



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

2026





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Ginkgo, Beta Carotene, Selenium, Vitamin B3, Vitamin B12, Vitamin C, Vitamin E, Zinc

چنکو / بیتا کاروتین / سیلینیوم / فیتامین ب3 / فیتامین ب12 / فیتامین ج / فیتامین هـ / زنک

1. Names & Synonyms

Ginkgo biloba L. (1)

Family: Ginkgoaceae.

Syns. *Pterophyllus salisburiensis* Nelson, *Salisburia adiantifolia* Smith, *S. macrophylla* C. Koch.

Arabic: چنکو

English: Ginkgo leaf (2), Fossil tree; Kew tree; Maidenhair tree (3).

2. Parts used for medicinal purpose

Ginkgo: Dried leaf (1, 3-5).

3. Major chemical constituents

Ginkgo

- **Flavonoids:** Flavonols (quercetin, kaempferol, isorhamnetin, and their glycosides and coumaroyl esters) (6), proanthocyanidins (yield delphinidin and cyanidin as main building blocks after acid hydrolysis) (7, 8).
- **Terpene lactones:** Bilobalide, ginkgolides A, B, C, J, M (6).



- **Amino acids:** 6-Hydroxykynurenic acid (2-carboxy-4-one-6- hydroxyquinoline), a metabolite of tryptophan (9).
- **Others:** Benzoic acid, ginkgolic acid, 2-hexenal, polyprenols (e.g. di-trans-polycis- octadecaprenol) and acidic polysaccharide (10).

4. Medicinal uses (Indications)

- A) Maintenance of good ocular and neural health in diabetic retinopathy
- B) Improvement of age-associated cognitive impairment and quality of life in mild dementia.
- C) Helps fight and protect neuro and ocular cells against the oxidative stress (Neuroprotection).

5. Herbal preparations correlated to medicinal use

Combination of ginkgo powder extract (extraction solvent: alcohol & water), vitamin C, nicotinamide, vitamin B12, beta carotene 30%, vitamin E, selenium yeast and zinc.

Herbal preparation is in pharmaceutical dosage forms. The pharmaceutical form should be described by the pharmacopoeia full standard term.

6. Posology and method of administration correlated to medicinal use

Adults and elderly:

Combination of 40 mg Ginkgo extract, 66 mg vitamin C, 10.5 mg nicotinamide, 0.0024 mg cyanocobalamin, 11 mg beta carotene 30%, 10 IU vitamin E, 10 mcg selenium yeast and 1.9 mg zinc, daily in the morning.

Method of administration: Oral use.

7. Contraindications

- Hypersensitivity to any of the active substance(s) and to other plants of the same family.
- Patients with known risk factors for intracranial hemorrhage and epilepsy (2,4).



8. Special warnings and precautions for use

- If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- The use in children and adolescents under 18 years of age has not been established (2,7,11).
- Preparations containing Ginkgo might increase susceptibility to bleeding, the medicinal product should be discontinued as a precaution 3 to 4 days prior to surgery (12).
- In patients with a pathologically increased bleeding tendency (hemorrhages) concomitant anticoagulant treatment, the medicinal product should only be used after consultation with a doctor (2,7, 11).
- Orlistat may decrease GI absorption of fat-soluble vitamins, allow at least 2 hours to elapse (before or after) (13).
- Adequate monitoring is advised when starting, changing the dose, when ending intake or if changing product (4).

9. Interactions with other medicinal products and other forms of interaction

- Concomitant use of Ginkgo biloba containing products and efavirenz is not recommended (4).
- Anticoagulants, (e.g. Phenprocoumon and Warfarin) or antiplatelet drugs (e.g. clopidogrel, acetylsalicylic acid and other non-steroidal anti-inflammatory drugs): Because of the increased risk of bleeding, ginkgo should not be taken concurrently with these products (4).
- Anticonvulsants: Ginkgo components may decrease the anticonvulsant effect; concurrent use should be avoided (4).
- Buspirone, fluoxetine: Ginkgo given with these agents may cause hypomania (2).
- Cytochrome P450IA2/P4502D6/P4503A4 substrates: Ginkgo may affect drugs metabolized by these agents (2).
- Selective serotonin reuptake inhibitors (SSRIs): Ginkgo is often used to reverse the sexual side effects of SSRIs (2).
- Trazadone: Ginkgo with trazadone may cause coma (2).



- Anticoagulant/antiplatelet herbs: Ginkgo may increase the risk of bleeding when used with these herbs (2).
- St. John's wort: Ginkgo with St. John's wort can lead to hypomania (2).

Lab Test (2):

- Partial thromboplastin time, ASA tolerance test: Ginkgo may cause increased bleeding.
- Platelet activity: Ginkgo may decrease platelet activity.
- Prothrombin time, blood salicylate: Ginkgo may increase prothrombin time and blood salicylate.

10. Fertility, pregnancy and lactation

- The use is avoided in pregnancy and lactation (7).
- No fertility data available.

11. Effects on ability to drive and use machines

No studies on the effect on the ability to drive and use machines have been performed.

12. Undesirable effects (4)

- Bleeding of individual organs has been reported (eye, nose, cerebral and gastrointestinal haemorrhage).
- Headache and dizziness.
- Mild gastrointestinal complaints: diarrhoea, abdominal pain, nausea and vomiting.
- Hypersensitivity reactions (allergic shock) may occur, skin, subcutaneous tissue disorders and allergic skin reactions (erythema, oedema, itching, rash) may also occur.
- People sensitive to nicotinic acid may experience flushing of the skin that is generally mild and transient (14).
- If adverse reactions occur, a doctor or a pharmacist should be consulted

13. Overdose

No case of overdose has been reported.



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14. Relevant biological properties

Not required as per Egyptian guidelines for registration of herbal medicines.

15. Additional information

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16. Date of compilation/last revision

21/05/2026.



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