Carbohydrate and electrolyte contents in commercial fruit juices

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Abstract
Forty kinds of commercial fruit juices sold in Thailand were analyzed for types and contents of carbohydrates, electrolytes as well as osmolarity and pH. Each juice was analyzed three times and the results were averaged. A few kinds of fruit juices have high sorbitol contents (> 10 g/L). There are some juices which have a high fructose to glucose ratio (> 1.5:1). Sodium contents in juices ranged from 19 to 1405 mg/L. The osmolarity of the juices ranged from 500 to 1200 mOsmol/L. Most juices have acid pH which ranged between 2.8 and 5.0. It is concluded that each fruit juice has a unique set of properties. Consumers should know the properties of each juice because chronic intake and large amount intake of the juice could have detrimental effects on the health of the consumer.

Keywords: Fructose; Fruit Juices; Osmolarity; pH; Sorbitol; Sucrose

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