DEVELOPING AMPALAYA AS AN ALTERNATIVE GUMMY CANDIES FOR DIABETIC STUDENTS AT BESTLINK COLLEGE OF THE PHILIPPINES

ABSTRACT

AUTHORS
Mary Joy Amante
Jovelyn Dilao
Aira Jane Gacusan
Samuel Marata
Nikko Jessneil Reblando

RESEARCH ADVISER
Romeoul Karl A. Flores, LPT

AFFILIATION
Bestlink College of the Philippines

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This study aims to develop ampalaya (bitter gourd) as a healthy alternative gummy candy specifically for diabetic students. Ampalaya gummy candies are designed as a nutritious snack that may help in managing blood sugar levels. These are naturally sweetened with honey and flavored with fruit juices to make them both palatable and safe for diabetic consumption. An experimental research design was employed to investigate the effectiveness of various methods in reducing the bitterness of ampalaya while maintaining its health benefits. The independent variables included techniques such as honey addition, fruit flavoring, and salt soaking, while the dependent variables focused on the candies' acceptability and perceived health benefits among diabetic student respondents. The study involved 10 respondents, mostly aged 16 to 20, with an equal gender distribution. Among the techniques tested, the use of 4 and 5 teaspoons of honey and salt soaking for one hour received "Excellent" ratings (weighted mean = 4.00) in reducing bitterness. Three teaspoons of honey also performed well (mean = 3.90). For fruit flavorings, mango (3.60) and orange (3.70) were rated "Excellent," while grape (3.20) and pineapple (3.30) were rated between "Good" and "Excellent." Respondents identified major challenges such as ingredient formulation (36%), taste acceptance (32%), and customer awareness (32%). They also acknowledged ampalaya's health benefits, citing its richness in vitamins (38.89%), dietary fiber (27.78%), and antioxidants (27.78%). In terms of product acceptability, 70% of participants rated the candies as "acceptable," and 30% rated them as "very acceptable." The results demonstrate that ampalaya-based gummy candies, when sweetened with honey and enhanced with fruit flavors, can serve as a viable healthy snack option for diabetic students. Despite positive feedback, formulation refinement and consumer acceptance remain areas for improvement. Further research is recommended to enhance nutritional value, scale up production, and raise consumer awareness. These findings may inform food manufacturers and health professionals in developing functional snacks tailored to diabetic needs.

RECOMMENDED CITATION

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