

# Development and Characterization of Carrot Extruded Product

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## ABSTRACT

Carrot (*Daucuscarrota*) is rich in bioactive compounds like beta-carotene, which is precursor of vitamin A. The supplementation of  $\hat{\alpha}$ -carotene enriched pomace powder in food can fulfil the need towards recommended dietary allowance for vitamin A. Extrusion cooked product is commonly treated in the category of junk food. Addition of fiber rich material having enhanced level of  $\hat{\alpha}$ -carotene in form of dehydrated pomace powder in the mixture of extrusion certainly improves the nutritional aspects of extrudates. Juice extraction behaviour is affected by exerted pressure in hydraulic press. The juice recovery was found to more than 80% under pressure at  $140.614 \times 10^4$  kg/m<sup>2</sup> in comparison to less juice recovery in traditional or enzymatically treated methods are reported elsewhere. The pomace recovered using hydraulic press was also found to be of nutritionally better than other methods of juice extraction. The dehydrated carrot powder could suitably be used in acceptable extruded product preparation with the maximum lateral expansion at a level of 272% and having an overall acceptability level of  $8.45 \pm 0.21$  on sensory 9 point hedonic scale.

**Key Words:** Carrot,  $\beta$ -carotene, extrudate, carrot powder