Ginkgo Biloba Benefits Energy, Mood & Memory

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Ginkgo biloba, which is also known as maidenhair, is an ancient plant extract that has been used in China medicinally to heal various health ailments for thousands of years. In fact, this is reported by Examine.com to be "the most commonly ingested herb for brain health." (1)

Ginkgo's been widely studied for its effective <u>anti-inflammatory</u>, <u>antioxidant</u>, platelet-forming and circulation-boosting effects. According to current research, ginkgo biloba benefits include improved cognitive function, positive mood, increased energy, improved memory and reduced symptoms related to multiple chronic diseases — for instance, it's been used as an <u>asthma</u> <u>natural remedy</u>, <u>ADHD natural remedy</u> and dementia treatment.

In fact, it's believed to be so effective that it's even a prescription herb in Germany and several other European countries! (2)

What Is Ginkgo Biloba?

Ginkgo biloba (which goes by the scientific name *Salisburia adiantifolia*) is a natural extract derived from the leaf of the Chinese ginkgo tree, also called the maidenhair tree. *EGb761* and *GBE* are the scientific terms for standardized extract of the green ginkgo biloba plant, which is often noted for its cerebral-enhancing effects.

Ginkgo has been studied for decades in France, Germany and China. And although Chinese herbal medicine has used both the dried ginkgo leaf and seed for thousands of years, today the focus in clinical studies is on the effectiveness of standardized ginkgo biloba liquid extract made from the plant's dried green leaves.

According to Traditional Chinese Medicine and current clinical studies, ginkgo biloba is safe, effective and benefits the body in numerous ways because it exerts protective effects against mitochondrial damage and oxidative stress. (3) It's been used in **Traditional Chinese**Medicine to treat a variety of medical conditions since ancient times, especially circulatory problems and those related to declining memory. (4)

What makes ginkgo so powerful? Ginkgo biloba extract contains two constituents (flavonoids and terpenoids) that have strong antioxidant properties. It's believed these may help slow down the progression of age-related diseases by combating oxidative stress that usually worsens as someone ages.

Its ability to increase vascular dilation and improve health of blood vessels means ginkgo biloba supports brain activity, development, detoxifying mechanisms and immune function. Many of ginkgo's most prominent benefits are tied to **brain function like focus and memory** as well as mental performance. In fact, according to a report in the *International Journal of Phyotherapy and Phytopharmacology*, ginkgo biloba is "currently the most investigated and adopted herbal remedy for cognitive disorders and Alzheimer's disease (AD)." (5)

One theory is that because it can help increase uptake of glucose (broken down sugar) by brain cells, it has the potential to improve the transmission of nerve signals responsible for memory, mood, task completion, heartbeat regulation and eye health — in addition to many other vital functions.

14 Proven Ginkgo Biloba Benefits

1. Protects and Enhances Cognitive Health

Research shows that ginkgo can help protect against cognitive decline and increase brain function, particularly for people with Alzheimer's, **dementia** or vascular problems caused by cerebral infarction (loss of blood flow to vessels in the brain). (6, 7)

It's even useful for helping to treat <u>cerebral insufficiency</u> — a condition characterized by chronically low concentration, confusion, decreased physical performance, fatigue, headaches and mood changes. (8)

Many of the brain-boosting ginkgo biloba benefits that researchers have discovered rest on the fact that it's an effective anti-inflammatory that increases antioxidant activity, lowers oxidative stress and improves circulation — all important factors for maintaining cognitive health.

A 2017 clinical trial conducted within seven hospitals in the Jiangsu Province in China highlighted that ginkgo biloba extract in combination with aspirin treatment diminished cognitive and neurological deficits after an acute ischemic stroke. The trial was conducted with 348 patients, with the control group receiving 100 mg of aspirin daily and the test group receiving 450 mg of GBE with the aspirin. The tests indicated that the GBE group scored significantly higher on cognitive assessment scores and there was an improvement in their cognitive controls. (9)

When researchers from the Institute for Medical Psychology at the University of Munich tested the effects of ginkgo on healthy adults' mental performance over a four-week period, they found significant differences in self-estimated mental health as well as self-estimated quality of life between those taking ginkgo and the placebo group. This is true even though there were no existing differences between the two groups in terms of general health. (10)

The group taking ginkgo experienced better motor performance and emotional health, and reported no known drug-induced side effects or intolerance. No serious adverse events were observed during the study overall, which suggests that ginkgo may be a safe and effective way to boost mental capabilities with little risk.

Other evidence, however, suggests that this protection against cognitive decline doesn't always translate to otherwise healthy older adults. (11)

2. May Improve Symptoms of Dementia and Alzheimer's

While not a total cure, overall scientific literature suggests that ginkgo biloba benefits people experiencing cognitive decline in those with dementia or Alzheimer's disease (AD).

Most studies have investigated the effects of ginkgo on <u>lowering Alzheimer's symptoms</u> in patients already undergoing standard AD treatment with cholinesterase inhibitor drugs (ChEIs). But when groups of AD patients taking additional ginkgo supplementation have been compared to those not taking ginkgo-combination therapy over at least a one-year period, significant differences in both cognition and quality of life have been reported, according to scores on the Alzheimer's Disease Assessment Scale (ADAS-Cog) and Activities of Daily Living (ADL) Scale. (11)

Overall, it seems clear that the cognition- and memory-enhancing impact of ginkgo biloba is most pronounced in patients with dementia and/or Alzheimer's symptoms.

3. Helps Fight Anxiety

One high-quality clinical trial found that a higher dose (up to 480 milligrams) of ginkgo biloba **reduced symptoms of generalized anxiety** disorder by the end of four weeks. Researchers found that the highest dose given was marginally more effective and that the decrease in symptoms didn't reach statistical significance until after the entire four week period had passed. (12)

However, ginkgo biloba doesn't seem to have an impact on **depression** or other mood disorders. It *does* increase the effectiveness of treatment for one major mental illness, but we'll get to that.

4. Fights Symptoms of PMS

Some early research has shown positive effects of taking ginkgo on <u>reducing PMS</u> <u>symptoms</u> like mood swings, headaches, anxiety, fatigue and muscle pain.

One 2008 study published in the *Journal of Alternative and Complimentary Medicine* compared the effects on ginkgo biloba in two groups of women that were similar in terms of demographic characteristics and baseline overall severity of PMS symptoms. (13) After a six-month intervention with ginkgo, there was a significant decrease in the overall severity of physical and psychological symptoms in both the group taking 40 milligrams daily of ginkgo extract and the placebo group; however, a higher percentage of the ginkgo group (23.7 percent) had improvements compared to the placebo (8.7 percent).

An older clinical trial from 1993 found similar results. While the symptoms were the same in the placebo versus test group, by the end, all participants taking ginkgo biloba had a significant reduction in their PMS symptoms that was not seen in the placebo group. (14)

5. Helps Maintain Eye Health

While more evidence is still needed, ginkgo appears to be beneficial for eye health. A Cochrane review examined the results of ginkgo biloba for **lowering the risk for age-related macular degeneration** thanks to its platelet-activating factors and prevention of membrane damage caused by free radicals. Not a lot of research yet exists, but the results in so far suggest that ginkgo biloba may improve vision. It's unclear yet if it truly is preventative for age-related macular generation. (15)

Another unexpected benefit might be ginkgo's ability reduce **pink eye symptoms**. Also known as conjunctivitis, pink eye is an infection that can be caused by both viruses or bacteria and often clears up on its own within 10 days. Compared to placebo eye drops, the drops with ginkgo biloba extract reduced the symptoms of pink eye caused by allergies. (16)

6. Helps Prevent or Treat ADHD

One study suggests ginkgo biloba may be somewhat effective at reducing <u>ADHD symptoms</u> in children. Each child in a group of 50 diagnosed with ADHD was given up to 120 milligrams of ginkgo per day, which resulted in lower rated symptoms of ADHD. However, the supplement did not outperform methylphenidate (Ritalin), suggesting the need for future trials at higher doses. (17)

7. Could Improve Libido

Results have been somewhat inconsistent so far, but it seems true that ginkgo biloba has some impact on **libido**, as it helps blood flow more efficiently and relaxes smooth muscle tissue.

Interestingly, the most significant result so far has been a potential for treating sexual dysfunction induced by **psychotropic drugs** used to treat depression — specifically SSRIs. The first open clinical trial, ginkgo biloba improved sexual function (especially in women) for those unable to perform due to SSRI side effects. (18)

It's unfortunate, though, that follow-up studies haven't turned out the same result. Scientists are unsure whether or not they will be able to duplicate the first study's findings, but research still seems hopeful. (19, 20, 21)

8. Helps Treat Migraines

In younger individuals who suffer migraines, with or without auras, ginkgo biloba may reduce frequency and severity of **migraine headaches**. The initial study observing these effects found it took about three months to see significant changes. (22) In the subsequent months, the improvements continued to increase. (23)

Another study, this one published in 2009, saw the same changes in women with aura alongside migraines. Researchers gave a combination of ginkgo biloba, vitamin B2 and coenzyme Q10 to patients for a total of four months (after two months during which people withdrew from their current medications). Migraines with aura went away completely in over 42 percent of study participants by the end of month four, while the remaining participants saw partial improvements in their symptoms. (24)

9. Reduces Symptoms of Altitude Sickness

Dread mountain climbing because it causes you headaches or other symptoms of altitude sickness (also known as "mountain sickness")? Although it's unclear why, ginkgo biloba has been proven time and time again to reduce symptoms of acute mountain sickness when taken before a climb. (25, 26, 27, 28) These results are only consistent when subjects take 240 milligrams for up to five days before mountain climbing.

10. Improves Sleep Quality

In multiple cases, it seems ginkgo biloba might help to improve the quality of sleep without impacting REM function. This benefit is attributed to ginkgo's antioxidant activity. For people

who are healthy but **can't sleep**, 240 milligrams ginkgo biloba per day may increase subjective sleep quality. (29)

Ginkgo biloba most significantly improves sleep for those who lose sleep while taking trimipramine, a popular antidepressant. (30)

11. Fights Fibromyalgia

Some studies have found that supplementing with CoQ10 and ginkgo together improved quality of life for people diagnosed with fibromyalgia, a disorder of the nervous system. (31) Fibromyalgia is a widespread muscle pain typically accompanied by fatigue; headaches; and difficulty with sleep, anxiety and depression. Ginkgo biloba can be used as a **natural fibromyalgia treatment**.

12. May Support Heart Health

A small but well-designed study in people at high risk for **heart disease** found that patients on ginkgo biloba had a reduction in the buildup of atherosclerotic plaque (which leads to **arteriosclerosis**) as well as oxidation of LDL **cholesterol levels**. The major benefit of ginkgo biloba for heart health seems to be its superior antioxidant ability — taking this supplement increased activity of some of the most powerful antioxidants in the body, superoxide dismutase and **glutathione**. (32)

13. Increases Effectiveness of Schizophrenia Treatment

Although the effect is not considered major, ginkgo biloba seems to effectively reduce positive and negative symptoms of schizophrenia when used as an adjunctive (add-on) with antipsychotic drugs. It may also help to improve responses to these medications for patients considered "treatment-resistant." Dosages range from 240-360 milligrams per day in the various studies testing this effect. (33, 34, 35, 36)

14. Promotes Healthy Skin

In several different instances, ginkgo biloba helps to improve the quality of skin when taken regularly.

For one, supplementing with ginkgo biloba causes a small but significant improvement in symptoms of **vitiligo**, a pigmentation disorder that causes white, blotchy skin patches. At 120 milligrams per day, participants in two studies saw a noticeable repigmentation of skin and a reduction in the size and spread of their lesions. (37, 38)

In facial cream form, flavonoids from ginkgo biloba caused a very noticeable difference in skin smoothness/roughness, wrinkles and moisture. The increased moisture was most notable, increasing by almost 28 percent overall. (39) Even though this was only one study and had a small sample size, it does suggest that using an facial cream containing ginkgo biloba might help to naturally slow aging.

Recommended Dosage of Ginkgo Biloba

Effects of ginkgo biloba seem to be dose dependent, so the more you take the bigger results you may see — although you still should carefully stick to recommended values. Depending on the condition, doses can range from 40 to 360 milligrams daily.

You can find ginkgo in capsule, tablet, liquid extract or dried leaf form in most health food stores and also online. Look for it in standardized extract form containing 24 percent to 32 percent flavonoids (also known as flavone glycosides or heterosides) and 6 percent to 12 percent terpenoids (triterpene lactones).

How quickly can you expect to see improvements? It can take between four to six weeks to see any effects from ginkgo, depending on the condition you're attempting to treat.

Concerns and Interactions of Ginkgo Biloba

Even though ginkgo is considered very safe and unlikely to cause any side effects, as with all herbal treatments there are some precautions you'll want to take. Some rare cases have reported bleeding in a very small percentage of patients taking ginkgo biloba, so it's possible that the extract can interact with anticoagulants and antiplatelet agents. It also might interfere with recovery from surgery or serious injuries.

As an increasing variety of alternative health care products become available, known to many people as "over-the-counter" treatments, many people choose to take these (sometimes in combination with other herbs) but don't discuss the herbs with their doctors even when necessary. Some reports show that up to 70 percent of patients might not mention herbal therapy use to their doctors during visits, even when they suffer from existing health conditions or are preparing for surgery. (40)

It's always a good idea to stick to recommended dosages of any herbs and also mention them to your doctor if you're taking other prescriptions, preparing for surgery or battling any chronic disorders — this way dangerous interactions don't potentially occur.

Ginkgo biloba should not be taken by children.

Final Thoughts

Ginkgo biloba is one of the most well-touted supplements in the world for improving cognitive health and preventing decline over the years. It reduces chronic inflammation and increases the

activity of antioxidants throughout the body. Germany and other European countries have introduced ginkgo biloba as a medication because of its many studied benefits.

Some of the major ginkgo biloba benefits are:

- 1. Protects and enhances cognitive health
- 2. May improve symptoms of dementia and Alzheimer's
- 3. Helps fight anxiety
- 4. Fights symptoms of PMS
- 5. Helps maintain eye health
- 6. Helps prevent or treat ADHD
- 7. Could improve libido
- 8. Helps treat migraines
- 9. Reduces symptoms of altitude sickness
- 10. Improves sleep quality
- 11. Fights fibromyalgia
- 12. May support heart health
- 13. Increases effectiveness of schizophrenia treatment
- 14. Promotes healthy skin

Ginkgo biloba may increase the chances of bleeding and should not be taken within the weeks before surgery. Always discuss new supplement regimens with your healthcare professional.

Dr. Josh Axe is on a mission to provide you and your family with the highest quality nutrition tips and healthy recipes in the world...Sign up to get VIP access to his eBooks and waluable weekly health tips for FREE!