THE EFFECTS OF CASSAVA PROCESSING METHODS ON ANTI-NUTRITIONAL COMPONENT AND HEALTH STATUS OF CHILDREN

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Cassava production and processing provide a primary source of food for nutritional well-being, employment and income generation, especially in poor communities. In Nigeria, the processing of cassava aims to produce "gari" (traditional staple food) free of hydrocyanic acid (HCN), an anti-nutritional agent. The traditional method involves a 3-4 day period, the use of palm oil, bagging and logs of wood to expel the juice before frying to produce gari.

In contrast, the modern method uses a mechanical grater and hydraulic press for about 1 day with no added palm oil in most cases. About 90% of village households are involved in the modern method compared with 10% employing the traditional technique. It is possible that susceptible children who consume large amounts of improperly processed gari with limited food varieties such as sulphur containing amino acids necessary for HCN detoxification, may be exposed to the hazards of HCN and thiocyanate and perhaps malnutrition.

In 1996, a nutrition survey conducted in Benin-City, Nigeria, indicated that a higher percentage of total daily energy and protein were derived from gari in protein deficient children compared to normal 3-5 year old children. We believe that the development of disease resistant cassava varieties, improved harvesting and processing techniques are factors which would enhance the nutritional quality of gari and therefore the health status if children.