Chapter 1

Introduction

1.1 Background

Sugar-Sweetened Beverages (SSB) are drink or beverage that are sweetened with various form of sugar that added calories, including sugar, high fructose syrup, and/or other corn syrup (Min, 2017). These beverages can be categories but not limited to, soda or soft drink, fruit drinks, sport or energy drink and other powdered mix drink (Smith, 2010). SSB is one of the sources of added sugar consumption in the diet of people around the world, and considered as a simple carbohydrate in the human diet (Qoirinasari, 2018).

Among the type of sweetened beverages, beverages that are sweetened by sugar or caloric sweetener can be considered as one of the most consumed/purchased. Study by Popkin (2016) shows that among any other type of sweetener used in beverages, caloric sweetener (sugar, high fructose corn syrup (HFCS), etc.) is the most used type of sweeteners compared to other sweeteners, and the beverages that were sweetened by this type of sweetener were also the most purchased among the type of sweetened beverages. The type frequency of beverages that were consumed is also dictated by the regional trends of the area where the beverages are consumed e.g., in the same study during that year, although it is stated that soft drink was the main contributor added daily calorie intake, the consumption of sports drink increases in Latin America, while in North America the consumption rate of soft drink declining while sports drink increasing. In Asia-Pacific, especially in China, while the consumption of soft drink remains stable, the consumption of fruit drink is increasing during that year (Popkin, 2016).

The consumption rate of SSB in the world differ from country to country, although it is stated that SSB consumption is high in the world (Popkin, 2016), not all country consumes the same level of calories through SSB. While countries that are the main consumer of SSB such as Chile, Mexico, and the USA consume 600-700 kilocalories (kcal), whereas Japan consume around 240 kcal per capita.

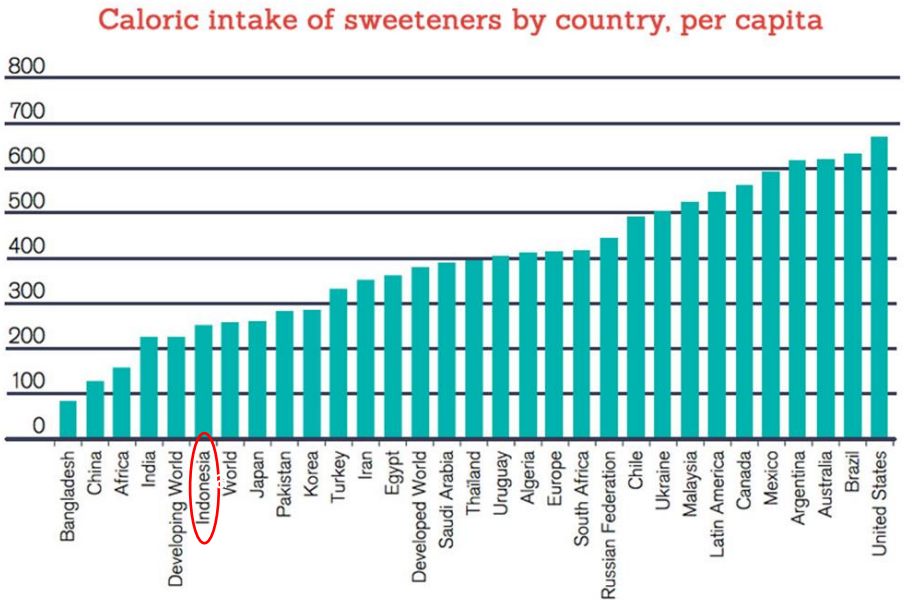

Figure 1. 1 caloric intake of sweeteners by country per capita
Credit Suisse Research Institute. Sugar Consumption at a Crossroads. September 2013.

Although, Indonesia is not one of the countries with the high consumption of SSB compared to other country. Based on WHO recommendation (caloric intake of added sugar >200 kcal is considered high), the consumption of SSB in Indonesia was considered as high (the caloric intake of sweeteners exceed 200 kcal) (WHO, 2003). A study by Laksmi (2018) for the daily fluid intake of Indonesian people, also shows that at least 72% of adolescent and 61 % of adults consumed at least one serving of SSB each day as one of the sources of daily fluid (Laksmi, 2018). The study also observed that SSB had a higher consumption percentage compared to other types of drink such as 100% fruit juice and milk; with water being an exception. Moreover, Indonesia SSB consumer tends to consume ready to drink (RTD) tea/sweetened tea and Coffee type of SSB, compared to carbonated drink or soft drink and other types of SSB.

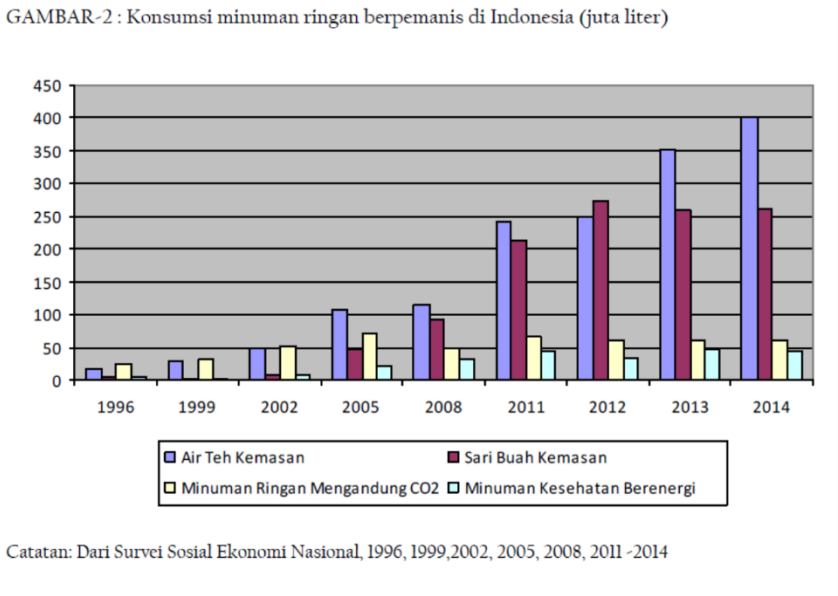

Figure 1. 2 Consumption of SSB in indonesia from 1996 until 2014

According to the data gathered by National Social-Economic survey from 1996-2014, Indonesia's SSB consumption showed an upward trend (Ardiansyah, 2017); the figure shows that there are an increase of SSB consumption trend in Indonesia in the past years. In addition, there is an increasing type of SSB available in market to the consumer in recent years (Min, 2017). Consequently, there is a need to study the consumption rate per person in the adolescent population of undergraduate student. This study is important because consumption of SSB is one of the dietary factors that can lead to health problem such as metabolic syndrome and obesity especially in adolescent (Shin, 2018).

During this study, undergraduate students are selected as research subjects with an age range of 17-24 years due to higher prevalence of SSB consumers within the age range in comparison with other age groups. (Laksmi, 2018).

1.2 Objective

The objective of this study is to assess the consumption of Sugar-Sweetened Beverages among undergraduate students aged 17-24 years old by sex, age and days.

1.3 Benefit of Study

The finding of the study will provide benefits for:

- **The Body of Knowledge.** This gives them information on SSB consumption as well as SSB type or choice by undergraduate students in Jakarta. This information can also contribute as a supplementary literature for further research.
- **The Academia.** The information obtained in this study serves as a contribution to further research on food/beverages consumption or other similar research and can also trigger research development on the consumption of SSB and product development.