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## Potential of probiotics from fermented cereal-based beverages in improving health of poor people in Africa

Setta, M. C.

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Potential of probiotics from fermented cereal-based beverages in improving health of poor people in Africa

M. C. Setta, A. Matemu & E. R. Mbega

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## **Abstract**

Milk and milk products; particularly voghurts have almost exclusively been used as media for probiotic delivery to human being for a very long time. Despite health benefits such products have to humans; that include supply of nutrients, prevention and cure of certain communicable and noncommunicable diseases; the presence of allergens, increased lactose intolerance, hypercholesterolemia effects, the need for vegetarian probiotic products, cultural food taboos against milk, and religious beliefs have led to limitations on the use of milk and its products as probiotic vehicles in many places including Africa. Such limitations have led to more researches worldwide on alternative delivery media for probiotics in order to meet the food preferences and demands of people affected by milk and milk products. An integrative approach has been used to find common ideas and concepts from different studies. Different food matrices have been tested for their ability to carry probiotics and cereals and cereal products have been found as among suitable substrates for the purpose. Some investigations have revealed that traditional African fermented cereal-based beverages are potential probiotic carriers because of the probiotic Lactobacillus spp. and yeasts which are involved in the fermentation of such products. This offers an opportunity for the African cereal beverages to be used to provide probiotic health benefits to the majority of African populations. Thus, this review provides information on probiotics including sources, types, health benefits, vehicles for their delivery and specifically also on challenges and future prospects for cereal-based probiotics development and consumption in Africa.

## Keywords

Fermentation; Cereal-based beverage; Lactic acid bacteria; Probiotics