ABSTRACT

Title of Abstract : Iron and Calcium Content and Acceptability of Dumpling Skin Fortified with Moringa Oleifera Leaves
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Moringa oleifera, rich in iron and calcium, is a potential ingredient for fortifying dumpling skins to improve their nutritional value for adults. This study aimed to evaluate the iron and calcium content of Moringa-fortified dumpling skins and assess their acceptability among consumers.

This study aimed to determine the iron and calcium content of dumpling skins fortified with Moringa oleifera and to assess their acceptability among consumers. Moringa can contribute to combating malnutrition and promoting health in Indonesia. Moringa, recognized by WHO for its nutritional value, is a rich source of calcium, iron, protein, and vitamins. These nutrients are crucial for bone health, oxygen transport, and overall well-being.

A completely randomized design with four treatments and three replications was applied. Organoleptic acceptability tests were conducted with 20 panelists using a self-administered questionnaire. Kruskal-Wallis and Mann-Whitney tests were employed to compare aroma, texture, color, and taste across treatments.

The Kruskal-Wallis analysis showed no significant differences ($p>0.05$) in aroma and texture among the formulations. However, significant differences were found in color and taste ($p>0.05$). The Mann-Whitney test showed no significant differences ($p> 0.05$) between the 50% and 75% Moringa formulations in color and taste.

Dumplings fortified with Moringa exhibited increased iron and calcium content compared to the controls, confirming the nutritional enhancement due to Moringa addition.

Keyword : Acceptability, Calcium, Iron, Moringa Oleifera, Organoleptic