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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



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**Chemical and Technological Studies on
some dried fish products**

By

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I feel always indebted to God,
the most beneficent and most merciful**

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ABSTRACT

Fish fillet prepared from two sp. of Nasser's lack fish (Bolti and Keshr—Bayad) then salted and dried using three different treatments with sodium chloride, sorbic acid, sorbitol and sugar extract. Two drying procedures were used i.e. oven—drying for 26 hr at $50^{\circ} \text{C} \pm 2^{\circ} \text{C}$ at the beginning of drying process, then at $45^{\circ} \text{C} \pm 2^{\circ} \text{C}$ at the end of drying process, and sun—drying for 3—4 days at $37^{\circ} \text{C} \pm 2^{\circ} \text{C}$ and relative humidity 44—65 % . All samples were packaged in high-density polyamide bags under vacuum. Chemical composition and quality attributes of all treated fish samples were determined. Results indicated that, fish samples treated with sorbitol had the highest moisture content followed by samples treated with sugar extract and control sample. The effect of cryoprotectants agents (e.g. sugars) to protect fish proteins from denaturation during drying process was studied. All treated fish samples were stored for 3 months at room temperature. Chemical characteristics, quality attributes, rehydration ratio for different treatments were estimated. Also, the effect of dehydration process on the chemical composition of salted dried fish samples were studied. The percentage loss of protein and fat contents were mainly depend on the total microbial load and enzymatic autolysis. Samples treated with sugars (especially sorbitol) and stored for 3 months at room temperature had the best results for rehydration ratio and less cooking loss compared to the control (free from sugars). The effect of storage on the chemical composition, quality attributes, physical characteristics, microbial load and sensory evaluation of dried fish were studied. The results show that samples treated with sugars had an desirable effect on the acceptability of the product. The best treated fish sample were used for producing the dried fish potato kafta. Chemical composition, quality attributes and sensory characteristics of these new products were studied. Results showed that moisture content was lower for fish sausage prepared from dried fish than fresh fish sausage, while, the crude protein and fat contents were increased. T.V.N and T.B.A values were increased in sausage prepared from dried fish. The effect of storage on the chemical composition, quality attributes, microbial load and sensory evaluation of fish sausage were studied. Results indicated the good quality of fish sausage prepared from dried fish but less than those for fresh fish sausage. As for dried fish potato kafta, the moisture and protein contents were lower than those for fresh fish kafta. While, T.V.N and T.B.A values were increased in dried fish kafta. Sensory evaluation indicates that Keshr—Bayad kafta was better than Bolti kafta.

Ferial A. Ismail

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