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Phenolic profile and health properties of *Citrus ×Clementina* juice

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Calabria (South of Italy) is around a quarter of the Italian *Citrus* production. The Calabria Clementine IGP (*Citrus ×clementina*) is a hybrid between a Mediterranean *Citrus ×deliciosa* and a sweet orange. *C. ×clementina* are grown in the province of Cosenza and are appreciated for the sweetness characteristics and the full taste and aroma made pleasant by the absence of seeds within the pulp. The nutritional interest in the significance of free radicals as a risk factor for the incidence of degenerative diseases is only acknowledged for one or two decades. One of the possibilities of 'fighting' free radicals is through the intake of antioxidants. *C. ×clementina* juice obtained by fruits at fully mature stage was investigated for its HPLC flavonoids profile and health properties. The quality parameters, including pH, total soluble solids and ascorbic acid content were also determined. The radical scavenging potential was investigated by using ABTS and DPPH test. Among identified flavonoids neohesperidin (116.5 µg per mL) and hesperidin (55.2 µg per mL) were the main abundant compounds followed by narirutin (9.9 µg per mL). Juice showed a potent radical scavenging ability in both assay with percentage of inhibition of 74.9 and 90.4% for ABTS and DPPH test, respectively. The *C. ×clementina* juice radical scavenging ability could be related with its great content of bioactive compounds.

Biography

Monica Rosa Loizzo is a Professor in Food Science Technology and in Functional Food at University of Calabria, Italy. She is author/co-author of 139 publications in international journal, 74 communications at national and international congress and 8 chapters in book series. She is a Referee of several international journals and institutions.

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