Fermenting food brings out its nutritional value

GOOD LIVING

BY SOLOMON KARANJA

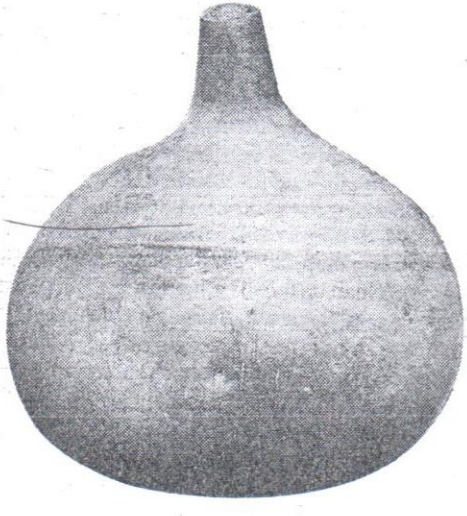
The traditional Indian medical system 'Ayurveda' – "knowledge of long life. — resulted in the discovery of *reserpine* a useful drug in the management of hypertension. In China, traditional medicine is today practised alongside modern medicine as a matter of policy. And in the remote Vermont region in America, folk medicine, which is largely based on foods such as honey, cider, vinegar, lemon juice, castor oil and corn oil, is a popular and effective method of disease treatment and management. Here in Africa, fermentation of food was common and popular in the days of our grandparents. The Sudanese still carry out a complicated 40-stage fermentation process using only a gourd.

It is interesting that almost all foods can be fermented, increasing their lifespan. Cheese, bread, wine and beer are examples of industrially fermented foods.

Knowledge of the fermentation process in Africa is mainly held by rural women, who as they marry across the ridges, share their skills thus causing spontaneous spread of technology. There are several advantages of fermenting food. It improves nutritional value, as fermentation of some raw foods triggers the release of larger quantities of some vitamins and amino acids. Fermented foods also have antibiotic components that destroy harmful bacteria resident in the digestive system. And since cooking time is reduced, there is an overall reduction in the consumption of wood fuel especially in the rural areas.

And in a world where the flavour of foods is becoming notoriously monotonous, fermentation adds flavour, thus improving appetite. It also improves the appearance of food and reduces antidigestive components found in raw food. Phytates, which have been known to reduce the absorption of zinc and iron in legumes and some cereals, are diminished by fermentation.

Young children become vulnerable to malnutrition during weaning, as their weakened digestive system is vulnerable to diarrhoea and bloat. In addition, infants' food can be contaminated during preparation, increasing the likelihood of infections in their digestive tracts. Fermentation helps solve these problems as bacteria that produce lactic acid lowers food PH, thus inhibiting the growth of other bacteria that could cause decomposition and spoilage.



Spreading the knowledge of fermentation perhaps offers the simplest and most economical means of improving the nutrition and health of our children.

In one study conducted in Tanzania, children fed on fermented gruels had a 33 per cent lower incidence of diarrhoea than those fed on unfermented gruels.

Uji (porridge) made from maize, sorghum and millet contains the microorganism *lactobacillus plantarium* and is a healthy drink for infants and young children. Injera, a popular pancake in Ethiopia made from Tef sorghum contains *candida sp*.

Banana beer, which is popular in Central Africa, is made by women from mature green fruit and sorghum and thus has high nutritional value.

And since fermented foods are pre-digested, they have proportionately fewer calories, making them useful anti obesity agents. For the poor, fermentation is closely linked to survival as it allows prepared food to last longer. Fermented porridge and milk, for example, last longer, making them ideal foods during drought or famine situations.

If we adopt and adapt the time-tested process of fermentation, we will be practising our own system of ayurveda, and the

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