

## CHAPTER II

### LITERATURE REVIEW

#### 2.1 Telok Ukan



Picture 2.1 Telok Ukan  
Retrieved from  
<http://palembangbari.blogdetik.com>

There are some informations about *Telok Ukan*. According to Tarmizi (2014), *Telok Ukan* is a kind of food taste like a sponge cake stuffed in a duck egg shell and steamed. Furthermore, Selvi (2015) says that “*Telok ukan*” had been existed for a long time. *Telok Ukan* exist only at Indonesian Independent day celebration or at *Telok Abang Festival* (Red Egg

Festival). In conclusion, *Telok Ukan* is the traditional food which the existence is very rare.

Cooking “*Telok Ukan*” is quite hard. Selly (2013) says that in cooking “*Telok Ukan*”, the eggshell must not be broken so the filling of *telok ukan* (the mixture of coconut milk, egg and Pandan) can be poured to the eggshell. There is also a small foam plug to cover the hole off the eggshell. This plug is used to make the filling stay inside the eggshell and not blooming. When steaming *telok ukan*, the timing must be exactly 15 minutes not to long or to short because if it is too long the filling can bloom and break the eggshell. If the steaming time is too short, the filling might be still raw.

The head of UPTD Museum Sultan Mahmud Badaruddin II Palembang, Ali Hanafiah (stated at the website, <http://inspirasi bangsa.com/dinas-pariwisata-kenalkan-telok-ukan-di-pameran-pangan/>) states that there are 3 main ingredients of “*Telok Ukan*”. The main ingredients of *Telok ukan* are:

### 2.1.1 Eggs

Egg is the most common ingredient in the world. Eggs come from the hen. According to Sudaryani (2003), eggs are the farm products contributed most to the achievement of community nutritional adequacy. Eggs are easy to digest and have excellent nutrition. These theories are supported by Szalay (2013) who says that every single vitamin B is found in eggs, as is a complete range of amino acids, is making eggs a complete protein. Eggs are a good source of several minerals that can be hard to get in other foods, such as iodine and selenium. So it can be concluded that eggs are the farm products containing protein as the good nutrition for human body.

Besides the egg, the eggshell also contains some nutrients. According to Bean (2017), An egg shell is made of calcium carbonate, which is also the main ingredient in some antacids. Each medium sized egg shell has about 750-800 mgs of calcium. The shell makes up 9-12 percent of an egg's total weight, and contains pores that allow oxygen in and carbon dioxide and moisture out.

As the layer of the eggs, eggshell is quite strong. According to Kalyani (2012), the power of the eggshell is based on the shape of the eggs. Any pressure from the sharp object on one thin side of the egg may break the eggshell, but if the pressures are on the many side of egg, the eggshell will not be broken. Widodo (2012) mentions that the Oval egg is the strongest eggshell. The calcium content of the eggshell makes the eggshell stronger. Bird eggshells contain calcium carbonate and can dissolve in various acids, including the vinegar used in cooking. While dissolving, the calcium carbonate in an eggshell reacts with the acid to form carbon dioxide. So oval eggshells is stronger than the round eggshell.

There are some rules of cooking the eggs . According to Anas (2016), the eggshell will not be broken if we cook the eggs by steaming them around 11-12 minutes. We can steam the egg under using the steam from the boiling water. According to Yanti (2013), if the egg is cooked by boiling, put the egg into cold water. Then boil the egg with small heat around 10-11 minutes. Then let it cool,

rinse it with cold water to stop the cooking process. From all explanation above, it can be concluded that the eggshell will not be broken if the eggs are cooked under small or high heat around 10-12 minutes



Picture 2.2 Egg and Eggshell  
Retrieved from Bean, J. 2017. *15 Surprising Uses For Eggshells*

There are two kinds of egg used to cook “Telok Ukan”. They are:

### 2.1.1.1 Chicken Egg

According to Mucket (2012), Chicken egg has the brown color and has the



Picture 2.3 Chicken Egg  
Retrieved from  
<http://www.howtodothings.com/pets-and-animals/a3158-how-to-hatch-chicken-eggs.html>

smaller size than duck egg. Denney (2011) also states the same opinion about chicken egg. Chicken eggs are much smaller than duck eggs. The texture of the egg shells is also a bit rough. Nosowitz (2015) says that chicken eggs are smaller and thinner than duck egg. Moreover, he says that chicken egg is easy to be cracked. From all above, it can be concluded that chicken egg is smaller,

rougher and thinner than the duck eggs.

### 2.1.1.2 Duck Egg



Picture 2.4 Duck Egg  
Retrieved from  
<http://modernfarmer.com/2015/06/everything-you-need-to-know-about-duck-eggs/>

According to Nosowitz (2015), Duck eggs are typically larger than chicken eggs; they vary a bit in size but are usually around 50 percent larger than your standard jumbo chicken egg. Nosowitz (2015) also describes The shell is significantly thicker than a chicken eggshell. This can make it tricky to crack, but generally this thick shell gives a duck egg a longer shelf life than a chicken egg. Pathak (2016) supports the theories of Nosowitz. He said that duck eggs are quite large compared to chicken eggs, which makes them easily distinguishable. Another distinct difference is that the duck egg's shell is a lot tougher than a normal chicken egg's shell. Though that makes them a lot more difficult to crack, it is also supposed to provide them with a considerably longer shelf life.

From many the information of two kinds of egg above, the writer decides to choose the duck eggs to make the “Telok Ukan”. Since “Telok Ukan” needs the strong eggshell to keep the filling of “Telok Ukan” inside.

### 2.1.2 Sugar

Sugar or sucrose is a carbohydrate that presents naturally in fruits and vegetables. The Sugar Association (2015) says that All-natural sugar or sucrose that is added to foods is identical to sugar found in fruits and vegetables. Sugar plays an essential functional role in food formulation, including as a natural preservative. Classic recipes confirm sugar’s historic role as a necessary ingredient in breads and other baked goods, cereals, sauces, salad dressings, fruit preserves and more. While The U.S. Department of Agriculture and U.S. Department of Health and Human Services (2010) support the The Sugar Association opinion about sugar. They say that sugars sweeten the flavor of foods and beverages and

improve their palatability. They are added to foods for preservation purposes and to provide functional attributes, such as viscosity, texture, body, and browning capacity. In conclusion, sugar can be the ingredients used to give the sweet taste to most dishes.

### **2.1.3 Coconut Milk**

Coconut milk, the main ingredients of telok ukan, is made from coconuts. Coconut milk comes from the white flesh of brown mature coconuts. According to Lewin (2016), coconut milk is made by grating the coconut flesh (the white part) and soaking it in hot water. The coconut cream rises to the top and can be skimmed off. The remaining liquid is squeezed through a cloth to extract a white liquid that is coconut milk. By repeating this process, the coconut milk becomes thinner. The thicker version is used for desserts and rich sauces. Coconut milk is used to get the creamy taste of “Telok Ukan”.

## **2.2 Development**

There are many definition of development according to some experts. Tayebwa (1992) states that development is a broad term which should not be limited to mean economic development, economic welfare or material well being, development in general includes improvements in economic, social and political aspects of whole society like security, culture, social activities and political institutions. Todaro (1981) defines development as a multi-dimensional process involving the reorganization and reorientation of the entire economic and social systems. He continues to argue that development is a physical reality and a state of mind in which society has, through some combinations of social, economic and political process secured the way of obtaining better life. Similar to the one given by Tayebwa, Todaro’s definition is applauded for its wider view of the development concept as related to social, economic as well as political changes in the society. However, Development process is not mechanical, automatic or fully

predictable and that, although progress in each of the above areas appears valuable for development, it may not always be a sufficient condition for growth and development. The process of developing is depending on the type of development itself. Many people do the process of development in order to gain the new kinds of product or terms.

### **2.2.1 Product Development**

Product development, also called new product management. Throughout time there are many opinions about product development. In 1991, Clark and Fujimoto define product development as the process by which the organization transforms data on market opportunities and technical possibilities in goods and information for the manufacture of a commercial product. Meanwhile, Toledo et al. (2008) report that product development is a complex process and of broad scope, and any research in this area has limitations and a wide range of critical success factors. Then, according to Salgado et al. (2010), the product development process refers to the steps, activities, tasks, stages and decisions involving the product development project. Salgado's definition is more simple than other definition. So it can be concluded that product development is a process involving the steps, activities, tasks, stages and decisions which have the limitations in researching in order to manage the commercial product.

### **2.3 Food Diversification**

There are several definition of food diversification. According to Sutrisno in Budiningsih (2009), food diversification is the way to diversify the kind of food consumed, including food booster and nutrient. While according to Suharjo (1998), diversification includes three interrelated scope of understanding, namely diversification of food consumption, diversification of food availability and diversification of food production. Moreover, Pakpahan and Suhartini (1989), define the concept of diversification is limited only staple food, so that

diversification of food consumption is defined as a reduction in rice consumption and it is compensated by the addition of food consumption of non-rice. From all explanation above, it can be concluded that food diversification is the process of diversify the main food or ingredients consumption to the other food in order to reduce the use of some food or ingredients.

#### **2.4 Organoleptic Testing**

Organoleptic is also called the sensory evaluation. It is the product testing using the human senses. According to Rahayu (2013), sensory evaluation or organoleptic is the study using the human senses to scale the texture, appearance, smell and the flavor of the food product. Organoleptic is important for research and development project. Organoleptic is conducted to minimize the risk before deciding the final product. Organoleptic also can be used to indicate the ingredients and the chemical containing of the food product. Likewise, Lawless and Heymann (2010) also say that sensory evaluation comprises a set of techniques for accurate measurement of human responses to foods and minimizes the potentially biasing effects of brand identity and other information influences on consumer perception. It attempts to isolate the sensory properties of foods themselves and provides important and useful information to product developers, food scientists, and managers about the sensory characteristics of their products. To sum up, organoleptic is the sensory evaluation of the characteristics of a product to minimize the biasing effects on consumer perception.

There are three kinds of organoleptic testing. There are discriminative testing, descriptive testing and affective testing. Stone and Sidel (2004) defines three kinds of organoleptic. Discriminative testing is the testing used to find out the differences between the example of the products. Then, descriptive testing is the testing used to decide the characteristics and the intensity differences of the products. Meanwhile, affective testing is the testing to know whether people like or accept the product or not. Lawless and Heymann (2010) says that

discriminative and descriptive testing need the panelis or tester from the expert (chef or scientist) meanwhile the affective testing can use non-expert tester to gain the result from the public. The kinds of organoleptic can be used depending on the what data should be got and who the tester is.

In this final report, the kinds of organoleptic used is the descriptive testing. Descriptive testing is designed to identify and scale the sensory characteristics. According to Lawless and Heymann (2010), Descriptive testing is generally useful in any situation where a detailed specification of the sensory attributes of a single product or a comparison of the sensory differences among several products is desired. Descriptive analysis can indicate exactly how the products different in term of sensory dimension. These techniques are ideal for shelf-life testing, especially if the judges are well trained and are consistent over time. Descriptive techniques are frequently used in product development to measure how close a new introduction is to the target or to assess suitability of prototype products. In quality assurance, descriptive techniques can be invaluable when the sensory aspects of a problem must be defined.

## **2.5. Recipe Book**

Recipe is the knowledge of how to cook by knowing the obstacle and the way how to do it. It can be also define as the instruction about how to cook completely with the ingredients and the amount of them, how to cook them at how to serve them. Ellingwood (2014) says that A recipe book can contain more than one recipe, or depend on outside recipes. Components of a recipe book should be modular, keeping recipes small and related. Meanwhile Gopnik (2009) says that, the recipe book always contains two things: how something is made, and assurance that there is a way to make it. To sum up, recipe book is the complete instruction of cooking including the way of choosing, preparing, cooking and the nutrients of the ingredients.

According to Destia (2016), there are six formulas to write a recipe book.



1. Writing the name of the dish
2. Writing the tools needed to cook the dish
3. Writing the ingredients
4. Writing the steps or instructions how to cook clearly and concisely
5. Writing how to serve it

In conclusion, recipe book should contain the name of the dish, the ingredients, the tools, the step-bystep processes and the serving. Recipe book should contain complete guidance about the proper ingredients and the clear and complete steps.