CHAPTER I INRTODUCTION

1.1 Background

According to Atmojo (2001 p.8), the functions of food are as a material for body builder, maintaining and repairing damaged parts (proteins, minerals), giving energy for the body when have rest or activities. Food is a substance that is solid or liquid form served as the source of energy for the body. Food sources can be got from the animals or plants that have been processed or directly in foods such as fruits. From the food we can obtain the vitamins and nutrients that needed for the human body. According to Marsetyo (2010, p:1), the benefits of nutrients to the body is for getting energy to perform the daily physical activities, making innovation in the food required by the body. Food as a source of energy, especially that containing of carbohydrates, we can get food that contains of carbohydrates from the healthy foods that work for metabolism balance in the body. Providing variation of food so is important because body needs a lot of nutrients and vitamins to balance the body's metabolism.

According to Agustina (2008), there is cassava, sweet potato, sago, corn, suweg, gembili and many other alternative materials nutritional value even the advantages over the rice example the corn kernels that have the highest content of vitamin A among the other grains. The food is that is not only focused on rice only, Image in Indonesian society is the food has always centered on rice. When the people realize that the variety of food is important for health so everyone should eat it every day. This has led to the diversification of the food is not too well known in the community though there are many other food sources that can be utilized to replace or complement the rice consumption. There are many other sources of the food that can be taken from like plants or tubers that can be processed into new food sources.

Example is purple sweet potato contains a lot of carbohydrates and beta-carotene that is very good for the body. Sweet potato is a tuber plant that is easy to get from the market or private planting. Purple sweet potato planting is very easy and it does not need extra care. Purple sweet potato contains of nutrients that are not much different from other types of sweet potato. Natural fiber polysaccharides are stored in the sweet potato become valuable commodity in the enrichment of processed food products (Anonymous, 2006 p.2). Sweet potato has many benefits for the body because it contains of beta-carotene. Betacaroten generated from the color of purple sweet potatoes.

According to Gadin (2008, p:1), the resulting of purple in sweet potato caused by a purple pigment Anthocyanin which spreads from the skin to the tuber flesh. This Anthocyanin causes the purple in sweet potato. Sweet potato can be consumed with boiled or made into processed foods that produce innovation in food.

Sweet potatoes can be innovated into a base material of donut that can replace wheat flour. As we know donuts are favorite foods of all backgrounds ranging from children, teens, adults, or even parents. The origin of the donut is often a source of difference. One theory says that donuts brought from North America by immigrants from the Netherlands who also popularized another dessert.

Two important reasons for product development are the need for ongoing cost-reduction efforts for existing products and the ability to produce highly appealing flavors for new products (added 7 May). Mostly, cost-reduction productions rely on searching lower prices or finding the substitution of expensive ingredients with cheaper ones, for example, replacing almonds with peanuts. Often alternative ways focusing on ingredient substitution can reduce raw material costs. Using other ingredients in a similar way can also yield useful savings plus flavor benefits.

Wheat flour is used for various food products and the demands for this staple food is high. Consequently, the price of flour is more expensive than sweet potatoes. The price will like during seasonal events such as Lebaran and Christmases. Making

donuts from purple sweet potato is a new innovation in making donuts. It can help people cut the cost of doughnut production. However, most people do not have enough information in making donuts using purple sweet potatoes and purple sweet potatoes are not less tasty than conventional donuts, even, the innovative products have better results.

In light of the discussion above, the writer propose the study entitled: The Differences between Sweet Potatoes Doughnut with Conventional Doughnut.

1.2 Problem identification

In this report the writer wants to discuss about how to make innovation in the food sector. The innovation is from doughnuts sweet potatoes with some additional flour. Making doughnuts using sweet potatoes is something new in life society because people do not know how to make it. Doughnut made from sweet potatoes has some basic ingredients. It is something new in people's life. In the making of this innovation, of course there will be some problems in process of cooking doughnuts.

There are some differences between making doughnut from sweet potato and conventional doughnut from flour. In fact, sometime people find problems to measure the materials to produce the expected texture in doughnuts. We must have the balance between flour and sweet potatoes. If the maker has already followed the recipe of course the color from sweet potatoes and taste of doughnuts is delicious.

1.3 Problem Formulation

We must know all about the things before cooking doughnuts, especially how to make it become perfect doughnuts and all about the rule in composition of the dough. Besides, avoiding its failure and also getting the properties and benefits of purple sweet potato such as vitamins and beta-carotene. The problem of this study is formulated in the following questions:

1. How does the cook process doughnut proceed using sweet potatoes as the main materials?

- 2. Are there any differences between the processes of producing sweet potato donuts and conventional doughnuts?
- 3. Are there any differences between the doughnuts made from sweet potatoes and conventional doughnuts regarding their resulted properties?

1.4 Research purpose

Its main goal is to reduce and eliminate confusion and minimize the possibility of making donuts to be failed. The research purpose is stated in the following main points: The writer wants to know how the cook processes doughnut production using sweet potatoes as the main ingredients. Secondly, the writer wants to examine if there are any differences between the processes of producing sweet potato donuts and conventional doughnuts. Finally, the writer wants to examine whether there are any differences between the donuts made from sweet potatoes and conventional doughnuts regarding their resulted properties.

1.5 Problem Limitation

In this case, the writer wants to discuss about how to make an innovation in cooking doughnuts with the combination of sweet potatoes and flour. Innovation in this study refers to the substitution of flour replacing wheat flour as a basic ingredient. This study is limited to comparing the production process starting from materials or ingredients preparation to doughnut cooking using sweet potatoes and using wheat flour. It is also aimed at examining the differences between the properties of sweet potato donuts and conventional doughnuts which include taste, volume or size, color and texture.

1.6 Research Benefits

For the society.

The benefit to society is to introduce, promote and provide information to the public that purple sweet potato can be used as a basic ingredient for donuts innovation.

For the reader.

The benefit for the reader is to be able to reduce or even eliminate the possibility of failure in making the purple sweet potato donuts, so the reader can get the guidance and correct procedures.