Ginkgo flavone glycosides are a group of bioflavonoids which are primarily responsible for the herb’s antioxidant activity and its effectiveness for reducing platelet aggregation. These important properties may explain GBE’s ability to enhance cerebral and central nervous system function and to help prevent cardiovascular diseases, such as atherosclerosis. The terpene lactones present in GBE are known as ginkgolides and bilobalide. Ginkgolides stimulate circulation to the brain and extremities and may reduce platelet-activating factor (PAF), the substance released from cells which causes blood platelets to aggregate (stick together). High levels of PAF have been linked with nerve cell damage, decreased blood flow to the central nervous system, bronchial constriction, and inflammatory disorders. Bilobalide appears to provide a protective action on nerve cells. A recent animal study published in *Planta Medica* indicates bilobalide may help regenerate damaged nerve cells.2-4

Medical researchers have explored numerous applications for GBE with some of the most important findings relevant to asthma, brain function, dopamine synthesis, impotency, inflammation and vascular diseases. However, the herb’s principal clinical application has been focused on the treatment of vascular insufficiency. Over 50 double-blind clinical trials have demonstrated the effectiveness of GBE for improving chronic cerebral arterial insufficiency (impaired blood flow to the brain), as well as peripheral arterial insufficiency. Symptoms of cerebral insufficiency which have responded favorably to GBE include impaired mental function and short-term memory loss, depression, headaches, tinnitus, vertigo, and suppressed vitality.1,4,5

The acclaimed British Journal of Clinical Pharmacology published a review of over forty clinical studies of GBE for the treatment of cerebral insufficiency. The review concluded that GBE proved effective in decreasing all symptoms associated with cerebral insufficiency, including impaired mental performance (senility). The mean dose of GBE was determined to be 120mg daily for 4 to 6 weeks.1,6-7

A 6-month double-blind, placebo-controlled study published in Current Medical Research and Opinion, demonstrated that the 31 individuals diagnosed with mild to moderate memory impairment who received a standardized *Ginkgo biloba* extract (GBE) showed improved mental ability following supplementation.1,7-8

Of great significance in the treatment of Alzheimer’s disease are the results from a recent study published in the Journal of the American Medical Association (JAMA). The 52-week, double-blind, placebo-controlled study was conducted upon 309 individuals diagnosed with mild-to-severe dementia associated with Alzheimer’s disease or multi-infarct dementia, using a standardized GBE (40mg taken three times daily for a total daily dose of 120mg). Study results demonstrated improvement in Alzheimer’s patients equivalent to a six-month delay in disease progression.9,10

In addition to increasing cerebral circulation, both experimental and clinical studies confirm that GBE also enhances the speed at which information is transmitted over nerve cells. However, improvement in mental performance does not appear to be limited to the elderly, as indicated by a study published in International Journal of Clinical Pharmacology Research. This double-blind, placebo-controlled study involved healthy female participants who were given doses of GBE ranging from 120mg to 600mg daily. The results showed significant improvements in participants’ memory, as measured by the Sternberg technique following the administration of GBE.1,7

It is important to note that since *Ginkgo biloba* extract reduces the clotting time of blood, this herb may increase the effectiveness of other anticoagulants.12

NSP’s Ginkgo Biloba Extract contains 120mg of concentrated *Ginkgo biloba* extract, standardized to 24% ginkgo flavone glycosides and 6% terpene lactones. Furthermore, each tablet is formulated with a special enteric coating which allows the contents to be absorbed slowly over approximately a 12-hour period.
References: