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P.044. Tocopherols in *Ginkgo biloba* L.: A comparative study between infusion and dietary supplements

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The concentrated extracts of *Ginkgo biloba* leaves have been marketed in Western countries as herbal medicines, which due to their bioactive compounds contribute for the improvement of cerebral blood flow and memory [1]. One of those compounds is α -tocopherol, which intervenes in the reduction of symptoms associated with oxidative stress in neurodegenerative disorders, particularly Alzheimer's disease. α -Tocopherol, an isoform of the lipid soluble vitamin E, is well-known as an antioxidant, and has been widely investigated as a potential prophylactic dietary supplement in cardiovascular diseases [2,3]. The objective of this study was to evaluate the amount and profile of tocopherols in some dietary supplements: pills based on *G. biloba* leaves standardized extract with 24% glycosides and 6% terpenes (P1, 40 mg/pill; P2, 60 mg/pill; and P3, 100 mg/pill); oral solution (OS- 40 mg of *G. biloba* standardized extract/mL); and compare them with the infusion of *G. biloba* wild leaves (LI). Tocopherols were identified and quantified by high performance liquid chromatography coupled to a fluorescence detector (HPLC-fluorescence). All the vitamers α -, β -, γ - and δ -tocopherol were found in the infusion, but not in dietary supplements. Furthermore, the infusion gave the highest amount of total tocopherols (126.23 mg/100 g dw) and of each individual vitamer; α -tocopherol was, by far, the most abundant tocopherol in that sample (124.88 mg/100 g dw). This study showed that wild *G. biloba* infusion supplies a much higher amount of tocopherols than dietary supplements based on the same plant. Moreover, its consumption could be beneficial due to the capacity of α -tocopherol to eliminate reactive oxygen species, inhibit lipid peroxidation, and attenuate inflammatory reactions.

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