

CHAPTER 1

INTRODUCTION

1.1 Background

The global population has been expected to reach 9.1 billion in 2050. Additionally, 70% of the rural population would shift to urban areas with a better income which has also been predicted to increase by 2% annually (Moekti et al.,2020). The alteration of these factors leads to a change in the food consumption pattern where people chose more towards the semi-processed or the ready-to-eat foods that originate from livestock as the main ingredients. The alteration of dietary patterns has predicted to cause the demand for meat consumption to increase rapidly (Boler & Woerner, 2017). According to Moekti et al. (2020), the improvement of socio-economic status and urbanization in developing countries such as Southeast Asia has been assumed to increase meat consumption by over 4% per annum.

Additionally, factors such as environment, human health, and animal welfare had discovered to be impacted by the increase in the demand for meat consumption. The escalation of demand causes the livestock production system to shift from the traditional animal rearing system towards the industrialized animal rearing operation. These operations usually involve intensifications, a type of industrialized animal rearing operations, which include animals raised in a densely populated environment. According to Tuomisto & Teixeira (2011), high intensification of meat production will affect the production capacity of arable land for livestock because the high demand for meat consumption could run out of the arable land (Tuomisto & Teixeira, 2011). Furthermore, the excess consumption of meat could enhance the risk for chronic diseases such as cardiovascular diseases (Wang et al.,2016).

Therefore, due to the negative impacts of meat consumption, social concerns about the high intensification of slaughtering and livestock herding have sparked (Tuomisto &

Teixeira, 2011). However, meat-eaters have less concern for animal welfare where the techniques utilized to slaughter the animals were less considered (De Backer et al.,2015).

Specifically, the control for the increased rate of demand for meat consumption in Indonesia was required. Indonesia required prevention since Indonesia is a developing country where economic progress and high population growth significantly impact the demand for animal source food in Indonesia (Agus & Widi, 2016). According to Agus and Widi (2016), the increase in the demand in Indonesia for red meat consumption has been expected to double by 2050. Moreover, Indonesia currently could only satisfy 45% of the need for meat consumption.

The development of novel techniques for the production of meat, such as cultured meat, is to cope with the increasing demand and tackle the negative aspects of slaughtering livestock industrially. Cultured meat is a novel technique for meat products made inside the laboratory with tissue engineering methods from stem cells. Cultured meat also refers to growing meat externally from the animal's body to produce animal-derived products such as hamburgers, nuggets, and sausages (Post, 2012). Compared with animal slaughtering techniques, cultured meat is made in a more hygienic environment resulting in a lower risk of contamination in the food (Bhat et al.,2015). However, the novel technique also has several challenges, which include the introduction of the product to the market that will involve consumer acceptance, regulatory challenges in cell agriculture, production cost, food safety, scalability, and the development of new value chains (Henchion et al.,2017; Post, 2012).

The existed challenges should be managed to accomplish the benefit of cultured meat. Consumer acceptance for a novel food product is essential since the evaluation of this parameter would support producers to understand the business strategy to market the product. For instance, if the consumer had accepted the product, it will be easier for producers to sell the product at higher prices. However, if consumers did not accept the products, then it will require more promotion to motivate people for the product value (Solomon et al., 2012).

Therefore, in this research the consumer knowledge, attitude & belief, and behavior towards cultured meat which were related with demographic factors in Indonesian young adults will be conducted.

1.2 Objective

The objective of the study is to observe how young adults in Indonesia perceived towards cultured meats. Specifically, the objectives are to observe consumer knowledge, attitude & belief, and behavior towards cultured meat and to observe the association of demographic factors with consumer knowledge, attitudes and belief, and behavior towards cultured meat.

1.3 Benefits of the study

The result of the study provides great benefits as follows:

- Provide information and a foundation for potential consumers that cultured meat could contribute as an alternative of meat production.
- Provide information regarding the potential market for potential producers in Indonesia
- Provide information for producers and consumers regarding the consumer acceptance for cultured meat.
- Provide a supplementary literature for future research and study which are to be continued or replicated.