

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Innovation is becoming more critical in food industries, where searching for an alternative food production. There are a lot of demand for a new raw material option as an alternative to traditional ingredients. Using carob seed powder as a replacement for cocoa in making fake chocolate bars offers a good chance. There are big differences in nutrition between carob and cocoa, and carob has a more complex nutritional profile compared to cocoa itself (Basharat et al., 2023). Carob seed powder offers a sustainable alternative but sadly not many people know that carob actually exist and offers a caffeine-free chocolate like product that can help fulfil peoples craving without worrying on caffeine, for example pregnant women.

Carob seeds have a lot of good nutrients and health benefits. These seeds can be turned into a smooth powder that tastes and feels like cocoa, but also gives special health advantages (Ikram et al., 2023). Carob seed powder is naturally low in fat compared to cocoa, making it an ideal ingredient for those seeking lighter and less calorie-dense chocolate confectionary options.

The production process of faux chocolate bars using carob seed powder involves several key steps. The initial step includes roasting the carob seeds to enhance its nutty aroma and reduce any raw taste. Once roasted, the seeds are ground into a fine powder, which serves as the primary base for the chocolate mixture. The carob seed powder then mixed with coconut oil as a substitute of cocoa butter (Adha et al., 2024). The mixture is then shaped into bars and then freeze to set the structure and improve texture stability. The final product is a thick fake chocolate bar that fulfills the craving for chocolate without containing caffeine and theobromine, which are found in real chocolate made from cocoa.

Carob seed powder offers more advantages than cocoa, carob seed powder is free from caffeine and theobromine (*Ceratonia Siliqua* L), the two compounds found in cocoa that can cause adverse effects in sensitive individuals. This makes faux chocolate bars made from carob seed powder suitable for children, pregnant women, and those with caffeine sensitivities.

In conclusion, using carob seed powder as a cocoa substitute to make fake chocolate bars is a new product that provides benefits such as being free from caffeine and theobromine. In addition to that knowing that there is a huge market demand on Dubai chocolate bar. This carob Dubai chocolate bar uses peanut butter as a filling so that it complements the carob Dubai chocolate bar where it helps to add the creamy texture.

1.2 Objectives of the Study

The objectives of this study are following below:

1. To evaluate the advantages of carob seed which is caffeine and theobromine free compared to cocoa.
2. To popularize carob as a substitute for cocoa.