## CHAPTER I

## INTRODUCTION

## 1.1 Background of the Study

The production of powdered stock granular stock concentrates has been attracting some level of attention in the food sector owing to its ease of use, reliability, and ability to improve the health aspect of a number of food products. Powdered stock is normally based on meat, vegetables, amounts, and seasonings blended into a concentrated and easily soluble seasoning powder for culinary use. It is interesting to note that the use of frog meat as an alternative protein source in the preparation of powdered stock addresses both the need for nutrition and the need for sustainability.

Frog meat has been used for food in different cultures for a long time, for example in Indonesia, where it is gaining popularity due to its healthy and culinary benefits. The cultural practices, economic aspects and food preferences influenced the use of frog meat in the Indonesian diet and so formed a part of the diet.

As frog meat is a good source of protein, in Indonesia as most parts of the world chronically poor conditions are a huge problem, especially in rural parts of the country, further such deficiency can be compensated towards by including frog meat into the diet. Consumption of frog meat can highly be beneficial to children and the old who are vulnerable and may need excess protein and nutrients.

Eggshells possess a high composition of calcium carbonate and are observed to be of interest as a possible diet

The incorporation of eggshell powder into the diet can help address calcium deficiencies, which are linked to various health issues, including osteoporosis and increased fracture risk. Research indicates that dietary calcium intake is crucial for maintaining bone density and reducing bone turnover, especially in older adults

(Sharma & Singh, 2018). For instance, a study highlighted that woman over 65 benefits significantly from calcium intakes of 1200-1300 mg daily, which can be effectively met through the consumption of eggshell powder (Sharma & Singh, 2018).

## 1.2 Objectives of the Study

The objectives of the study are:

- 1. To develop a method for producing powdered stock from frog meat.
- 2. To incorporate eggshell powder into the powdered stock.
- 3. To explore the potential culinary applications of the powdered stock
- 4. To promote sustainable and efficient utilization of resources