Formulation and quality evaluation of finger millet (*Eleusine coracana* (L.) gaertn.) flour incorporated biscuits

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Abstract

Replacing the ingredients used in biscuits with potential nutritive ingredients would be beneficial to improve the nutritional quality of the biscuits. Although, finger millet is highly nutritious when compared to other most commonly consumed cereals, limited availability of processed food products in ready-to-eat form has restricted the finger millet consumption. The present study was focused on formulating biscuits by replacing refined wheat flour with finger millet flour. Four biscuit samples were formulated by replacing different percentages of refined wheat flour with finger millet flour. Physicochemical and microbiological properties of the biscuits were evaluated. Nutritional and antioxidant properties of the biscuit, which was formulated by replacing 50% of refined wheat flour with finger millet flour, were evaluated and compared with a control biscuit which was prepared using refined wheat flour. The finger millet flour incorporated biscuit was nutritionally superior to the control biscuit in terms of dietary fibers and polyphenolic compounds including flavonoids. Besides,

replacement of refined wheat flour with finger millet flour in biscuit formulation enhanced the antioxidant properties of the biscuit. Therefore, the finger millet flour incorporated biscuit can be considered as a good source of antioxidants.

Keywords: Antioxidants; biscuits; dietary fibers; finger millet.

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