

# ANTIOXIDANT ACTIVITY OF THE MAJOR POLYPHENOLS IN GREEN TEA, BLACK TEA AND COFFEE

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Green tea and black tea and coffee are high in phenolic phytochemicals, among which epigallocatechin gallate, catechin and caffeic acid, respectively, have been extensively investigated due to their possible role as antioxidant capacities. The present study investigated the phenolic and flavonoids contents and total antioxidant capacities of green tea, black tea and coffee. Green tea contained much higher levels of total phenolics (169 mg GAE/100 g) and flavonoids (75 mg CE/100 g) per serving than black tea (145 mg GAE/100 g, 31 mg CE/100 g) and coffee (69 mg GAE/100g, 20 mg CE/100 g). Total antioxidant activities were measured using the 2, 2'-azino-bis (3-ethylbenzthiazoline-6-sulfonic acid) (ABTS) and 2, 2-diphenyl-1-picrylhydrazyl (DPPH) radical scavenging method and are expressed as vitamin C equivalent antioxidant capacities (VCEACs). Green tea exhibited the highest antioxidant activity among samples total antioxidant capacities of the sample. These results suggest that green tea is more beneficial to health than black tea and coffee in terms of its higher antioxidant capacity.

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