



كلية الزراعة
قسم الميكروبيولوجيا الزراعية

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ABSTRACT



جامعة الفيوم

Khider, M., Elbanna K., Seoudi O. A. and El-Fakharany, A. (2015). Lactic acid fermented permeates and mushroom powder (<i>Pleurotus ostreatus</i> Hk 35) for improvement of the nutritional value and quality of pan bread. Int. J. Curr. Microbiol. App. Sci. 4(8): 723-736.	البحث الأول
مشترك مع أذربايتخصص وأخرين من خارج التخصص – منشور	1

Title	Lactic acid fermented permeates and mushroom powder (<i>Pleurotus ostreatus</i> Hk 35) for improvement of the nutritional value and quality of pan bread.
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Journal	International Journal of Current Microbiology and Applied Sciences (2015) 4(8): 723-736.

ABSTRACT

Malnutrition has many adverse effects on human health, especially in pre-schoolers and children of school age. In this study, fermented dairy permeate and mushroom powder were used for enhancing the quality and the nutritional values of pan bread. The highest sensory score was recorded for bread supplemented with 100 % fermented dairy permeates without mushroom powder (82.76). The bread made with 100 % fermented dairy permeate and 5% mushroom powder had the highest protein (16.05 %), dry matter (63.23 %), and ash (1.84 %) contents. In addition, all mineral contents significantly were increased by adding fermented dairy permeate and mushroom powder. Compared to the control, the percentages in protein, calcium, phosphorus, potassium, magnesium, zinc, manganese, and iron increased by 31.99, 301.29, 102.35, 176.81, 43.94, 194.82, 90.90 and 268.49 percent, respectively. In addition, microbiological studies revealed that the total counts of spore formers and molds decreased as the percentage of fermented dairy permeate in the dough increased. From these results, it can be concluded that fermented dairy permeate and mushroom powder improve the quality and significantly increase the nutritional values of the bread via protein and mineral contents and extend the shelf-life of pan bread.