Proceedings of International Seminar on "PERSONALIZ

"PERSONALIZED NUTRITION IN AN INNOVATIVE WORLD"



# HOLY CROSS HOME SCIENCE COLLEGE

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Editors: Karolin, A S. Sulochana S. Rajalakshmi

### International Seminar

On

# "PERSONALIZED NUTRITION IN AN INNOVATIVE WORLD"

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# FORMULATION AND NUTRITIONAL ANALYSIS OF MULTIGRAIN INCORPORATED READY TO EAT FOOD PRODUCTS

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In recent years, a wide range of processed foods in ready to eat form have been marketed with increased interests. The present study is undertaken to formulate and standardize a multigrain incorporated ready to eat food products. Three different compositions of crackers and flakes were made and were assessed by 25 panel members by using 9-point Hedonic scale. Out of those, the composition two of both Crackers and Flakes got the highest score and it was selected for further nutritional analysis and storage study. Nutrient content was determined for the crackers and flakes and its control. The Energy, carbohydrate, protein, Total fat, Crude fibre, Moisture, Ash, Calcium, Antioxidant and Phenolic content of Multigrain incorporated Crackers were 421Kcal, 77.7g, 14.7g, 9.2g, 3.5g, 3.9g, 3.3g 88.3mg, 50%, 30%. The Energy, carbohydrate, protein, Total fat, Moisture, Ash, Calcium, Crude fibre, Antioxidant and Phenolics content of Multigrain incorporated Flakes were 445Kcal, 61.0g, 16.8g, 9.8g, 1.2g, 3.2g, 2.9g, 76.8mg, 53%, 37. The result shows that there was a significant difference in energy, carbohydrate, protein, fat, crude fibre, moisture, ash, calcium, antioxidant and phenolic content between the control and multigrain incorporated Crackers and Flakes. The results of the microbial assay showed that there was no microbial growth of both Crackers and flakes in Air tight container till 20th day. There was no Bacterial growth in Crackers in Zip-lock packaging till 20th day. Only the growth of bacteria occurred after 20th day in Zip-lock packaging of Flakes.

Keywords: Ready to eat, Multigrain, Crackers, Flakes

#### Introduction

The Institute of Medicine's Food and Nutrition Board (IOM/FNB, 1994) defined functional foods as "any food or food ingredient that may provide a health benefit beyond the traditional nutrients it contains." In India preference for Multigrain products has witnessed a considerable rise. More and more consumers prioritise healthy living and eating habits, it is no surprise that Multigrain products have become more desirable as it comes with a number of benefits. It has the ability to improve digestion, provide a more diverse mineral intake, protect the heart, build strong bones, improve the metabolism and boost circulation. The changing lifestyle of people with changing dietary patterns can lead to good health. Now,