Ginkgo biloba* should be initiated as soon as possible following a diagnosis of tinnitus, at a dosage of at least 120 to 180 milligrams daily, possibly up to 320 mg daily plus attention to any residual infection will be required. Up to 6 months may be required before improvements can be perceived.

Cochlear deafness and vertigo are thought to be related to reduced blood flow through the cochlea of the ears. The cochlea are the part of the inner ear housing the mechanical and neurological apparatus for hearing and for maintaining balance. Reduced oxygen levels reaching the cochlea is profoundly disabling. *Ginkgo biloba* has been shown to enhance recovery in some cases of acute cochlear deafness and vertigo. Delay in application, could weaken its benefit.^{6,7}





In cases of age-related macula degeneration and diabetic retinopathy, there is a reduced blood flow to the retina, usually in both eyes. The macula forms the central part of the retina and is responsible for fine vision details at the center of the vision field, especially for reading.^{6,7} Impaired microcirculation through the retina can result in a reduced concentration of dietary antioxidants over time, and the accumulation of retinal and macular damage. Since *Ginkgo biloba* provides both enhanced blood flow and potent free-radical reduction, it is a natural treatment for retinal and macula degeneration. Those with diagnosed macular degeneration should also consider supplementing with daily doses of lutein. Diabetic retinopathy in experimental animals has been blocked when *Ginkgo biloba* was applied before damage could begin. It is reasonable to expect the same benefit in human diabetes.⁶

Migraine headaches stem from disturbed vascular tone patterns and the use of *Ginkgo biloba* has been successful in managing this kind of headache. Avoidance of migraine episodes may require regular daily use as a preventative.^{6,7}

Another hallmark of *Ginkgo biloba* is its ability to effectively address peripheral vascular insufficiency. The most common manifestation is intermittent claudication, a condition in which the lower leg muscles become severely fatigued and painful with cramping upon walking a short distance. The pain can become so intense as to force the sufferer to stop walking, resting until the pain goes away. The cause of peripheral vascular insufficiency is atherosclerosis, which impedes blood flow through the lower legs. *Ginkgo biloba* has demonstrated superior treatment benefits for peripheral vascular insufficiency compared to the medical drug of choice, pentoxifylline. Pentoxifylline has demonstrated an approximate 65 percent increase in distance covered with pain free walking, while *Ginkgo biloba* has demonstrated 75 to 110 percent. Because it demonstrates superior management of peripheral vascular insufficiency, *Ginkgo biloba* can be tried in diabetic peripheral vascular insufficiency, Raynaud's disease, acrocyanosis, and postphlebitis syndrome.^{6,8}

Impotence or erectile dysfunction that stems from impaired blood flow to the penis has been successfully managed in a significant number of patients in clinical evaluations of *Ginkgo biloba*. In one clinical evaluation involving 60 patients, 50 percent achieved normal erectile function after 6 months. The dosage must be at least 120 milligrams per day. Positive indications should be evident in 6 to 8 weeks.^{6,9}

Ginkgo biloba has been shown to be a potent inhibitor of platelet-activating factor (PAF). Platelets circulate in the blood to provide necessary chemical mediators for release when the conditions warrant release. PAF is a powerful stimulator acting on platelets causing the release of components that, if in excess or if unwarranted, cause allergic and inflammatory symptoms. PAF can also cause reduced coronary blood flow and bronchoconstriction as seen in asthma, as well as tissue swelling. *Ginkgo biloba* has been used successfully to tame PAF and control asthma and reduce the severity of allergy attacks and subdue chronic inflammatory suffering.^{6,7}





Manufactured product information:

Manufacturer:

WN Pharmaceuticals® Ltd.

Size/UPC:

180's 7 77747 10258 7

NPN:

80006550

Expiry Date:

36 months from date of manufacture

Active Ingredient:

Each tablet contains:

Ginkgo biloba 50:1 Extract (leaf)
(Standardized to 24% ginkgo flavone glycosides and 6% terpene lactones) 60 mg

Non-Medicinal Ingredients (in descending order):

Microcrystalline cellulose, dibasic calcium phosphate dihydrate, croscarmellose sodium, coating (carbohydrate gum, glycerin), silica, magnesium stearate

Appearance:

Round clear coated beige tablet with tan-brown specks.

Packaging:

175 cc white round bottle with safety seal under a 38 mm white induction sealed cap with vented interior seal and a label applied to the bottle. Lot number and expiry date are printed on label applied to exterior of bottle.

Storage:

Store in tightly sealed containers in a dry place below 30°C.





Dose:

Most clinical trials using *Ginkgo Biloba* for cognitive impairment used daily dosages of 120-240 mg divided into two or three doses.¹⁰

For vertigo or tinnitus, dosages of 120-160 mg per day in divided doses have been used.¹¹

Standardized ginkgo leaf extracts have been used safely in trials lasting from several weeks to up to 6 years.¹¹

Directions:

(Adults): 1 tablet, 2 – 3 times daily or as recommended by a physician. Consult a physician for use beyond 6 weeks.

Caution:

The caution as approved by the *Natural Health Products Directorate* (NHPD): KEEP OUT OF REACH OF CHILDREN. Consult a physician prior to use if you are taking medications for diabetes high blood pressure or seizures, or if you are pregnant or breastfeeding. Do not use if you are taking health products that affect blood coagulation (e.g. blood thinners, clotting factor replacements, acetylsalicylic acid, ibuprofen, fish oils, vitamin E) as they may increase the risk of spontaneous bleeding. STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE. DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

Deficiency Symptoms:

N/A

Drug Interactions/Contraindications

Use of *Ginkgo biloba* extract with anticoagulation medications (like warfarin), which often presents delicate balancing to avoid unwanted bleeding, is considered a risk for bleeding episodes. This risk is even more pronounced, if the consumer is also using other natural products known to have a blood thinning effect, such as garlic, vitamin E, and grape seed extract. These products are widely selected by older consumers. Unless guided by a physician, the combination of anticoagulation therapy and *Ginkgo biloba* extract should be considered a contraindication.

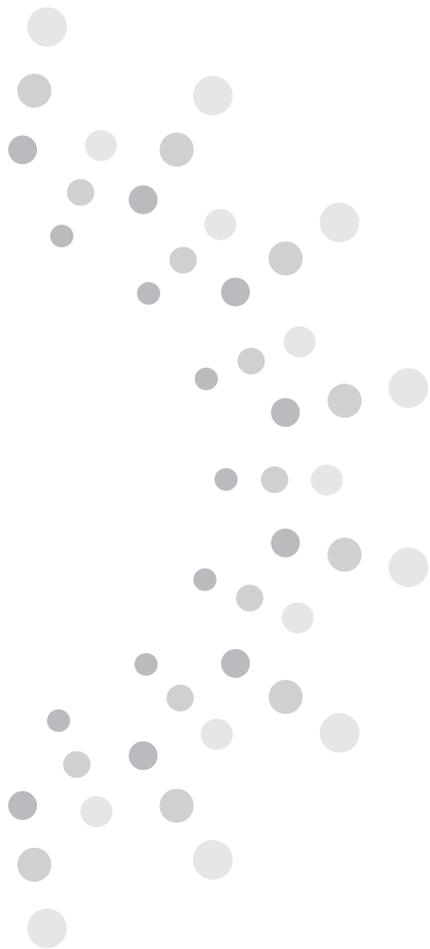


Combining ginkgo with ibuprofen might have additive antiplatelet effects and increase the risk of bleeding.

Otherwise, no significant interactions with existing medications, including cardiac glycosides and anti diabetic medications were reported in a long-term study on chronic cerebral insufficiency with 112 geriatric patients using *Ginkgo biloba*.^{7,12} After considerable use in Western cultures, the clinical observation of Donald J. Brown, ND, is that *Ginkgo biloba* extract is not known for drug interactions.¹³

Toxicity/Adverse Reactions:

Ginkgo biloba is extremely safe and side effects are uncommon or considered insignificant.^{6,7} No significant adverse reactions have been reported in patients taking as much as 600 mg of extract in single doses.⁷ In 44 double-blind studies encompassing 9,772 patients, the number of side effects reported was extremely small, with the most common types being gastrointestinal discomfort (21 cases), headache (7 cases), and dizziness (6 cases).⁹





Allergen Content/Ingredient Sensitivity:

NO	YES
Artificial Colors	
Artificial Flavors	
Artificial Sweeteners	
Corn Products	
Egg Products	
Fish	
Gluten	
Hydrolyzed Plant Protein	
Lecithin	
Milk Products	
Peanuts	
Preservatives	
Sesame Products	
Shellfish	
Soy Products	
Starch/Modified Starch	
Sulphites	
Tartrazine	
Tree Nuts	
Wheat Products	
No Yeast	

NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTIONS:

Free of animal products

Kosher





References:

1. Jung F, et al. Effect of *Ginkgo biloba* on fluidity of blood and peripheral microcirculation in volunteers. *Drug Res* 1990; 40:589-593.
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3. LeBars PL, Katz MM, Berman N, Itil TM, Freedman AM, Schatzberg AF. A placebo-controlled, double-blind, randomized trial of an extract of *Ginkgo biloba* for dementia. *J Am Med Assoc* 1997; 278:1327-1332.
4. Mix JA, Crews Jr WD. A double-blind, placebo-controlled, randomized trial of *Ginkgo biloba* extract EGb 761 in a sample of cognitively intact older adults: neuropsychological findings. *Hum Psychopharmacol Clin Exp* 2002; 17: 267-277 and references therein.
5. Chen X, Salwinski S, Lee TJ. Extracts of *Ginkgo biloba* and ginsenosides exert cerebral vasorelaxation via a nitric oxide pathway. *Clin Exp Pharmacol Physiol* 1997; 24:958-9.
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7. Newall, Carol, et al, *Herbal Medicines A Guide for Health-Care Professional*, The Pharmaceutical Press, London, 1996
8. Halpern, Georges, *Ginkgo A Practical Guide*, Avery Publishing Group, Garden City Park, New York, 1998
9. Sikora S, et al. *Ginkgo biloba* extract in the therapy of erectile dysfunction. *J Urol* 1989; 141:188.
10. Weinmann S, Roll S, Schwarzbach C, Vauth C, Willich SN. Effects of *Ginkgo biloba* in dementia: systematic review and meta-analysis. *BMC Geriatr* 2010 Mar 17; 10:14.
11. Natural Medicine Comprehensive Database (NMCD), *Ginkgo Monograph*, Accessed October 19, 2010 [Available from: <http://www.naturaldatabase.com/>]
12. Vorberg G. *Ginkgo biloba* extract (GBE): A long term study on chronic cerebral insufficiency in geriatric patients. *Clin Trials J* 1985; 22:149-57.
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