

Investigations into the Textural Characteristics of Agidi (A Fermented Corn Meal).

Osungbaro, Taiwo Olujide

M.Sc Food Science and Technology

Department of Food Science and Technology
Obafemi Awolowo University, Ile Ife, Nigeria

1986.

Abstract:

The effect of particle size, maize variety, fermentation periods and methods of milling on textural properties of 'agidi' was investigated. Textural properties were evaluated, using the Brabender Amylograph, Gel tester, and sensory evaluation. The data obtained showed that 'agidi' manufactured from wet-milled ogi of 4 425 μm particle sizes exhibited the highest gel strength while that from the dry-milled ogi of .0 600 μm particle size fractions recorded the highest gel strength. Of the five maize varieties investigated, FARZ-27 had the best gelling characteristics for 'agidi' manufacture, while FARZ-34, recorded the lowest gel strength and kewesoke recorded the lowest stability and setback values. 'Agidi' from wet-milled ogi fermented for 4 days recorded the highest gel strength, peak viscosity and index of gelatinisation values. While the dry-milled ogi soured for 2 days recorded the highest values for the above parameters. Gel tester results were highly correlated with sensory evaluation for 'agidi' samples of the same particle size manufactured either from different maize varieties or subjected to different days of fermentation.

Keywords: Fermentation

Supervisor: I. A. Adeyemi