

Functional properties of roselle (*Hibiscus sabdariffa* L.) seed and its application as bakery product

ABSTRACT

Roselle (*Hibiscus sabdariffa* L.) seed is a valuable food resource as it has an excellent source of dietary fibre. Therefore, this study examined the functional properties of roselle seeds. Replacement of cookie flour with roselle seed powder at levels of 0–30 % was investigated for its effect on functional and nutritional properties of cookies. Among the four formulations cookies, the most preferred by panelists was 20 % roselle seed powder cookie (F3), followed by 10 % roselle seed powder cookie (F2) and 30 % roselle seed powder cookie (F4). The least preferred formulation among all was control cookie (F1). Cookie with 20 % roselle seed powder added showed higher content of total dietary fibre (5.6 g/100 g) as compared with control cookie (0.90 g/100 g). Besides that, cookies incorporated with roselle seed powder exhibited improved antioxidant properties. Thus, roselle seed powder can be used as a dietary fibre source and developed as a functional ingredient in food products.

Keyword: Roselle seed; Functional properties; Antioxidant activity; Cookies; Dietary fibre