شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

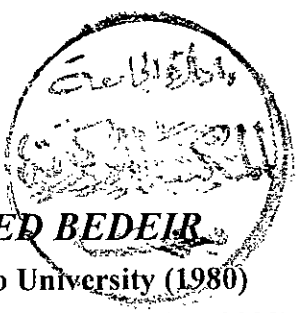
في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

ADDITION OF GLUTEN, PENTOSANS, ASCORBIC ACID, AND MILK CASEIN TO WHEAT FLOUR TO PRODUCE A HIGH QUALITY BAKERY PRODUCTS



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THESIS

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ABSTRACT

The aim of this research was to characterize the starting bakery ingredients involving whole, 82 %, and 72 % extraction wheat flours and study the effect of adding gluten, pentosans, ascrbic acid, or milk casein with different ratios on the properties of the dough of pan, and balady breads as well as the sensory quality and shelf life of their final products. Wheat flours of 62%, and 72% (ext.) were separately supplemented with gluten,pentosans, ascorbic acid, or with milk casein with nil,1.0, 2.0, and 3.0 % gluten; nil, 0.5, 1.0, and 1.5 % pentosans; nil, 0.002, 0.003, and 0.004 % ascorbic acid; or nil, 5.0, 10.0, and 15.0 % milk casein. Then, the treated 72% ext. flours were exposed for pan bread handling. While balady breads were made from those of 82 % ext. flours. The obtained results showed that, both of protein, ash, fiber, fat, as well as minerals content raised by increasing the ext. rate. However, the wet, and dry gluten were improved as well as gluten absorption, gluten index, and carbohydrates increased as the ext. rate decreased. Farinographically, there were positive relationship between the fortification level by any type of suggested additives and the water absorption and dough stability, regardless the ext. rate of flour. Extinsograph measurement exhibted that, both of resistance to extension, and extensibility were improved as the level of any type of additives increased.In this report, milk casein came in the first order followed by gluten or pentosans and ascorbic acid. Likewise, maximum viscosity increased as the addition level increased. All physicall properties of resultant pan bread including the height, and specific volume of loaves enhanced when 72 % ext. flour was fortified with 2 % gluten, 1.5 % pentosans, 0.003 % ascorbic acid, or 5.0 % milk casein The present of alkaline water retention capacity of both pan, and balady bread increases gradually as the additives level proportionally progressed.Organoleptically, the same additives levels imparted the prefered the sensory qualities whether for pan or balady bread. Finally, the foregoing results are evidently leading to include that, all suggested food additives were evidently confirmed to play beneficial roles on the bread properties. Whereas the supplementation of wheat flour, whether of 82% or 72% extraction rates with 2% gluten, 1% pentosans, 0.003% ascorbic acid, or 5% milk caseins offered several advantages in the bakery field mainly improving the organoleptic properties, expirty periods, and consequently maximizing the industrial economy by minimizing the market refused rate. Needless to add that some additives possess nutritional consideration, meanly those involving protein *via* gluten or milk casein.

Key words:

Rheological properties, compressibility, gluten, sedimentation,wheat flour, pentosans