ABSTRACT

THE INFLUENCES OF TEMPERATURE AND BOILING DURATION TO THE LEVEL OF REHIDRATION IN MAKING INSTANT CARROT

By

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Carrot is a vegetable product that is largely consumed freshly or in form of food processing because carrot's taste is delicious, crunchy, and a little bit sweet. Dry vegetable is an alternative to fulfill consumer's necessity. The fast life style changing demands instant vegetable availability such as dry vegetable with relatively unchanged nutritional content compared with fresh vegetable. A problem in making dry vegetable is that the capability of dry vegetable in rehidration has not been satisfied yet. Producing instant carrot with high rehidration capability needs proper temperature and duration of boiling.

This research purposed to find out the influences of temperature and boiling duration to the level of rehidration in making instant carrot. This was expected to produce a good quality of instant carrot.

This research was conducted with using two factors: (1) temperature with three levels of treatments in 65°C, 75°C, 85°C, and (2) boiling duration with three levels of treatments in 10, 20, and 30 minutes. Every treatment was repeated three times.

The results obtained optimum temperature and boiling duration of instant carrot that used 65°C temperature and 10 minutes boiling duration. The product had material shrinkage value of 8.59%, water content of 12.47%, high rehidrasion ability of 333.7%, and rehidration duration of 4 minutes 57 second.

Keywords: carrot, dry vegetable, temperature and boiling duration