

Tropentag, September 19-21, 2012, Göttingen -Kassel/Witzenhausen

"Resilience of agricultural systems against crises"

## Nutritional Adequacy in Africa: The Bases for Planning Sustainable and Diverse Food Supply

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## Abstract

The relative increase in regional and global cereal production can be paralleled by the decline in legume and vegetable production affecting the micronutrient supply. This can coincide with the emergence of simplified diets, lack of dietary diversity, the nutrition transition phenomenon and the coexistent of hunger, malnutrition, obesity and obesity related systemic diseases. It has therefore become necessary to test the adequacy of the diets of some selected countries in Africa in order to find out the state of the matter and hint the direction for change.

The continent is virtually divided into four regions from which two representative countries are arbitrarily selected. FAOSTAT and WHO regional food consumption patterns were used as the source of information on food types, qualities and levels of consumption. Data are entered to the Nutrisurvey tools in order to test the adequacy.

In Egypt, Ethiopia, Cameroon and Ghana food ingredients from plant origin make more than 80% of the diet. In Algeria, Kenya and Zimbabwe this fraction account for about 70% of the diet and in South Africa it lies at levels as low as 61%. Cereals are the major sources of food energy in North, East and South Africa, whereas in West Africa roots and tubers are equally important. The average energy value of the daily diets is 2749 kcal. In North Africa and Ghana the daily diets contain 3346 and 3522 kcal respectively, whereas in East Africa the energy content is 2077 kcal, in Ethiopia it goes as low as 1900 kcal.

All of the countries have proved to be calcium deficient. All except Algeria, Egypt and Ghana, are additionally deficient in folic acid. Ethiopia, Kenya and Zimbabwe are also deficient in Fe, K, and vitamin C. Vitamin A, E and some vitamin Bs are lacking in Ethiopian diets. The problem is probably attributable to the low intake of the total diet. S. African diet is apparently adequate in Fe but deficient in folic acid and vitamin C.

**Keywords:** Africa, food quality, food types, level of consumption, nutritional adequacy

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