

# CHAPTER I

## INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

The reason the writer chooses to make dragon fruit skin kombucha vegan panna cotta is that it contains lots of benefits for the body and is healthier. The writer also wants to contribute for reduce food waste by using dragon fruit skin for a better environment. Not only that, but the writer also makes it suitable for vegans. Choosing panna cotta itself because the writer wants to make a healthy and suitable dessert for the customer who is vegan or even not vegan.

Panna cotta is one of the desserts that hails from Piedmont which is part of Northern Italy bordering Switzerland and France. Panna cotta is usually made using cream and also gelatin. Panna cotta is widely served at a restaurant that serves western food. The advantages of panna cotta besides the taste sweet and the texture is softer than chewy pudding (Dewi and Rahayu, 2020).

Kombucha tea is one of the most interesting traditional drinks because this tea is the result of fermentation carried out by symbiotic cultures. The main ingredients of kombucha that are often used are black tea leaves, green tea, or tea oolong, but can also be made through infused water using fruits, mint leaves, jasmine flowers, and so on (Indah C et al., 2020).

Microorganism activity during fermentation produces a variety of compounds that are beneficial to health, these include a number of vitamins, minerals, enzymes, and phenolic compounds. The higher the phenolic compounds, produced, the higher their antioxidant activity. Besides, that

kombucha contains organic compounds which are beneficial for the body so the potential as a functional food (Khamidah and Antarlina, 2020).

Health problems have an important role in human life and become one of the primary needs. Free radicals will make our body cells easily damaged and unable to function properly. Vitamin C in kombucha tea is an important compound necessary to boost the immune system. Vitamin C can function as an antioxidant that can repair body cells and skin tissue damaged by free radicals. Antioxidants are useful for neutralizing free radicals (harmful particles formed as byproducts of metabolic processes, that can damage genetic material and damage the immune system), inhibiting the growth of cancer cells and reducing the accumulation of cholesterol in the blood, and accelerating the removal of cholesterol through the feces (Nurikasari et al., 2017).

Different types of tea will give different colors to kombucha. If the tea is used has a darker color, as long as scoby's fermentation process will also look better dark. Scoby color change to dark is also caused by yeast attached to the Scoby area and looks like threads that hang and form spots brown or yellow so that the display is darker. Then, the sugar used in green tea and tea kombucha-making process black also affects the color change on scoby. If the sugar used is colored yellow then scoby will also follow the color of the solution produced by kombucha (Crum and Alex, 2016). In addition to the formation of ethanol and acid organic, fermented kombucha drink also produced a layer of cellulose formed from scoby. The new layer or slab referred to as baby scoby who later got used as a starter for beverage fermentation kombucha. The longer the fermentation period, the more cellulose clay will get thicker (Khaerah, 2019).

The skin of the red dragon fruit is a waste that is rarely used. Skin from Dragon fruit contains antioxidants that are quite high, so there is a need for alternatives to take advantage of dragon fruit skin (Ramadani, 2018). Dragon

fruit skin contains vitamin C, vitamin E, vitamin A, alkaloids, terpenoids, flavonoids, thiamine, niacin, pyridoxine, cobalamin, phenolic, carotene, and phytoalbumin, the benefits of fruit peel dragon fruit is rich in polyphenols and is a great source of antioxidants. In addition, antioxidant activity on the skin of dragon fruit is bigger than the activity of antioxidants in the flesh of the fruit, so the potential to be developed as a source of natural antioxidants (Nizori, 2020).

The brand that the writer creates is "Be gentle". The meaning of be gentle is that the writer wants to deliver a message to the customer that eats it slowly and gently when eating the product because the writer's products always serve a soft texture. The dragon fruit skin kombucha vegan panna cotta to be short the writer name it Snap Dragon Panna Cotta. The "snap dragon" itself comes from a flower's name, there is no particular reason, it is just because snap dragon is a flower that has a magenta color and it has a dragon word on its name

Snap Dragon Panna Cotta made from homemade kombucha and use dragon fruit skin on the second fermenting to give color and flavor. The ingredients that the writer use is plant-based ingredients and even healthier by replacing some ingredients. The panna cotta is made by cooking all the ingredients according to the recipe and also the sauce that the writer made uses a waste ingredient which is dragon fruit skin to maximize the use of waste ingredients.

## **1.2 THE OBJECTIVES OF THE STUDY**

1. Finding and explore the benefit of dragon fruit skin kombucha
2. Identify how to make vegan panna cotta
3. Support reduce food waste by using dragon fruit skin
4. Made new product that is healthy
5. Contribute to support animal free by using plant based ingredients

6. Formulate this product that will meet the needs of certain market segments
7. Prepare costs and a definite price range for these products