

**DEVELOPMENT OF A HEALTHY CARBONATED
BEVERAGE WITH GREEN TEA AND MORINGA
LEAVES**

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ABSTRACT

Consumers prefer experienced new form of products of tea rather than traditional tea beverage. Value addition is a better option to fulfilling above requirements. This study was carried out to develop a carbonated beverage using green tea and Moringa (*Moringa oleifera*) leaves. Green tea fannings and Orange Pekoe grades were used. Most suitable combination of green tea and Moringa leaf powder was selected through a sensory evaluation using trained panelists. Lemon and Peach flavors were used with the selected combination. Peach flavored carbonated drink sample was selected as the best through a sensory evaluation. Production procedure is adding selected amount of green tea and Moringa. Then adding liquid flavors, sugar and carbonated ice. Proximate composition of the carbonated drink was determined according to the Association of Analytical Communities standards. Shelf life of the final product was analyzed for one month of period. Acidity and Brix values were measured weekly. Total bacterial count, coliform count and fungal count were done. Initial values of pH and brix values were determined as 6.16° and 7.16° respectively. Selected carbonated drink sample included 230.6 ppm polyphenol content, 2.1% ash, 3.3% crude fiber and 0.0% crude protein. After a week beverage samples were negative for pathogenic bacteria and fungi. Green tea and Moringa incorporated carbonated drink can be prepared and it is a new product to Ready-to-drink tea market.

Keywords: Ready to drink, Green tea, *Moringa oleifera*, Carbonated ice, Fannings