

Anti-oxidant, anti-mutagenic and immuno-modulatory activities of some African foods plants and beverages

Source: Mossanda, S. K. (2005). Anti-oxidant, anti-mutagenic and immuno-modulatory activities of some African foods plants and beverages. Cape to Cairo Safari Conference, Potchefstroom, South Africa, North West University.

In African regions where the risk of digestive and liver cancer is high, it is difficult to control these cancer types through formulated guidelines and governmental policies because of the lack of financial support, the poor living conditions of the majority of Africans and the high costs of western foods.

Based on epidemiological, animal model and cell culture studies, some African food plants and local beverages have been reported to generate anti-mutagenic, anti-oxidant and/or anti-mutagenic activities. These investigations lead to the conclusion that some African food plants and beverages may play a role in cancer prevention as well as in the prevention of inflammatory diseases.

The aim of this study would be to investigate whether the rural African population could be provided with a degree of prevention against chronic, infectious diseases and common cancers through the consumption of local food plants and beverages.

The following plants are going to be collected:

- *Bitekuteku (Amaranthus hybridus, A. caudatus, A. cruentus)*
- *Ngai-ngai (Hibiscus sabdariffa L)*
- *Matembele (Ipomea batatas)*
- *Morogo (Vigna radiata, Cleome gynandra, Corchorus tridens, Curcubita pepo, Chenopodium morale, Malva parviflora)* in South Africa

The results of this study should be of future importance to develop guidelines on specific beneficial diets by which African communities will benefit in terms of high risk of digestive and hepatic cancers.