MAKING RICE BISCUITS FOR PEOPLE WITH GLUTEN ALLERGY.

Dhilal Mehdi Abdul-Kadir*

* College of Agriculture Diyala University

Abstract

The paper aims at investigating the impact of substituting wheat flour with rice flour on the chemical composition and qualitative properties of biscuits. The treatments of the paper was A (0% rice flour) • B (25% rice flour) • C (50% rice flour) • D (75% rice flour) and E (100% rice flour). Results of the chemical analysis show that protein and fat ratios decreased from 14.90% to 8.90% based on dry weight. While there was an increase in the ratios of ash and carbohydrates; ash ratio ranged between 0.70% and 1.10% on the basis of dry weight and the carbohydrates ratio fell between 82.50% and 89.00% based on dry weight. Regarding biscuits flakiness, it show a decrease in spite of the absence of significant variations among factors. Factor A equals (0% rice flour) 1.60 cm while factor E reached to (100% rice flour) 0.80 cm with a decrease ratio of 12.50% and 50.00%. Concerning biscuits spread ratio, it signifies an increase noticing significant variations among factors. Factor E (100% rice flour) marks the highest degree mounting to 5.40 compared to factor A (0% rice flour) of 3.80 degree. In Sensory evaluation, concerning tenderness, factor E (100% rice flour) gained the highest level of 9.00 followed by B • C • D factors as compared to factor A (0% rice flour) of 7.30 degree. In crumb colour values trait, factor C (50% rice flour) reached the highest degree of 19.00 followed by factor B (25% rice flour) of 18.40 degree. Factor E (100% rice flour) signals the highest degree considering flavour reaching to 19.00 flowed by factors D and C of 17.80 degree and 16.50 degree respectively. Specific volume feature decreased as factor E (100% rice flour) gained the lest degree of 27.30 followed by B • C • D factors as compared to factor A (0% rice flour) which had a degree of 35.10. Finally, factors B and C show the highest degrees in sensory properties total reaching to 84.30 and 82.60 respectively.

Key words: Rice • Wheat flour • Biscuits.