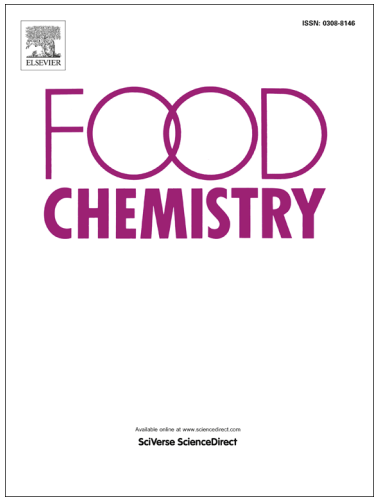

Effects of brewing conditions on the phytochemical composition, sensory qualities and antioxidant activity of green tea infusion: A study using response surface methodology

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Effects of brewing conditions on the phytochemical composition, sensory qualities and antioxidant activity of green tea infusion: A study using response surface methodology

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Abstract: Green tea is a highly consumed beverage, and the phytochemical composition, sensory qualities, and antioxidant activity of tea infusion are significantly affected by brewing conditions. However, the simultaneous effects of brewing conditions on the infusion are unknown. This study aimed to model the effects of brewing conditions (temperature, time, water/tea ratio and particle size) on the phytochemical composition, sensory profiles and antioxidant activity of green tea infusion using response surface methodology. The regression models describing the brewing of detected indexes were significant ($p < 0.01$) and reliable ($R^2 \geq 0.854$). Particle size had the greatest negative effects on the phytochemical composition and

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