

# Sensory Acceptability and Characterization of Snack Bar Using *Artocarpus Blancoi* Fruit Seed Flour

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**Abstract:** This study aimed to develop a flour and snack bar using Antipolo fruit seeds (*Artocarpus blancoi*) as the primary raw material, focusing on phytochemical content, sensory acceptability, physicochemical composition, and nutritional value. A developmental research design with a quantitative approach was employed. The phytochemical analysis revealed the presence of beneficial bioactive compounds, including alkaloids, steroids, flavonoids, and saponins, with the absence of tannins and quaternary bases—indicating potential nutritional and therapeutic benefits with reduced astringency and toxicity. To evaluate the sensory attributes of three snack bar formulations, a hedonic scale was utilized. Data gathered from food technology experts and consumer respondents were analyzed using the median to interpret sensory evaluations, while the mean was used to describe the nutritional and physicochemical properties. A One-Way Analysis of Variance (ANOVA) was employed to determine significant differences in sensory acceptability across formulations. Findings showed that Formulation B consistently received higher median scores for appearance, aroma, taste, texture, and overall appeal, with a statistically significant difference observed among the three formulations. The most preferred formulation exhibited a balanced nutritional profile: 39.07% moisture, 7.56% fat, 1.45% ash, 5.45% protein, and 146.34 mg sodium per 100g. Based on the updated 2016 FDA Nutrition Facts Label and FNRI RENI guidelines, a serving contains approximately 140 calories, 4g fat (5% DV), 75mg sodium (3% DV), 23g carbohydrates (8% DV), and 3g protein (6% DV), contributing 5% of the daily calorie requirement and 4% of protein needs for adult Filipino males aged 19–29. These results affirm the potential of Antipolo fruit seed flour as a sustainable, nutritious, and health-conscious ingredient for innovative snack food development.

**Keywords:** Snack Bar, *Artocarpus Blancoi*, Fruit Seed Flour

