

Banana Flour Incorporated Muffins

Invention Summary:

Muffins were formulated by replacing refined wheat flour with banana flour

Technology Overview:

Muffins are small cup cake-like baked products, more elastic and less tender than cup cakes. They have bell-shaped tops and can be sweet or savoury. A basic muffin batter contains refined wheat flour, eggs, a fat source, sugar, milk and leavening agents. Majority of muffins are high in carbohydrate, fat and calorie, but low in fiber content and these attributes have set them as unhealthy choices for daily consumption. Therefore, alternating the ingredients used in muffins with potential nutritive ingredients would be beneficial to improve the nutritional quality of muffins. Since refined wheat flour contains high amount of starch and lacks in dietary fiber and micronutrients, to improve the nutritive value of muffins, there is a need for replacing refined wheat flour with flours of better nutritive quality. Fully mature unripe bananas were identified as a promising source to obtain gluten-free flour which is rich in dietary fibers (including resistant starch) and amylose. Relevant scientific studies have confirmed the possibility of using banana flour as an alternative in formulating bakery products. Therefore, muffins were formulated by replacing refined wheat flour with banana flour to improve the nutritional quality of muffins and to meet the expectations of health-conscious consumers.

Potential Application:

To fulfill the demand of health-conscious consumers who wish to consume healthy food without changing their diet or dietary habits

Advantages of the product:

- Contain dietary fibers including resistant starch
- Products made out of 100% banana flour are gluten free and suitable for those who are suffering from Celiac disease
- Benefit the farmers those who cultivate Banana varieties

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