

Nutritional properties of orange-fleshed sweet potato juice

ABSTRACT

Orange-fleshed sweet potato (OFSP) offers many health benefits and can be processed into different food forms including as a healthy drinking juice. However, the OFSP juice requires exploration on the juice properties, especially its nutritional elements before it can be marketed as a healthy drink. Hence, this study aims to address the detailed nutritional composition of the OFSP juice via analyses of proximate composition, amino acids, mineral, carotenoids and vitamins. Findings have shown that OFSP juice is proven to be high in beta-carotene with a value of 4916.06 µg/L which is almost 100 times the value of beta-carotene in orange juice, and also rich in vitamins, certain amino acids and minerals. By considering that, these phytochemicals can aid in the reduction of anti-mutagenic, immuno-enhancers, cancer, and free radical scavengers, in which this study has proven the potential of OFSP to be processed into a healthy juice based on its nutritional properties.

Keyword: Ipomoea batatas (L.) Lam; Orange-fleshed sweet potato; Carotenoid; Healthy drinking juices