

**DEVELOPMENT AND EVALUATION
VALUE ADDED PRODUCT OF ENERGY DRINK
WITH BLACK TEA POWDER**

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ABSTRACT

Tea has an attractive odor, excellent taste, and health promoting effects making it the most popular beverage in the world, second only to water. An energy drink is a type of beverage containing stimulant drugs, mainly caffeine, which is marketed as a provider of mental or physical stimulation.

A 30g of glucose, 80mg of purified caffeine and 1ml of vitamin B syrup were mixed and dissolved in purified water. Seven such samples were prepared with different black tea volumes as 5 ml, 10 ml, 15 ml, 20 ml, 25 ml and 30 ml. a control sample was prepared with no black tea. First, all seven treatments with different black tea levels were evaluated to select the best treatment using sensory evaluation. Data were analyzed using Friedman's test. Treatment no. 05 with 25 ml of black tea infusion was selected as the best treatment and it was compared with a market available energy drink. However, there was a problem of fermentation and ascorbic acid was added to overcome that problem and to increase the shelf life. Ascorbic acid was added at 4 different levels as 50 mg, 100 mg, 150 mg and 200 mg to treatment no.05 and glucose level was measured by brix meter at one week intervals. Reduction of brix value indicates the fermentation of glucose in to ethanol. The treatment level with the least difference in brix was considered as the best level of ascorbic acid to be added.

There is a significant effect of black tea to developed energy drink. The best treatment of tea energy drink was better than market available energy drink when comparing color, flavor, strength Stimulation and overall acceptability. Ascorbic acid is efficient as a tea energy drink preservative. So, the shelf life can be maximized using ascorbic acid.

Key words-Energy drink, caffeine, glucose, vitamin B syrup, overall acceptability