

10. Consumer acceptability of *gari* in coastal Kenya

Alice M. Nderitu¹, Abdul K. Faraj^{2*}, Prisca J. Tuitoek¹ and Rahab W. Muinga³

¹Department of Human Nutrition and Preclinical Studies, Egerton University, Njoro, Kenya.

²Department of Dairy and Food Science and Technology, Egerton University, Njoro, Kenya.

³Kenya Agricultural Research Institute, Mtwapa, Kenya.

*Corresponding author: ah_faraj@hotmail.com

SUMMARY

Gari is a granular meal made by fermenting grated cassava, then toasting in a shallow pan until it becomes crisp. The fermentation step in the preparation of *gari* imparts a characteristic aroma and sour flavour which may in turn affect acceptability of the product. Hence, the consumer acceptability of *gari* fermented for various durations (2, 4 and 6 days) was studied. Clone 1838 (renamed Karemba variety) grown at KARI-Mtwapa, which is low in cyanide (< 40 ppm) was used. For all the attributes of the *gari* that were evaluated (colour, texture, aroma, flavour and general acceptability), *gari* fermented for 2 days was more acceptable than that fermented for a longer time (4 and 6 days). However, the unfermented sample was liked most in all the attributes. Flavour was found to be the single most important factor in determining the general acceptability of *gari* ($r = 0.75$). During the sensory evaluation, most of the panelists (~90%) said that all the *gari* samples were tasteless and not appealing. Some suggested that addition of sugar and food colour could possibly make the product better. The use of other additives could thus be tried in Kenya in efforts to increase the acceptability of *gari*.

INTRODUCTION

The coastal region of Kenya has chronic food insecurity and high poverty levels necessitating recurring food relief (KDDP, 1997-2001). Cassava which is an important food crop in the region has the potential to improve food security in this area. The region produces 30% of the country's total cassava production. Researchers at Kenya Agricultural Research Institute (KARI), Mtwapa, have been involved in developing improved cassava varieties that are high yielding and tolerant to cassava pests and diseases. In efforts to increase cassava production, six new varieties were released by the Ministry of Agriculture, Livestock and Fisheries in 2008 (Muli et al., 2008). However, fresh cassava roots cannot be stored for long because they rot within 3-4 days after harvest. They are also bulky with about 70% moisture content. Hence, transportation of the roots from rural to urban markets is very difficult and expensive (Nweke, 1996). According to KARI Annual Report (KARI, 2003), a baseline survey on cassava production, usage and