

Moringa Oleifera Leaf Powder Herbal Biscuit: Forming A Protein-Rich Nutraceutical

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Abstract: *The creation of plant-based functional snacks has emerged as a key area of innovation due to the growing demand for natural, health-promoting foods worldwide. The creation of a protein-rich herbal biscuit enhanced with powdered Moringa oleifera leaves—a nutrient-dense plant renowned for its high protein, vitamin, and mineral content—is the main goal of this study. The objective was to improve the nutritional profile of a classic biscuit without sacrificing its flavor by mixing moringa with chickpea flour and certain seasonings. The biscuits' proximate nutritional content, taste, texture, and antioxidant activity were assessed after they were made with different amounts of moringa powder.*

The biscuit with 10% moringa powder and 20% chickpea flour had the greatest balanced nutritional and acceptability outcomes out of all the formulations. According to this study, moringa herbal biscuits can be a practical, reasonably priced, and successful means of addressing protein-energy malnutrition, particularly in marginalized communities, while also fitting in with contemporary wellness and health trends.

Keywords: Moringa oleifera, Herbal biscuit, Nutraceutical, Antioxidants, Sensory evaluation, Malnutrition prevention, Plant-based nutrition, Food fortification, Dietary supplements, Bioactive compounds, Health-promoting foods

