

AN ASSESSMENT OF THE STATUS AND PRODUCT QUALITY OF SOME BREAD MAKING INDUSTRIES IN ABEOKUTA

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ABSTRACT

The technological status and product quality of some bread making industries in Abeokuta were evaluated. Factors such as capital investment, production capacity, sanitary conditions and factory layout of selected bakeries were evaluated in the survey. Sensory quality, residual sugar, specific volume and shelf life of bread samples from the bakeries were also determined. Most of the bakeries were unregistered and of small scale, characterised by low capital investments, poor hygiene, the use of old bread process involving long fermentation time ranging from 2 to 10 h, and the use of mud ovens. Bread samples from the bakeries were significantly different ($P < 0.05$) in taste, flavour, texture, crust colour, grain, symmetry and eating quality. Specific volume, residual sugar and shelf life of the bread samples ranged between 0.7 – 5.0 cc/g, 2.0 – 3.5% and 3 – 7 days, respectively. Although sensory scores for symmetry was slightly positively correlated with specific volume of bread samples ($r = 0.38$); taste scores however, was only weakly correlated ($r = 0.08$) with residual sugars. Some of the microorganisms isolated from the bread such as *E. coli*, *Staphylococci spp*, *Bacillus, spp*, *Aspergillus niger* and *Penicillium citrinum* were undesirable because of spoilage and food poisoning implications.

Key words: Bread making, product quality, residual sugar, shelf life and technological status.