

CHAPTER I

INTRODUCTION

1.1 Background of the study

The idea of filling a pastry shell with ingredients came long ago. It seems that ancient Egyptians were among the first who did it. However, they hardly used these pies as a "course" and rather used them as an essential part of their main meal. On the other hand, the apple pies were not the same as the modern apple pie because of a fact that sugar was not so common and pies were often made with a spiced, sweetened broth instead of a sugary filling. Pie is a food consisting of a dry-textured crust that can be filled with a variety of flavours, such as fruits (Baking Industry Research Trust, 2010).

Apples were so popular and plentiful as the colonies grew that they eventually led to the creation of apple desserts, one of which was one of the earliest apple pies (William Blackstone, 2016). Apple dessert became well-known due to how easy it was to grow apples and how versatile the fruit was in the kitchen. Apples have long been a beloved fruit, cherished for their ease of cultivation and remarkable versatility in the kitchen. One of the primary reasons people favor apples is their widespread availability and the relative ease with which they can be grown in diverse climates.

This accessibility has made apples a staple in many households and culinary traditions around the world. Furthermore, apples come in a wide variety of flavors, from sweet to tart, and textures, from crisp to tender. The eighteenth and nineteenth centuries saw the emergence of the modern American apple pie, with its sweet, variegated filling all encased in a buttery crust. Apple pie was first published in cookbooks from American colonies in the eighteenth century, but since then, it has undergone changes. The pie became sweeter and more flavorful as a result of the frequent addition of sugar, cinnamon, and other spices.

Modern modifications, such as the use of healthier and gluten-free products, also accommodate various dietary needs. Despite these variations,

apple pie is still regarded as a timeless classic because of its interesting background, delicious flavour, and distinctive character.

Research shows that consuming oats can provide various health benefits. According to Whitehead *et al.* (2014), the beta-glucan fibre found in oats is effective in lowering blood cholesterol levels, which in turn can reduce the risk of heart disease. The study also emphasizes that consuming oats can help control blood sugar levels, which is highly beneficial for individuals with type 2 diabetes. The production of pie crust with high dietary fiber content and gluten-free has garnered significant attention in the food industry, considering the consumers' demand for healthier and diet-friendly products. In an effort to meet these needs, the use of mocaflour as a substitute for wheat flour has become a promising option.

1.2 Objective of the study

The objectives of this study are following below:

1. In order to follow the global trend and due to increasing demand on gluten free and healthy foods, the study aims to create gluten free and high dietary fiber pie from local resources, which are mocaflour and almond flour.
2. To identify the acceptance of gluten free and high dietary fiber content apple pie from mocaflour and almond flour.
3. To make the apple pie gluten-free and consumable by everyone.