

PRODUCTION, PHYSICOCHEMICAL PROPERTIES
AND SENSORY EVALUATION OF ENERGY BAR
WITH INCORPORATION OF DESICCATED
COCONUT

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ABSTRACT

The aims of this study were to produce energy bar with the incorporation of desiccated coconut and to determine the physicochemical properties and the sensory attributes. Desiccated coconut was used to substitute 0g, 5g, 10g and 15g of rolled oats to produce the energy bar, in which the formulations were defined as control, DC1, DC2 and DC3, respectively. The water activity (a_w), moisture content, crude fat, crude protein, ash content, total dietary fibre (TDF), carbohydrate and calories analysis of all the samples were determined. The water activity (a_w) and moisture content of DC1, DC2 and DC3 were significantly higher than the control. The incorporation of desiccated coconut into energy bar also showed an increasing trend in the crude fat, total dietary fibre and calories as well. However, the crude protein, ash content and carbohydrate decreased with the following order: control, DC 1, DC 2 and DC 3. No significant difference was found in the intensity of brown colour in Quantitative Description Analysis (QDA), while the moisture absorption, hardness and crispiness attributes of energy bars had significant difference. In Hedonic test, samples with the incorporation of desiccated coconut were rated higher than control. DC 3 (10g desiccated coconut) was the most preferred among the panellists. Therefore, energy bars with the incorporation of desiccated coconut could be served as a convenient healthy snack, which offered a good source of dietary fibre with low fat content.