

Chapter I

Introduction

1.1. Background

Nutrition is the supply of materials that are required by organisms and cells to stay alive (Nordqvist, 2017). Nutrition is also a requirement for the growth and development of the human's body. As the growth and development of a human continue, the nutrition requirements were also affected. Thus, nutrition for each stage of life in human is different including for the toddler that is in a transition stage between infancy and childhood. The toddler is a stage where the child learns to walk, talk and solve the problem independently. Nutritious food shall be provided for the toddler to support this stage. According to the Institute of Medicine (2005), the Acceptable Macronutrient Distribution Range (AMDR) of the macronutrient for a toddler is 45-65% of carbohydrate, 30-40% of fat, and 5-20% of the protein of total energy per day. The carbohydrate is used as the primary fuel for energy while the fat is used to enhance the absorption of fat-soluble vitamin and maturation of the central nervous system. Adequate intake of protein is needed to ensure the adequacy of energy and promote healthy growth. Moreover, the consumption of vitamins and minerals such as vitamin A, C, and D iron, zinc, and calcium are also needed to support the growth. Fulfillment of nutrition support can be derived both from the complimentary food and formula milk. Therefore parents need to choose the correct formula.

The formula milk is based on adapted cow milk with macro and micronutrient enrichment. According to the food and drug administration of Indonesia (BPOM) (2013), 100 ml of formula milk shall contain 60-85 kcal. Therefore, the formula milk could contribute up to 305-425 kcal or 27-38% of the total energy per day. Furthermore, Calcium and vitamin D in cow-derived formula milk are essential for bone development (Joseph, 2018). The enrichment of formula milk is available in a wide range of choices and specific purposes. Based on the cluster of consumer-related factors, four factors were

having a significant and positive impact on the milk consumption namely nutrition and its benefits for the human body, social element, age and ethnicity (Bonaventure, 2012). The nutrition and benefit of the formula milk can be distinguished through the nutrition label that exists in the product.

The nutrition label is detailed information on nutrient content in a packaged food product. BPOM states that a proper nutrition label shall contain the serving size, calorie, recommended daily intake per day, the percentage of daily value and nutrient content. The serving size determines the total serving that is provided in a product. The serving size shall be around 30-50 gram for powdered milk or 200-250 milliliter for liquid formed milk. Calorie includes information regarding the calories content of one serving of the products. The recommended daily intake shall fulfill the nutrient requirement per day. The percentage of daily value and nutrient content provide information how much nutrient that is contained in one serving of the product based on general recommended daily intake (RDI) and what kind of nutrient that is available in the products. From the everyday value and nutrient content, each product can be differentiated from another as the nutrient content is different. However, the purpose of the nutrition label is not only restricted to show specific nutrient content. It also can be used to educate and guide the consumer in their food choice which affecting the fulfillment of the nutrition requirement of the consumer.

The consumer knowledge regarding nutrition label affects their food choices and selection. Drichoutis (2005) explained that nutrition knowledge has a substantial effect on general label use and use of ingredient and nutrient content such as fat, vitamins, and minerals. The consumer knowledge itself is reflecting the consumer understanding toward nutrition label. Understanding the nutrition information provided on the label implies that consumers recognize and know what each nutrient term and measurement unit means; and that they understand the relationships between different nutrients and the role of each nutrient in the body and terms of healthy eating (Cowburn, 2005).

However, the consumer may not use the nutrition label for their milk choice. In Indonesia, several studies regarding the use of nutrition label in food choice have been done. Oktaviana (2016) stated that about 54.7% of the general consumer in a supermarket does not use the nutrition label as part of consideration while purchasing a food product. Moreover, according to Goodman (2016), 61% of the monthly grocery shopping is done by women with an age range within 30-55 years old. This indicates the women are also responsible for fulfilling their household nutrition requirement. Then again, there has not been a study regarding what factor affecting the mother's choice and how exactly the nutrition label is guiding them in choosing formula milk for their toddler. Based on these reasons, therefore, this study will assess the consumer understanding toward nutrition label in formula milk and how precisely the use of the nutrition label in formula milk by the consumer during their milk choice.

1.2. Objectives

- To assess the consumer understanding toward nutrition label in toddler formula milk
- To assess the role of nutrition label in choosing toddler formula milk by the consumer

1.3. The Benefit of The Study

The finding of the study would provide significant benefits for:

- **The body of knowledge.** This gives information regarding the consumer understanding toward nutrition label in toddler formula milk. This study could be used as supplementary literature for further research.
- **Academia.** This gives valuable and new findings toward consumer understanding in the nutrition label and used to stimulate further research.
- **Society.** This gives a better understanding of how the nutrition label actually can be used by the consumer during their food product selection and purchase.