
Abstract

Sugar industry is one of the important agro-industries of Thailand economy. Sugar is widely used and consumed by people around the world. Thailand is now the second country in the world that exports sugar. During 2007-2017, the rate of increase of sugar cane growing area was 26.79% and rate of increase of sugar production was 28.31%. Rate of sugar export was increased with the rate 11.63%. The trend of sugar selling to consumers both direct and indirect was been increasing in past 10 years. Most of the selling was for direct consumption. However, the major health problem worldwide including Thailand was from non-communicable diseases (NCDs). There was about 39.5 million people dies every year. The death from NCDs was reported to closely related to stress, inactive lifestyle and high calories food and beverage consumption, which including foods and beverages with high sugar content. This research aimed to study the behavior about sugar consumption, knowledge, understanding and attitudes about sugar consumption of Thais. The results of the survey research from 5 regions were from 1,127 questionnaires. The majority was female with the age of 20-29 with the highest education was bachelor degree and no personal disease. The survey results revealed that most of the consumers added sugar when consumed food and beverages everyday. White sugar was mostly used following by brown sugar, coconut sugar or palm sugar and syrup (19.6%, 10.5%, 10.1% and 8.0%, respectively). The consumers added sugar into foods or beverages 2.15 teaspoons/day. Regard to consumer behaviors, a person who purchased sugar was family members, not the responders. They tended to purchase one kilogram-packed

sugar, one pack each time, every month. The purchasers spent 20-40 baht every time of purchase. The purpose of sugar purchase was for cooking following by adding to beverages, adding to dessert and snack (66.9%, 15.6% and 13.4%, respectively). The factors influenced the purchase decision making were standards, safety, price, convenience of packaging, size of packaging and branding (15.9%, 15.6%, 15.1%, 10.4% and 10.2%, respectively). Distribution channel was convenience store.

In addition, the results of the study of consumer lifestyle on the selection of food and beverages found that most of the consumers mostly agreed that consumers always read food label before making decision and consumers regularly purchased well-known brands due to their reliability. The consumers also agreed to buy health food. Moreover, consumers agreed that they are socialism. The study of knowledge and understanding on sugar consumption found that most of the consumers did not know the fact that sugar provided 4 calories/gram (77.6%). Most of the consumers thought that they should not consume sugar more than 2 teaspoons/day (87.6%). This results led to the changes in consumer behavior with reduction in sugar consumption (72.3%) or consume same amount of sugar but increase their exercise (12.6%). Most of consumers agreed that honey had more health benefits than sugar (79.5%). As a results, the consumers thought that they could consume honey more (43.5%). Moreover, the results found that consumers misunderstood that caramel granulated sugar had more health benefits than white sugar (39.3%) and did not know what was caramel granulated sugar. The consumers further knew that syrup was a type of sugar products (87.6%). However, consumers knew that all types of sugar contributed to

diabetes (80.5%). They also thought that fructose was suitable for diabetic patients (46.8%), which is the misconception about the sugar consumption. The survey results also revealed that the sources of information for the sugar consumption and health benefits were from online (25.4%) following by books/magazines and television/radio.

Based on cluster analysis, the consumers were clustered into 4 groups. Group 1 was adaptable consumers (35.5%). Group 2 was consumers who do not care about choose and consuming foods (28.3%). Group 3 was consumers who care about health (18.2%). Group 4 was consumers with risk of any diseases (18.0%). Binary logistic regression analysis was used to study the effect of understanding about sugar consumption. The results showed that demographical data, lifestyle and attitude influenced sugar consumption of consumers. The demographical data that influenced sugar consumption of consumers were gender and age. Fours lifestyles that influenced sugar consumption of consumers were 1) attention to read food label before making a decision to purchase, 2) regularly exercise, 3) regularly ready-to-eat food or junk food and 4) regularly drink carbonated drinks, sweet drink, tea and coffee. Only one attitude influencing sugar consumption of consumers was attitude about controlling sugar consumption when a person has high risk of disease, such as obesity and diabetes. Collectively, data from our survey study showed that most of the consumers had the wrong knowledge and misunderstanding about sugar consumption. Therefore it is necessary to provide the correct information of sugar nutritions and consumptions to all consumers via online channel.