

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1. INGREDIENT REVIEW**

##### **2.1.1. Dates**

Dates as a fruit has beneficial for the body, one of them is for eye health, because dates too contains vitamin A and many nutrients when consuming these dates. According to (Cahyo (2010), dates contain lots of nutrients useful for the body such as substance conten, high iron can help formation of hemoglobin to speed up metabolism in cell. (Bone (2013) suggests that dates contain flavonoids, which can be beneficial as an antioxidant, anti-inflammatory, anti-microbial, and liver regeneration stimulant. Functional food diversification make dates as an ingredient major in the manufacture of confectionery, besides contains vitamins and fiber which has many benefits for the body and many other contents.

##### **2.1.2. Ginger**

Ginger has a substance, namely essential oil. The active substance in essential include: shogaol, gingerol, zingeron, and antioxidants. Ginger as herbal medicine efficacious for prevention and treatment diseases such as rheumatism, nausea, motion sickness, cough, body aches, headaches and etc. Efficacy this relates to active chemical compounds in ginger especially zingerol and oleoresin. Use ginger for therapy can be combined with material other (Anonimous,2020).

##### **2.1.3. Turmeric**

Turmeric has been widely used by society as a medicinal plant. A number of the properties of turmeric include: Anti bacterial, Anti tumor, Anti cancer, Antioxidant, Antiseptict, and Anti inflammatory. Turmeric is herbal therapy for various type diseases. In addition to the properties

already mentioned. Previously, turmeric can also reduce levels fat, cholestrol in the blood and heart (Anonymous,2020).

#### **2.1.4 Gelatine**

Gelatine has many function including as an ingredient stabilizers, emulsifiers, binders, thickeners, plastics alternative, as well as matrix material for implants (Anonymous, 2020). Gelatine found in marshmallow, jelly, yoghurt, and ice cream products. Meanwhile, in the pharmaceutical industry, gelatine is used in the manufacture of hard and soft capsule shells. Gelatine contains high and low protein fat content, sucrose in jelly candy is very important as it can be gives aroma, taste and texture (Anonymous, 2020)

## **2.2. PRODUCT REVIEW**

### **2.2.1 Jelly Candy**

The product that I made is Jelly Candy from dates and spices, because to introduce a product in the form of herbal jelly candy which has many health benefits. This candy is suitable for anyone can consume it. The advantage of my candy is that it uses natural sweetener, namely dates. Dates is choice of sweetener, because their sweetness is safer than using sugar. Excerpted from the journal I've taken (for safe sweetener consumed, has been studied date fruit or *phoenix dactylifera*. The fruit is a lot contains sucrose, fructose and glucose experience. Tannins contain in dates anti-infective. I also use natural artificial dyes, namely spices such as ginger and turmeric. Ginger is proven to be able to treat various kinds of disease. Active substances essential oils, among others: shogaol, gingerol, zingeron and antioxidants. Other natural properties to prevent and treat a variety of ailments from mild to severe, such as: cold, cough, headaches, aches, rheumatism, nausea, motion sickness. In my product, is definitely inseparable from weakness. The weakness of my product is the taste of this jelly candy is not too sweet,

because it doesn't use sugar sweetener, Instead it used fruit juice which tends to be less sweet than using sugar (Anonymous, 2020).

### **2.3. PROCESS REVIEW**

- The first process is boiling the dates to extract the juices. Dates juice has a texture, tastes sweet, black in color, and has benefit. The antioxidants in date juice help boost the system immune
- The second process is boiling the spices to take the color from the spices. The result of the analysis showed that the ratio of ginger and turmeric extract significant effect on moisture content, antioxidant activity, color, taste. Ginger and turmeric have nutrients that can be consumed have a positive influence on health
- The third process is mixing gelatin into spices and date juice, use gelatin in manufacturing jelly candy aims to inhibit cystalization, turning a liquid into a solid elastic, improve shape and texture. Gelatine contains high and low protein fat content, sucrose in jelly candy is very important as it can be gives aroma, taste and texture. And finally put in refrigerator until the product finished.