

**THE STUDY OF WHOLE AND SPLIT YELLOW PEA IN THE
PRODUCTION OF MURUKKU**

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ABSTRACT

THE STUDY OF SPLIT AND WHOLE YELLOW PEA FLOUR (*Pisum sativum L.* *Miranda*) IN THE PRODUCTION OF MURUKKU

Murukku, a very popular Indian traditional snacks food, was prepared from yellow pea flour, which are split yellow pea and whole yellow pea. Four formulations were created for two types of the pea flour. At the same time, the commercial pre-mix murukku flour was purchased to be the control murukku. All the murukku were fried by using deep-fat frying method. The fat content, oil uptake ratio and the proximate composition were checked and evaluated. In term of texture, the fracturability of murukku was evaluated by using TAX-T2i Texture Analyzer. Fat content and oil uptake ratio of the murukku increased with the increasing proportion of pea flour. However, the control murukku shows the highest fat content and oil uptake ratio which is 51.16% and 1.31 respectively. In term of proximate composition, all formulations shows higher protein content compared to murukku. In the other hand, whole yellow pea shows higher fibre content compared to split yellow pea. In term of texture, higher amount of pea flour will contribute to harder texture. Formulation 2 of both yellow pea flour murukku is the most accepted by panelists during sensory evaluation.

CHAPTER 1

INTRODUCTION

1.1 Background and problem statement

A major world concern in fulfilling the food is to supply the protein required by the whole population now and in the future. According to Lynn Heng (2005), the idea to develop Novel Protein Foods (NPF's) based on plant protein, as an alternative to meat arises with the aim to reduce environmental burdens brought about by existing meat production system, which inefficiently use large amount of energy, land and raw materials.

Legumes such as peas, beans, and lentils are high in protein content and have been used as an inexpensive protein source in the diet (Uken, 1991). Since legumes can be prepared for consumption in many ways, it deals with the production of snack foods from legume-based flour. Most of the snack foods rich in carbohydrate and low in protein content which is around 2-10% (Panchuk *et al.*, 1979). Therefore, it is now very crucial to develop quality snack foods of increased nutritional value by simple procedures from field crops.