

OPTIMIZATION OF BLANCHING PROCESS FOR CARROTS, BY RESPONSE SURFACE METHOD

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ABSTRACT

Aim is to study the effects of selected blanching treatments, on the quality of carrots over a temperature range of 80–100°C. The blanching treatments selected were steam, water, 0.05 N acetic acid solution and 0.2% calcium chloride solution. These blanching treatments were optimised with respect to the maximum yield of carrot juice and minimal loss of β -carotene, by using Response Surface Method. The most effective blanching treatment was 5.6 min in hot water at 91.4°C and yields for 55.334% of carrot juice and minimal loss in β -carotene content.

KEYWORDS: Blanching, Optimisation, Yield & β -carotene