

Development of Fruit-Flavored Glazed Watermelon Rind

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Abstract

Watermelon rind constitutes about 30% of the waste product in watermelon juice/concentrate business. This study was conducted to add value to watermelon rind by converting it into glazed rinds. Glazed rinds were prepared and subjected to 1, 2, 3, and 4 hours of drying at 50 °C. Samples were subjected to preference ranking test and moisture content and water activity determination. The flavored glazed rinds were subjected to preference ranking and consumer testing. Crude fiber and crude ash contents of selected flavored rind was also done. Preference test results showed that the drying time had no significant effect on the preference scores. Except for drying for 1 hour, all others passed the standards for Intermediate Moisture Food. A two-hour drying period was chosen as the optimum drying time. This formulation was applied in making orange-, lemon-, melon-, and strawberry-flavored glazed rinds. The most preferred product was found to have 0.38% ash and 2.14% crude fiber. The color of the product packed in polyethylene bags was stable up to 7 days of storage at 4-6 °C, as indicated by L*, a*, and b* values. But yeast and molds count at day 7 exceeded the acceptable limit. Among the four flavors, strawberry was rated as "like extremely" for color, chewiness, and general acceptability. Sign test showed that all flavored rinds were within the acceptable range at 0.05 level of significance. This can be used in place of glazed fruits and bring down the production cost of certain bakery products.