

CHAPTER I

INTRODUCTION

1.1 Background of Study

Probiotics are a fantastic functional food product to consume. Probiotics comprise bacteria such as lactic acid bacteria, which are helpful to the digestive system because it can improve the balance of the intestinal microflora and can live in stomach acidity in sufficient quantities to occupy the gut. Probiotics are typically consumed as a dietary supplement or as part of fermented foods with specially added active living cultures, such as Yoghurt and soy yoghurt (Rizal *et al.*, 2016; Astuty *et al.*, 2021). According to Astuty *et al.*, (2021), Yoghurt contains calcium. Also, it has other micronutrients, such as potassium, zinc, phosphorus, magnesium, vitamin A, riboflavin, vitamin B5, vitamin B5, vitamin B12, and vitamin D, as well as other nutrients. Yoghurt is a fermented bacterial product containing strains of *Lactobacillus delbrueckii* subspecies *bulgaricus* and *Streptococcus salivarius* subspecies *thermophilus*.

Carica Dieng Fruit (*Vasconcellea pubescens*) is a plant found only in Dieng Plateau, Wonosobo, Central Java. Carica Dieng Fruit or Mountain Papaya contains anti-diabetic flavonoids, alkaloids, polyphenols, cysteine proteases, and papain (Sasongko *et al.*, 2020). Carica Dieng Fruit contains calcium, sugar, vitamins A and C, so it is perfect to be eaten by people whose stomach is weak against other fruits, because it improves the digestive system. Carica Dieng Fruit is generally only processed into Candied Carica, a popular food in Dieng. The aim of this product is to process yoghurt Carica without losing its original taste, and it has many benefits from Carica Dieng Fruit and fermentation technique.

According to Hidayati *et al.* (2021), Yoghurt is made by fermentation technique by lactic acid bacteria. Lactic acid bacteria will hydrolyze milk sugar and lactose into lactic acid. Additionally, the nitrogen metabolism from protein hydrolysis by *Lactobacillus bulgaricus* bacteria can produce acetaldehyde compounds that give Yoghurt a distinctive aroma. At the same time, *Streptococcus thermophilus* contributes to the developing yoghurt flavor. Processed Carica Dieng Fruit into Yoghurt is one of the innovations to make processed Carica Dieng Fruit more delicious and has many benefits.

1.2 The Objective of The Study

The objective of this study is below:

1. This study attempts to make Carica Dieng Fruit into delicious Yoghurt.
2. To maintain and promote Carica Dieng Fruit as a fruit full of benefits and nutrition for health.

