

## CHAPTER 1

### INTRODUCTION

Noodle are food came from the land of China. Many of people thought that noodle form Japans before, but according to the history noodle are made 2000 years ago (Kasmita, 2011). In Indonesia, Noodle become very loved by various of age from young to old (Kasmita, 2011). Making noodle actually using all-purpose flour as the staple ingredients. That is why Noodle can become an option to complete the source of carbohydrate. Beside that noodle was also the source of protein, fats, and minerals. In Indonesia the produce of the noodle are rich of iron because, in the all-purpose flour itself has already fortified by the iron to increase the nutrition.

As time goes by, people create innovation for the noodle especially the process. Now if people want to made some noodle faster, they can just buy from the market which called instant noodle. Instant noodle was become favorite food of Indonesian. According to the journal report from World Instant Noodle Association (WINA) the consumption of instant noodle globally in 2017 reaching 100,1 million portion, increasing 2,7 % from years before. While in Indonesia the consumption of instant noodle reaching the number of 12,67 million portion, about 12,6% from the consumption of the world, that makes Indonesia become the second largest consumer of instant noodle in the world. (Samparaya 2018)

Besides that, not every Indonesians like instant noodle, so people of Indonesia has another option to enjoying noodle that made from the local restaurant which is more safe to eat than the instant one. Actually, instant noodle was rich of carbs, but the rate of vitamin and mineral was very low. Also, the texture of the dried noodle itself are came from frying process that can cause disease such as coronary heart because of the trans-fat that increase Cholesterol. Besides that, for the people who loves to eat instant noodle must be worried, because study said that instant noodle has more content of Monosodium Glutamate (MSG) and Sodium, which is not good for the body (Herwin, 2007).

But now, making noodle and consumption noodle from scratch are still loved by many people of Indonesian. Now there are a lot kind of noodle we can eat, from the dried one until the wet one. Now there are also noodle made from vegetable like Brocoli, and Carot. It was made by changing the water to the jus of the vegetable that need to use. There is also a healthy dried noodle that came from healthy ingredient from the market now. Not only the noodle, even the spice itself was healthy. On this good opportunity, as the time flies fast, people know more about healthy life, so this is the right time to do this kind of innovation by doing some Research and Development (RnD). As people known that noodle was made from flour, but in this project, it will substitute with the waste from the fruit caled Cempedak.

Acording Zerega et al. (2010) Cempedak was introduction plant of tropic land that utilized as food source. Besides that, cempedak Plants was producing a good wood (Beer,an McDermott, 1996). And also, the source of traditional medicine that can resolve Diabetes, Hypertension, Fever and anythink else (Nauw et al. 2016). In indonesia Cempedak can be found in the land of Sumatra, especially in the Island of Mentawai. The Cempedak fruit itself has a very sweet taste and have a big seed inside. But people neve notice that the waste (the seeds) are so benefical. It was said that cempedak seeds have a huge source of carbs beuse it has wax coating outside the seed body (Anshari et al. 2010).

By this Research and Development (RnD), Cempedak seeds will be substitute the All-purpose flour as the main ingredients. So, the cempedak seeds will be processed to become a flour. The first thing to do are boil the Seeds for 30 minutes depending how much the quantity of the seeds. After boil, drain in the paper towel to drain from water, so it's not watery. After that peel the outer skin slice the seeds into a thin piece. Then put then into the dehydrator for 2 days until it gets dehydrate. Then put it to the foodprocesor until you got a flour texture for it. After that start to made Noodle from scratch. By Adding 100 grams of All-purpose flour and 100 grams of Cempedak Seeds into a large bowl, the next prepare from the water about

100 ml in a measuring glass. Pour it a little then mix it, do that continuously until incorporate each other.

The next step are to prepare the noodle maker to make some noodle shape. After you got the noodle shape. Boil the noodle until Half cooked. Then the next, pre heat your oven in 180-degree celcius. don't forget to drain your noodle from water, because it makes your noodle too watery while bake. Bake it for 5 minutes then check it. If the colour change into bright yellow, bake it more for about 2 – 3 minutes until you got golden brown colour. After keep in room temperature first before storing it in packaging. Store into a dehydrator box to keep the crunchynes of the Tamie. Use bake as the cooking technique are, to reduce using of cooking oil that is not really good for body if you using it to much and use it many times of cooking.

#### **1.1 THE OBJECTIVE OF THE STUDY**

1. To identify that food waste can be a wonderful dish and have many beneficial aspects to be a healthy product
2. Explore some kind of noodle dish to be more acceptable
3. Become a new product bussiness in the future

#### **1.2 THE BENEFITS OF THE STUDY**

1. To innovate some food waste into a benefical edible food
2. Learn how to make some new product and how to make the product it self
3. Get some new ingredients from a food waste.