

DEVELOPMENT OF A FLAVORED JELLY INCORPORATED WITH GREEN TEA EXTRACT

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ABSTRACT

Tea (*Camelia sinensis*) is most popular non-alcoholic, non-carbonated beverage all over the world and due to its relatively large amounts of polyphenols it is having strong stimulant effects and considerable number of health benefits. Even though the situation is like this, younger generation of the world get away by consuming tea due to unhandy nature of its preparation. Therefore, development of ready- to- use product by incorporating will attract more customers towards consumption of tea. In addition to that development of product by incorporating tea is an accumulation of additional value to the primary product of tea which results more economic benefits. The jelly is one of the best products due to its various product ranges preferred by consumers from kids to adults.

The study was conducted with an aim to develop ready to serve flavored jelly by incorporating green tea extract. By incorporating green tea extract to jelly, it can create favorable market segment due to increasing interest towards green tea. Also it can make comparative higher returns to end users due to higher polyphenol content in green tea compared to black tea. The study was carried-out in the laboratory of HVA Foods PLC, Kandana. Green tea incorporated jelly was prepared by changing the green tea level extract incorporated to the product. Best level was identified by the sensory evaluation of trained (07) panelists. The formulated jellies were evaluated for their attributes like taste, aroma, texture, color and overall acceptability. Suitable strength of the flavor level was identified by the sensory evaluation of non-trained (30) panelists under above parameters. Sensory results were analyzed through Kruskal-Wallis test at 95% confident level and mean separation was done through Conover-Inman method.

Result revealed that the green tea jelly prepared with 2% green tea extract is superior in quality. The quality of the final product was determined by physical and chemical analysis. The final product contains 13.65% (by mass) of polyphenol and higher level of antioxidant. Based on the tested parameters green tea incorporated jelly can be stored for more than 10 weeks without significant changes in its quality.

Key words- *Ready to serve, Polyphenol, Stimulant effect, Green tea extract, Antioxidant*