DEVELOPMENT OF READY-TO-DRINK JELLY DRINK FROM SOY MILK

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STATEMENT BY THE AUTHOR

I hereby declare the originality of this thesis is clearly from my own work, it contains no material published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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Jelly drink is a ready to drink beverage that was firstly created as a snack to delay hunger. unique characteristics such as chewy and sippable by straw. However, this common product is categorized as an unhealthy product because of its lack of nutrition value and lots of synthetic agents in it. In addition, adults tend to avoid this kind of product because of the high sugar content. The objectives of this study were to determine the suitable carrageenan concentration to create a proper characteristics of soy milk jelly drink (0.1%, 0.2%, 0.3%); to determine the suitable sweetener combination to achieve less sugar and acceptable soy milk jelly drink product and to evaluate the effect of additional heating time towards product's characteristics and shelf-life at 2 temperatures (4°C and 25°C). The soy milk jelly drinks that used in this research were heated for 30 minutes at 90°C. Longer heating time successfully decreased the microbial contamination in the product. However, it was highly affected the texture, pH value and sensory acceptance where the texture gets firmer and pH gets unstable as the heating time increases. The best composition of iota-carrageenan (0.2%) and best sweetener concentrations combination (0.579:45 g/L stevia:sucrose) reached their optimum quality attributes at 30 minutes of heating time.

Keywords: Soy milk, Jelly Drink, Ready to Drink, Iota-carrageenan, Stevia, Texture stability, Effect of heating time, Effect of temperature, Total Plate Count



DEDICATION



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