

CHAPTER 1

INTRODUCTION

1.1 Background

Vitamins and minerals are micronutrients required in minimal amount by the human body which aid in growth, development, and maintenance of the body (Jones, Caballero & Davidov-Pardo, 2019). There are two forms of vitamins which are water-soluble and fat-soluble vitamins. Water-soluble vitamins are easily lost through body fluids such as urine. The example of water-soluble vitamins are vitamin C and vitamin B. Fat-soluble vitamins are stored in the liver and fatty tissues. The examples of fat-soluble vitamins are vitamin A, D, E, and K. Minerals are required to maintain the metabolic function of human body. Minerals can be classified into macrominerals and microminerals (trace minerals). Calcium, phosphorus, magnesium, potassium, chloride, and sulfur are classified as macrominerals. Meanwhile, iron, manganese, copper, iodine, zinc, cobalt, fluoride, and selenium are trace minerals (Fathima, Nallamuthu & Khanum, 2017).

Some people might need to enhance their micronutrient intake by taking supplements. However, supplements are not intended to replace the balance of eating a variety of foods. Based on the functions, supplements are categorized into three main groups (Faqi & Yan, 2013), which are:

1. Substances with nutritional functions such as vitamins, minerals, amino acids, and fatty acids.
2. Botanical products, including concentrates and extracts.
3. Other substances from various origins and physiologic role such as steroid, pyruvate, and hormone precursors.

Nowadays, the awareness of a healthy lifestyle is increasing. People are starting to be conscious to invest for their health in the elderly stage. One of the trends is the consumption of supplements. In 2016, it was estimated the global dietary supplement consumption was US

\$133.1B and predicted to reach US \$278B in 2024 (Grand View Research, 2018). Moreover, during the current COVID-19 pandemic situation, people are trying to enhance their immune system by consuming dietary supplements. Therefore, dietary supplement advertisements are increasing as the market is also growing.

Nevertheless, consumers might utilize supplements due to the trends and advertisements correlated with the current COVID-19 pandemic situation without having knowledge regarding the supplement itself. According to a previous study conducted in Surabaya, Indonesia, consumer understanding of supplement utilization during the COVID-19 pandemic is categorized as good (40%) and adequate (41%) (Mukti, 2020). However, none of the studies was conducted in Indonesia's capital city area (Jabodetabek) and West Java's capital city (Bandung). Besides, there is no study about supplement consumption before and during the COVID-19 pandemic.

Furthermore, according to Indonesia's Central Bureau of Statistics and the Ministry of Home Affairs, population census data showed that Indonesia's population is concentrated in Java Island. The majority of Indonesia's population (70.72%) is in the productive age group (15 – 64 years). Meanwhile, there is 6.95% of the older age group (65 years and above) and 23.33% of the younger age group (0 – 14 years) (BPS, 2021). Shifting in demographics might also be a factor affecting consumer's knowledge, attitude, and practice towards supplements that should be considered.

1.2 Objectives

The objectives of this study were as follows:

- To assess the consumer knowledge, attitude, and practice about supplements.
- To assess the practice of supplement intake before and during the COVID-19 pandemic.

1.3 Research Significance

This research could give insight into the depth of consumer knowledge, attitude, and practice towards dietary supplements. Thus, this research would be beneficial for further study about consumer behaviour towards supplements, drugs, and diseases. Moreover, this research can be used to educate consumers, improve their knowledge, ensure they trust the information, and improve their behaviour.