## CHAPTER 1 INTRODUCTION

## 1.1 Background of The Study

These days, researcher has found that people sometimes don't know food waste has a lot of nutrients which is needed by the human body. For example, dragon fruit skin. It has a lot of nutrients but people throw it away for they only know that human cannot eat fruit skin.

Researcher has found a way to consume dragon fruit skin, such as mixing the dragon fruit skin into 'bakwan' mixture and make it into a new product called 'Skinnie". Since so many people from all ages like to eat 'bakwan' as a side dish and snack because of the delicious taste.

According to a research, dragon fruit skin has benefits such as:

1. Maintain flexibility of blood vessels.

Having a flexible blood vessel bending alias is very important to avoid the occurrence of blood vessels that rupture due to high blood pressure flow from the heart. Well, in the skin of dragon fruit contained two active compounds called pentacyclic triyepene taraxast 20ene 3aol and also taraxast 12.20 (30) dien 3aol. Both of these compounds are very powerful in maintaining and protecting the flexibility of blood vessels (Elsaif, 2020).

2. Anti-diabetic

Anthocyanins have been shown to help in the reduction of the risk of diabetes.Inhibits the development of cancer cells. A study done on rodents shows that anthocyanin prevents insulin resistance, lower blood sugar levels, and reduce oxidative stress (Aivoges, no year).

3. Anti-cancer

Several studies have linked anthocyanin as having anti-cancer property. Anthocyanin anti-breast cancer properties are also shown on

another research where blueberry anthocyanins prevent the growth of breast cancer cell lines (Aivoges, no year).

4. Prevent cardiovascular diseases (heart disease)

Preliminary research suggested that anthocyanins demonstrate cardioprotective effects and may be helpful to prevent the development of cardiovascular disease. In addition, a report published in Nutrition Reviews in 2010 suggested that anthocyanins may improve heart health by improving cholesterol levels, blood glucose metabolism, and provide protection against oxidative stress (Aivoges, no year).

5. Lowering cholesterol level

Anthocyanins can also help lowering cholesterol level.

Having made from food waste, 'Skinnie' has a delicious taste as the common 'bakwan'. 'Skinnie' has more beautiful color compare to the common 'bakwan', the color is more golden brown. But overall 'Skinnie' has the same characteristic as the common 'bakwan'.

## 1.2 The Objectives of The Study

- Introducing the benefit of dragon fruit skin.
- Making a new inovation in culinary.
- Opening new business for the community.

## 1.3 The Benefits of Study

- People will know that some of food waste still can be produced into something nutritious to consume.
- People will know that dragon fruit skin still has a lot of nutrients which are good for health.