

Preparation and Utilisation of Indigenous Fermented Non-Alcoholic Cereal Beverages Within Sub-Saharan African Communities

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Abstract

Indigenous foods are foods that originated or were introduced to a specific area, forming part of the local food culture. Among indigenous foods are nutritious fermented cereal beverages with potential health benefits in many countries. These fermented cereal beverages can be either alcoholic or non-alcoholic, depending on the naturally fermenting organisms. Alcoholic beverages are added with yeasts as a starter culture, wherein alcohol is the primary end-product. Non-alcoholic cereal beverages (NACB) use yeast and lactic acid bacteria, resulting in lactic acid as the main end-product. Alcoholic and non-alcoholic indigenous fermented beverages constitute a vital part of the diet of many people, consumed during special occasions such as rituals, festive events, weddings, ceremonies, lactation, or school feeding scheme. Cereals mainly used to produce cereal beverages are locally grown maize (*Zea mays*), sorghum (*Sorghum bicolor*), pearl millet (*Pennisetum glaucum*), finger millet (*Eleusine coracana*), or a composite. NACB have seen large demand from pregnant women, children, and adults, while religion restricts alcoholic cereal beverages. However, there is little information regarding the addition of probiotic bacteria, new ingredients, and improved production methods of NACB. Moreover, producing non-alcoholic beverages may help alleviate food insecurity, improve the final product's nutritional composition and contribute to the utilisation of underutilised finger millet grains/flours.