COMPARISON OF PROXIMATE COMPOSITION AND FUNCTIONAL PROPERTIES OF RESISTANT STARCH IN BLANCHED AND PREGELATINIZED FORMS OF COMMONLY AVAILABLE BANANA VARIETIES

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ABSTRACT

In this study, blanched and pregelatinized of widely accessible banana types in Sri Lanka are investigated for their resistant starch's functional characteristics and approximate composition. The aim of the project is to provide is to provide useful information about the nutritional and functional variations resulting from blanching and pregelatinizing process. Kandula, Red, Sugar, Ambul, Parakum, Millawa suwadal and Cavendish were among the seven banana types that were selected for investigation.

The following parameters were measured using proximate analysis: pH, total soluble solids, total acidity, crude protein levels, and moisture and ash contents. The functional parameters that were evaluated were bulk density, solubility, foaming, emulsion, swelling, water and oil absorption capacities, and bulk density. The findings indicated that there were significant variations in the functional characteristics and proximate composition of several banana types and processing techniques.

The results demonstrate the possibility for incorporating banana flour of various types and processing techniques as food ingredients in processed foods, hence advancing the creation of functional food products. The purpose of this research is to benefit the manufacturing company and its stockholders financially while also advancing our understanding of the nutritional and functional qualities of products derived from bananas.

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