MICROBIOLOGICAL AND CHEMICAL STUDIES ON SOME BAKERY PRODUCTS

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ABSTRACT

The aim of this study is to investigate the effect of using milk permeate as natural by product. In addition to lactic acid bacteria strains (*lactobacillus casi* and *lactobacillus acidophilus*). In the ordinary produce of balady and toast breads making. The amounts of milk permeate used were 50, 75 and 100% substituent with water in the dough and amount of LAB addition (1ml milk broth contain 10^{10}cells). The obtained results showed that milk permeate was stable up to six days of storage at (5 ± 2°C) .Gas production from dough of flour (72% - 82%) mixed with milk permeate increased with increasing milk permeate percentages. Meanwhile LAB addition caused little increase in gas production, wet and dry gluten in the dough with different treatments showed little differences compared to control sample.

The organolyptic evaluation of Balady bread preparation with 50 ,75 and 100% milk permeate and LAB compared with (100% water), showed improvement in some bread characteristics such as crumb color , appearance ,odor and taste with 50% milk permeate and (*lactobacillus acidophilus*)).

The use of wheat pollard or wheat fine bran with 50 and 75% permeate enhanced the gas production during fermentation.