

Consumer acceptability and sensory evaluation of a fermented cassava product (Nigerian fufu)

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Abstract

The purpose of the study was to evaluate the sensory profile and acceptability of six types of fufu (a fermented cassava product) produced by different processes using sensory evaluation and consumer acceptability testing. Fufu samples were selected to evaluate the acceptability of dried fufu flours, which are increasingly being consumed, and compare with a traditional paste and a newly developed paste that produces less environmental waste. Descriptive sensory profiles of the selected samples demonstrated distinct differences in sensory profiles. They were evaluated for consumer acceptance at three demographic locations; Lagos ($n = 91$), Ibadan ($n = 121$) and Abeokuta ($n = 99$), Nigeria. Fufu made from a paste that produced less environmental waste had the highest acceptance scores, followed by flour and paste made by the traditional method and finally the remaining flours. Average consumer liking between the three locations did not differ. Three distinct consumer segments were identified and the number of consumers in these segments differed between the locations. Consumers differentiated fufu made from pastes and from flour. Internal preference mapping indicated that consumers associated the flours with sensory attributes such as sticky texture and raw cassava odour, while pastes were associated with soft texture, and shiny and creamy appearance. Fufu acceptance varies widely among consumers and is related to preferences for distinct fufu flavour profiles. Correlations between consumer acceptance scores and sensory scores appeared to be non-linear for many attributes but a larger sample size of fufu samples would be necessary to confirm this. The implications of these findings are discussed. Copyright © 2007 Society of Chemical Industry

Keywords