THE EFFECT OF REPLACING WHEAT FLOUR WITH CHICKPEA POWDER (CICER ARIETINUM L.)AND NON FAT DRY MILK IN QUALITATIVE PROPERTIES OF MUFFIN

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Abstract

This research aims to study the effect in using chickpea powder and non-fat dry milk with different proportions instead of using wheat flour in the chemical compositions and qualitative properties in muffin. In addition, it studies its shelf life by following up the growth of molds and calculating their total amount.

The results of chemical analysis showed that the rate of ashes, protein, and fats has increased. The rate of ashes is ranged between 0.80-2.50% according to dry weight . The rate of protein is ranged between 12.20-15.90% according to dry weight. The rate of fat is ranged between 2.00-3.60% according to dry weight. as for carbohydrate rates has decreased ranging between 85.00-78.00% according to dry weight. Concerning the Standing Height of Muffin in spite of no significant differences between the treatments the treatment D has obtained (5% chickpea powder + 5% non-fat dry milk) with height 4.70 cm compared to with controlling treatment A 3.50 cm., as for sensory evaluation for the aspect of flavour the treatment C obtained (5% non-fat dry milk) in a high degree

reaching 6.00 degree compared with controlling treatment A obtaining 4.90 degrees, for texture aspects the treatment C obtained (5% non-fat dry milk) with a higher degree 6.20 degree, followed by treatment D 5.50 degrees (5% chickpea powder + 5% non-fat dry milk), the controlling treatment A obtained 5.30 degrees. Concerning the aspect of tenderness the treatment C (5% non- fat dry milk) obtained a high degree 6.40 degrees compared to controlling treatment A 5.10 degrees and for general acceptance the treatments C and D obtained the highest degrees 6.30 and 5.40 degrees, respectively.

Finally it has been noticed that shelf life mold with room temperature (30 C^o) for 5 and 7 days was not good for human consumption because of mold growth.

Key words: Chick pea powder. Non fat dry milk. Muffin . moulds