

## ABSTRACT

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Title : The Effect of Blanching and Freezing on Crispness and Color of Vacuum Fried Purple Sweet Potato Chips  
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This research provides a perspective of a different way to produce purple sweet potato chips, which is using vacuum frying process. There are some other research that focused on vacuum frying, such as the production of fruit chips to maintain their original color and taste. Besides, the additions of pretreatment can affect the quality of processed food, which resulted in a better product. Blanching pretreatment; freezing pretreatment; and the combination of blanching and freezing pretreatment are the pretreatment used in this study. The objective of this study is to analyze the effects of blanching and freezing pretreatment on vacuum fried purple sweet potato -simultaneously and individually- which can affect the physical (color, and crispiness) and chemical properties (fat content, moisture content, and water activity).

Based on the result, the application of blanching and freezing pretreatment on vacuum fried purple sweet potato significantly affect the product quality in terms of, moisture content and fat content. With regard to color analysis, pretreatment affect the lightness and redness value. The combination of blanching and freezing pretreatment gives a lower moisture content and water activity inside the product. Also, by combining blanching and freezing pretreatment, the sample produced the most inferior peak force compared to another pretreatment. Other than that, pretreated purple sweet potato, by combining blanching and freezing, gives the bright purple color compared the blanching one.

Key words: Purple Sweet Potato, Blanching Pretreatment, Freezing Pretreatment, and Vacuum Frying.