

01 Mar 2023 | News

Ginkgo Biloba Review Finds ‘Undervalued’ Cardiovascular Benefits For Healthy Users

by [David Ridley](#)

Ginkgo biloba's cardiovascular benefits may be behind the popular ingredient's wide range of applications, from dementia to tinnitus, suggest researchers at the University of Lisbon, Portugal.

Popular herbal medicinal ingredient ginkgo biloba provides a range of “undervalued” cardiovascular benefits for healthy users, according to a recently published scientific review.

A [study](#) published in the peer-reviewed journal *Biology* found that in healthy humans, tree extract ginkgo biloba improves blood flow to various areas of the body’s vascular system, such as the eyes, ears, brain, skin and heart, without significantly affecting blood pressure.

This perfusory power may explain the ingredient’s ability to help with diseases with a probable underlying vascular dysfunction component, which the ingredient is more often associated with, the authors of the study suggest, such as cognitive decline, dementia, and tinnitus.

“Most clinical data on the efficacy of ginkgo biloba is from clinical studies, with few results from healthy subjects,” comment the researchers, based at the University of Lisbon, Portugal. “This paper provides a comprehensive review of the mechanisms underlying the known beneficial cardiovascular activities of ginkgo biloba and its main compounds.

“This plant displays myocardial suppressant and vasorelaxant activities ex vivo. It improves perfusion in different vascular beds without significantly affecting blood pressure and heart rate.”

Metabolism Important

Interestingly, the researchers note that the cardiovascular benefits of ginkgo biloba – which is found to be generally safe, with a low frequency of adverse reactions – may depend on the person using it.

“Although scarce, recent evidence suggests that individual metabolism of ginkgo biloba in different subjects is an important determinant of the nature and magnitude of vascular response,” they write.

In the future, “better controlled” clinical studies should be undertaken to identify target populations who may benefit the most from pharmacotherapeutic interventions involving ginkgo biloba, they recommend.

EU Regulatory Status

In the European Union, ginkgo biloba products can be marketed as traditional herbal medicines for the treatment of mild dementia as well as minor circulation problems.

In 2015, the European Medicines Agency’s Committee on Herbal Medicinal Products (HMPC) concluded that ginkgo medicines containing the dry extract “can be used to improve the age-related cognitive impairment (worsening of mental abilities) and quality of life of adults with mild dementia.”

The HMPC’s conclusions on age-related cognitive impairment and dementia were based on “well-established use,” which means that there are bibliographic data providing scientific evidence of ginkgo biloba’s effectiveness and safety when used in this way, covering a period of at least 10 years in the EU.

For minor circulation problems, the HMPC’s conclusions were based on “traditional use.”

“This means that, although there is insufficient evidence from clinical trials, the effectiveness of these herbal medicines is plausible and there is evidence that they have been used safely in this way for at least 30 years (including at least 15 years within the EU),” the EMA explains on its website.

Classic Borderline

Ginkgo biloba was the subject of a longstanding dispute between Germany’s food regulator, the Federal Office of Consumer Protection and Food Safety (BVL), and an unnamed company that had applied for registration of such a product.

Closing the case, the highest court in Germany last October ruled that products containing “monograph compliant” ginkgo biloba (GbE) dry extract as the main active ingredient at recommended doses of 100mg per day should be considered drugs, not dietary supplements.

Commenting on the ruling, botanicals expert Mihai Inceu said he was “not surprised” as GbE’s pharmacological properties have been widely recognized. (Also see “[Ginkgo Biloba Extract Is Drug, Not Supplement, Rules German Supreme Court](#)” - HBW Insight, 26 Oct, 2022.)

For Inceu, who is a senior regulatory affairs officer at UK consultancy firm JensonR+ Limited, GbE is a classic case of a “borderline ingredient.” In some countries it is marketed as a traditional medicine, in others a food supplement.

As part of its periodic review process, the HMPC is now asking for scientific data related to ginkgo, “so the monograph could be updated,” Inceu pointed out.