

Gotu Kola (*Centella asiatica*): Nutritional Properties and Plausible Health Benefits

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Abstract

Centella asiatica L. (Gotu Kola) is a nutritionally important plant and a valued traditional medicine in South East Asia. In this review, the chemical composition, nutritional values, and health benefits of C. asiatica have been discussed in detail to emphasize its usage as traditional food and medicine. C. asiatica is one of the most commonly used green leafy vegetables (GLVs) in some countries including Sri Lanka due to its high amounts of medicinally important triterpenoids and beneficial carotenoids. It is consumed in the form of GLVs and in the preparation of juice, drink, and other food products. It is also known to contain vitamins B and C, proteins, important minerals, and some other phytonutrients such as flavonoids, volatile oils, tannins, and polyphenol. In vitro and in vivo studies have shown important health benefits like antidiabetic, wound-healing, antimicrobial, memory-enhancing, antioxidant, and neuroprotecting activities. However, detailed scientific approaches on clinical trials regarding health benefits and nutritional values of C. asiatica are limited, hindering the perception of its benefits, mechanisms, and toxicity in order to develop new drug prototypes. In vitro studies have shown that the method of processing C. asiatica has an impact on its nutritional values and health-related beneficial compounds. The composition of its compounds is influenced by different biotic and abiotic factors which need to be studied in detail to provide information to the public in order to maximize the usage of this valuable plant.