

Rheological Properties and Consumer Acceptability of Supplemented with Flaxseed

Authors : A. Albaridi Najla

Abstract : Flaxseed (*Linum usitatissimum*) is well known to have beneficial effect on health. The seeds are rich in protein, α -linolenic fatty acid and dietary fiber. Bakery products are important part of our daily meals. Functional food recently received considerable attention among consumers. The increase in bread daily consumption leads to the production of breads with functional ingredients such as flaxseed. The aim of this Study was to improve the nutritional value of bread by adding flaxseed flour and assessing the effect of adding 0, 5, 10 and 15% flaxseed on whole wheat bread rheological and sensorial properties. The total consumer's acceptability of the flaxseed bread was assessed. Dough characteristics were determined using Farinograph (C.W. Brabender® Instruments, Inc). The result shows no change was observed in water absorption between the standard dough (without flaxseed) and the bread with flaxseed (67%). An increase in the peak time and dough stickiness was observed with the increase in flaxseed level. Further, breads were evaluated for sensory parameters, colour and texture. High flaxseed level increased the bread crumb softness. Bread with 5% flaxseed was optimized for total sensory evaluation. Overall, flaxseed bread produced in this study was highly acceptable for daily consumption as a functional foods with a potentially health benefits.

Keywords : bread, flaxseed, rheological properties, whole-wheat bread

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