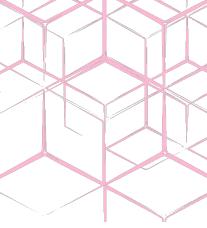
### **GINKGO BILOBA**







Ginkgo Biloba is a very long-lived tree species, some specimens are more than 2,500 years old. It has been used as a natural remedy for centuries in traditional Chinese, Japanese and Hindu medicine. Nowadays, it is used in order to obtain raw materials that are added to the formula of anti-aging products. This is because it is considered as a wonderful antioxidant, with proven free radical scavenger action. In addition, this kind of tree is known for its neuroprotective and vasoregulatory properties, among many other benefits. (1)

The most common pharmaceutical forms are: tablets, dried infusion leaves, baths, drops and poultices. (2)

Ginkgo Biloba is usually used as a dietary supplement. With regard to its dosage, the amounts range from 80 to 240 mg of extract, 2 or 3 times a day. The average recommended dose is 120 mg / kg. (2)

# Description

The Ginkgo plant drug is mainly obtained from the leaves. The seeds and fruits are only used in Chinese medicine. (1)

These leaves can have various shapes and can be very divided, bilobed or a whole leaf. Ginkgo leaves are harvested in early autumn, when they have a yellowish tint. (1)

### Flavonic compounds: free flavonoids such as

**CHEMICAL COMPOSITION:** 

- quercetin gluco-rhamnoside or kenferol, p-hydroxycinnamates and biflavonoids. Terpenic lactones: ginkgolides A, B, C, J, M: with a
- hexacyclic diterpenic structure and sesquiterpene. Others: Phytosterols. (1)

## The gingko biloba leaf and its preparations are used in cases

brain areas.

Neuroprotective effect

arterial circulatory disorders. The European Commission approves the use of its hydroacetonic dry extract for the following indications: (1) Primary degenerative dementia syndromes or vascular dementia, memory deficit, concentration disorders and depressive emotional conditions.

of minor or moderate cerebrovascular insufficiency and

- **Intermittent claudication** or occlusive arteriopathies. **Vertigo and Tinnitus:** vascular and involutive origin. The **mechanism of action** involved is related to: (3)
  - A reduction in the release of glutamate in various

Antioxidant activity (free radical scavenger)

- Anti-inflammatory, apoptotic and antiproliferative activity (through the activation of intracellular signaling pathways)
- Inhibition of Platelet Activation Factor (PAF)

# Vasoregulator: vasoconstrictor, capillary resistance enhancer and increased blood flow. (1) activating factor) (1)

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### Platelet antiaggregant: PAF antagonist (platelet

Other properties

vasodilator,

nuclear factor-2 (Nrf2). When

venous

Increased tolerance to anoxia: increased glucose and and decreased uptake requirements. (1) Antioxidant: increased expression of the transcription

arterial

- activated, it stimulates the expression of a set of cytoprotective antioxidant genes. (3) Antibacterial: against Staphylococcus aureus and

factor erythroid

Escherichia coli species. (3)

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C/ Carlo Goldoni, 32 Polígono Industrial Guadalhorce – Malaga 29004 Espana : Teléfono: 952 240 988 · Fax: 952 242 585 · e-Mail: farmaquimicasur@farmaquimicasur.com