CHAPTER I

INTRODUCTION

1.1 Background

Beetroot has been consumed for ages, and the popularity of beetroot-based food and drink have been increasing as studies have proved that beetroot contain high nutritional value. Researchers claimed beetroot as one of the super-food available, since the root part of beetroot contains many antioxidant molecules such as vitamin C and it is low-fat (Anonymous, 2017). Beetroot is a good source of glutamine, an amino, iron and folate (naturally occurring folic acid). It also contains nitrates, betaine, magnesium and other antioxidant (notably betacyanin). Considering the nutritional fact of beetroot, the positive impacts for human body cannot be denied. Beetroot is good for cardiac health and it helps to lower blood pressure for those who suffer hypertension. Beetroot aids lowering blood pressure as it consists of high nitrate value, and it is universally used as beetroot is relatively inexpensive and highly effective to treat cardiovascular disease (Ware, 2017). Since beetroot has considerably great amount of fibre, it caused healthier gastrointestinal tract (Ware). In addition, drinking beetroot extract is believed to be good for skin and muscle health (Anonymous, 2015).

While consuming beetroot product is believed to maintain a good health condition, the preparation time and method might frustrate young consumers. Nevertheless, the consumption of 'ready-to-drink', that has been pasteurised, is not recommended as pasteurisation markedly degrade the antioxidant content of the natural ingredient by almost 50% and deactivate the beneficial gut microbial content (Kumar et al., 2014). Food dehydration, on the other hand, do reduce the nutritional value, but not as significant to pasteurisation method as those vitamins and minerals which are not sensitive to dehydration are not affected if dehydrated product is accompanied by appropriate storage method (Ronberg, 2015). Thus, this project is proposing a new instant

beverage product, beetroot powder, using beetroot as the main ingredients that could be obtained easily in Indonesia, and this product is believed to suit Millennials' preferences of healthy lifestyle and quick preparation method.

1.2 Objective

The purpose of making "Heart BEET" Instant Beetroot Drink products are:

- 1. Presenting a high quality of naturally manufactured instant drink.
- 2. Promoting beetroot as a one of the richest sources of glutamine, an amino acid, essential to the health and maintenance of the intestinal tract.
- 3. Encourage development of culinary industry to produce a healthy drink with profitable bussines prospects.