

DEVELOPMENT OF AN INSTANT TEA CUBE

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ABSTRACT

Tea is an aromatic beverage generally prepared by pouring boiling water over cured leaves of the tea plant, *Camellia sinensis*. Instant tea is a kind of value added product derived from tea. Preparation of an instant 4 in 1 cube with the use of instant tea is the main objective of the study. Basic ingredients for the tea cube was Instant tea, Milk powder, powdered sugar and malt powder. After conducting several sensory evaluations with 30 untrained panelists, the mixture for preparing tea cube was selected by using Minitab software and Freedman statistical analysis. After conducting dissolvability test of different pressure applications with different weight amounts of mixture, serving size, amount of cubes and optimum pressure for cube were identified. The procedure of preparing an instant tea cube is as follows; all equipment were sterilized and mixed all ingredients after sieving them individually and cubes were prepared using iron mold applying hydraulic pressure. The best combination of mixture was identified as 0.842 g of instant tea, 7.416 g of milk powder, 7.742 g of powdered sugar and four grams of malt powder. The serving size of the mixture was identified as 20 g per cup as literature. And best amount of cubes per cup was identified as two and best pressure application to form the cube was identified as 0.75 bar. The instant tea cube contains 10.1% protein, 244 ppm polyphenol 3.4% moisture 2.9% ash and 0.2% crude fiber. *Salmonella*, *E.coli* and *coliform* did not present and it fulfils the specifications of the Sri Lanka Standard Institute (SLSI) standards. Moisture content was not exceeded than SLSI standard level for milk powder and malt powder for one-month period. Cost of production of an instant tea cube is Rs.5.79 approximately.

Keywords: Tea, Cube, Malt, Hydraulic pressure, Sensory