

Antioxidant activity of catechin compounds from Korean green tea by HPLC coupled to an on-line ABTS+ based assay

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In the present study, the catechin compounds were extracted from Korean green tea by using solvent extraction (dipping) method. The major classes of catechins found in tea include epigallocatechin gallate (EGCG), epigallocatechin (EGC), epicatechin gallate (ECG), picatechin (EC), galocatechin (GC) and catechin (C). Most studies have used crude extracts of tea for the evaluation of antimicrobial activity against pathogens including food-borne pathogens, and many measured the activities of pure standards of tea polyphenols to confirm the activities found in tea extracts. In this work, the aim was to couple the on-line screening HPLC (ABTS), and off-line (ABTS) method for analysis of the antioxidant catechin compounds in Korean green tea extracts. This technique would permit the rapid determination of antioxidant activity.