



EFFECT OF ROASTING ON THE ANTIOXIDANT ACTIVITY OF COFFEE BREWS.

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Resumen: Colombian Arabica coffee beans were roasted to give light, medium, and dark samples. Their aqueous extracts were analyzed by gel filtration chromatography, UV-visible spectrophotometry, capillary electrophoresis, and the ABTS(*)(+) assay. A progressive decrease in antioxidant activity (associated mainly with chlorogenic acids in the green beans) with degree of roasting was observed with the simultaneous generation of high (HMM) and low molecular mass (LMM) compounds possessing antioxidant activity. Maximum antioxidant activity was observed for the medium-roasted coffee; the dark coffee had a lower antioxidant activity despite the increase in color. Analysis of the gel filtration chromatography fractions showed that the LMM fraction made a greater contribution to total antioxidant activity than the HMM components.