

## **CHAPTER II**

### **LITERATURE REVIEW**

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

##### **2.1.1. Moringa Leaf Powder**

Moringa leaf powder has a positive effect on breastfeeding, increasing the supply of breast milk. It contains phytosterol compounds, such as lactogogum effect, which facilitate and increase milk production. Consuming moringa leaf powder can help children access nutritious food for growth, as it is a non-pharmacological treatment (Kurniasih. 2013).

##### **2.1.2. Spinach Powder**

Spinach Powder, rich in vitamins B6, thiamin protein, folic acid, and potassium, is beneficial for breastfeeding mothers due to its high content of phytoestrogens. It supports lactation and improves fiber, minerals, total phenolic content, and antioxidant activity by retentate (Rachmawati, 2009).

##### **2.1.3. Dates**

Dates, a fruit with high glucose content, are beneficial for breastfeeding mothers due to their high glucose content, fiber, and antioxidants. They aid in postpartum recovery by increasing milk production, providing essential nutrients, and boosting energy levels. Dates also contain hormone oxytocin, a hormone produced by neurohypophysis, which stimulates contractions in the veins around the mother's breasts, encouraging milk glands to produce milk. This functional food has active components that provide health benefits and support breastfeeding mothers (Prianti, A, 2020)

#### **2.1.4. Ginger**

Ginger, a plant spice originating from South Asia, has been used as an ingredient in cooking and traditional medicine for thousands of years. Its rich nutrients complement main ingredients, improving digestion and stimulating breast milk production. Also ginger is a herbal ingredient that contains galactogue which can help stimulate, maintain or increase breast milk production.

#### **2.1.5. Carrot**

Carrots are a rich source of beta carotene, a vital vitamin for the human body. These vegetables contribute to the production of breast milk, a crucial component for a baby's growth and development. Carrots are considered a galactagogue food, facilitating and increasing breast milk production, making them an ideal choice for breastfeeding (Rindi, 2020).

#### **2.1.6 Soymilk**

Soy milk, a popular vegetable protein beverage, is a suitable choice for breastfeeding mothers due to its high protein content and numerous nutrients. It contains substances like isoflavones, alkaloids, polyphenols, and flavonoids, which stimulate hormones and increase breast milk production, making it a beneficial choice for breastfeeding mothers (Martalia, 2017)

#### **2.1.7 Almond**

Almonds, a fruit from the almond tree, are rich in vitamins and minerals that can increase breast milk production. These nuts are rich in vitamins and minerals which are good for your baby's development, as well as calcium, iron and Omega-3 which are great for increasing

breast milk production. Consuming almonds or drinking almond milk can enhance the creaminess, sweetness, and amount of breast milk for nursing mothers.

### **2.1.8 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, gummy, 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 gummy candy is very important as it can be gives aroma, taste and texture (Anonymous, 2020)

## **2.2. PRODUCT REVIEW**

### **2.2.1 Gummy Candy**

The product that I made is Gummy Candy from Moringa leaf powder and spices and other ingredients, because to introduce a product in the form of herbal gummy candy which has many health benefits and good specially for breastfeeding mother. This candy is suitable for older people and all mother that still breastfeeding, but anyone can consume it. The advantage of my candy is that I use special ingredients that rarely used and its good for health and as specially for production of breastfeeding milk namely moringa leaf powder. Moringa leaf powder is choice of special ingredients, because their effect is very effective impact on the supply of breastmilk, more than doubling the milk production in many cases and can be used to protect tissue (liver, kidneys, heart, and lungs), and to reduce pain.. Excerpted from the notes I've taken Moringa leaf powder it contains phytosterol compounds, such as lactogomum

effect, which facilitate and increase milk production. Consuming moringa leaf powder can help children access nutritious food for growth, as it is a non-pharmacological treatment. Moringa is also recommended by lactation consultants for its effectiveness and nutritional goodness. Steeping powdered moringa leaves ensures optimal absorption of nutrients. I also use natural another special natural ingredients, namely spinach powder, carrot juices, ginger, and almond.

Spinach powder are proven has an great function. Spinach powder is a nutritious ingredient in ultra-filtered soft chesses, providing protein, fiber, antioxidants, and minerals. Spinach Powder, rich in vitamins B6, thiamin protein, folic acid, and potassium, is beneficial for breastfeeding mothers due to its high content of phytoestrogens. It supports lactation and improves fiber, minerals, total phenolic content, and antioxidant activity by retentate (Rachmawati, 2009).

Carrot juices has rich source of beta carotene, a vital vitamin for the human body. These vegetables contribute to the production of breast milk, a crucial component for a baby's growth and development. Carrots are considered a galactagogue food, facilitating and increasing breast milk production, making them an ideal choice for breastfeeding (Rindi, 2020).

Ginger is proven to be able to treat various kinds of disease as I've taken in the journal namely (Active substances essential oils, among others: shogaol, gingerol, zingeron and antioxidants. Its rich nutrients complement main ingredients, improving digestion and stimulating breast milk production. Also ginger is a herbal ingredient that contains galactogue which can help stimulate, maintain or increase breast milk production.

Soymilk had benefits for health improve your cholesterol levels, reduce high blood pressure, fight inflammation, and support weight loss or weight maintenance. It also contains substances like isoflavones, alkaloids, polyphenols, and flavonoids, which stimulate hormones and

increase breast milk production, making it a beneficial choice for breastfeeding mothers

Almond had benefits for health, benefits of almonds include lower blood sugar levels, reduced blood pressure, and lower cholesterol levels. These nuts are rich in vitamins and minerals which are good for your baby's development, as well as calcium, iron and Omega-3 which are great for increasing breast milk production. Overall, almonds are as close to perfect as a food can get, with some considerations. Also raw almonds are healthy, protein-rich, and can be consumed or consumed to increase breast milk creaminess and sweetness.

### **2.3. PROCESS REVIEW**

The first process cut the carrot into small pieces. Then put it in a pot with 200 ml of water and put it in the blender and blend it. Strain it. carrot juice are rich in beta-carotene and vitamin A also a cup of carrot juice may increase the afternoon breast milk supply.

The second process is take ½ segment of ginger, peel the skin, then put it in a pot containing 150 ml of water and boil it for 10 minutes it takes the smell and taste. Transfer it to a bowl. As herbal medicine ginger is efficacious for prevention and treatment diseases such as rheumatism, nausea, motion sickness, cough, body aches, headaches and etc

The third process is add 100 ml soymilk to a saucepan , many nutrients in soy milk make it a suitable choice for breastfeeding moms, especially those who can't consume cow's milk. However, soy milk's nutrients would also give health benefits to the breastfed baby. Then add 5 tablespoons of gelatin and put 2 tablespoon of sugar for that taste and texture, then stir gently until evenly distributed. use gelatin in manufacturing gummy candy aims to inhibit crystalization, turning a liquid into a solid elastic, improve shape and texture. Gelatine contains high and low protein fat content, sucrose in gummy candy is very important as it can be gives aroma, taste and texture. Then put the carrot

Juices and liquid spices into the pot, stir until evenly distributed and put in the moringa leaf powder and moringa spinach powder. The nutrition in moringa leaf powder and spinach powder can help to boost immunity and can boost production of breastfeeding milk. When it's even, turn on medium-low heat for 10 minutes. When it's been 10 minutes, put it in the mold and put in the kurma slices and the roasted almond, after that put in the refrigerator until it finished. After that take it out cut into 5-10 cm square then dehydrate it.