

ABSTRACT

Effect of Ginger Addition (*Zingiber officinale*) on Antioxidant Activity of Green Tea (*Camellia sinensis*) - Literature Review

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Free radicals are unstable and highly reactive molecules which can cause cellular damage and oxidative stress. Antioxidants are compounds that can inhibit cellular damage caused by free radicals. There are natural and synthetic antioxidants. One source of natural antioxidants comes from plants. Green tea (*Camellia sinensis*) and ginger (*Zingiber officinale*) are plants with high antioxidant potential. The antioxidant activity was tested in vitro by the DPPH method, which is a stable radical. The literature review method carried out by researcher is a scoping review that used 13 original research containing chemical compounds from green tea and ginger, antioxidant activity of green tea, ginger and a combination of both used the DPPH method. Based on the literature review showed that the green tea and ginger contained polyphenol compounds that may played a role in antioxidant activity. The addition of ginger can increase the antioxidant activity of green tea. Organic solvent or their mixtures are the best solvent as extractor to increase DPPH radical scavenging activity, especially ethanol 50% which shows an optimal increase in the antioxidant effect of green tea with the addition of ginger.

Keywords : Green Tea, Ginger, Antioxidant, DPPH