

**Series F – Foundations : Ending Drought Emergencies**

# Drastic Massive Loss of Women's Diets Diversity Due to Changes in Season

*Sophie Ngala and Dasel Mulwa Kaindi*

## Key Messages

*Support establishment of kitchen gardening and keeping of small livestock to increase food variety for pregnant women.*

*Every pregnant woman be given individual counselling on the consumption of a varied diet.*

*Introduce mobile outreach antenatal clinics in all counties to improve coverage of counselling on diversified diet*

*Support development of digital tracking systems for antenatal clinics defaulters.*

## Context

Most causes of women's nutritional problems are preventable. Lack of variety, poor quality, and sufficient food during pregnancy are important factors contributing to the health problems of expectant mothers and newborn children. This exposes women to risk for anaemia, hypertension, miscarriages, stillbirths, gestational diabetes, pre-term delivery and/or even loss of the mother. Ignorance and lack of comprehensive guiding information during antenatal and postnatal clinics are responsible for the failure of observing life-saving eating habits by expectant mothers.

The ten food groups proposed to be eaten daily by women of reproductive age (FAO and FHI, 2016). Women should eat at least 5 out of 10 of the following food groups daily: (a) grains, white roots and tubers, and plantains; (b) pulses (beans, peas and lentils), (c) nuts and seeds, (d) dairy, (e) meat, poultry and fish, (f) eggs, (g) dark green leafy vegetables, (h) other Vitamin A rich fruits and vegetables, (i) other vegetables, and (j) other fruits.

A varied diet rich in essential nutrients is vital for the proper growth of the developing fetus and leads to full-term births of healthy babies. Consuming different types of foods rich in essential nutrients help build the body, fight diseases and provide vital energy for optimal body growth and function.

## Dietary intake for different seasons

A study was done in Mbooni Division, Makueni District, during two seasons, pre-harvest (n=73) and post-harvest (n=203) (Ngala, 2015). Non-lactating and non-pregnant women who had children aged between 2-5 years were the respondents concerning household dietary diversity in the two seasons. The diversity of women's diet tends to decrease from 5 to 4 food groups during seasonal change. Even though the energy intake increased slightly after harvesting from an average of 2,039 Kilo Calories (kCal) to 2,097 kCal, the nutrient adequacy of the diet was unacceptable.

The food groups mostly eaten by women, irrespective of the season, were starchy staples, vitamin C-rich vegetables, vitamin A-rich dark green leafy vegetables, all other fruits and vegetables, and legumes and nuts (Figure 1). Vitamin A-rich dark green leafy vegetables and all other fruits and vegetables are significantly not available for women's consumption after harvest. Also, dairy intake is very low as women primarily consume through very minute quantities in tea.

## Useful Strategies to Reverse the Situation

Women of childbearing age need to consume different types of foods that provide all the major nutrients required for optimal growth and body functioning to



improve birth survival rates and increase the proportion of normal weight births.

At the clinic, counselling should start by interrogating the diet history of mothers to reveal their dietary diversity. Pregnant women should be counselled on what a diverse diet constitutes especially the 10 food groups. Where poor diets are identified, specific action should be taken. The knowledge of the need to consume a varied diet will create a demand for food production for home consumption. Therefore, women should also be encouraged to have kitchen gardens and rear small animals to ensure availability of essential foods and improve vital nutrition.

Women's visits to antenatal clinics are poor (Riang'a et al., 2017, Perumal, et al, 2013). Two-thirds of the pregnant women made one ante-natal clinic (ANC) visit. The Kenya Ministry of Health (MOH) recommends four visits, while the World Health Organization recommends eight ANC visits to ensure that women have all the right information, continuous monitoring and follow up (FAO and FHI 360,2016).

At the antenatal clinics it was found that as women wait to be attended, nurses (not nutritionists/dietitians) gave group talks to women on various issues, though their busy schedules did not allow regular talks (Perumal, et al., 2013). The pregnant woman:nurse ratio was also high, preventing individualized counselling. Further, the contents of the talks given to the pregnant women had not been formally reviewed, standardized and made into a curriculum. Besides, consumption of a varied diet was not being communicated to the women at the ANC.

Women were found to eat a low number of different food groups for the following reasons (Ngala, 2015):

1. Consumption of starchy staples with very little vegetables/fruits and animal source foods.
2. Very few women snack in between meals. even when pregnant.
3. In Kenya, there is no policy on how to determine the macro/micronutrient adequacy in the diets of women, including pregnant women.
4. Food consumption patterns remain the same even as the seasons change. Little advantage is taken of foods in season.

Other studies have found that:

1. The women are inhibited by cultural myths, taboos and practices some of which are guided by ignorance (Riang'a et al., 2017).
2. Lacking knowledge of what alternatives foods to buy when their purchase power is poor and still consume nutritious diets (de Sande, 2017; Best Start, 2003).
3. Some women are encouraged to eat very little food and a limited range of food groups to prevent the fetus from growing too big, thus avoiding cesarean sections (Riang' an et al., 2017).
4. Inadequate contact with ANCs, where pregnant women could get information

on the consumption of diverse diets (Perumal, et al., 2013).

## Policy Recommendations

### Short-Term

- Agricultural extension officers/development partners to support the women with the establishment of kitchen gardening/keeping of small livestock to supplement their food sources to ensure availability of essential foods
- MOH to develop fliers and information sheets on important foods essential for the health of the mother and baby and to encourage behaviour change.
- MOH to develop a programme to use ANCs as intervening points for counselling pregnant women on important food groups to be included in their daily diet.
- A guideline often important food groups, with a minimum of five food groups recommended per day, should be prepared and availed at all ANCs.
- MOH to recommend at least four compulsory visits to ANCs for expecting mothers.

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## Author

**Sophie Ngala**

(sngala@uonbi.ac.ke)

**Dasel Wambua Mulwa Kaindi**

(mulwa.dasel@uonbi.ac.ke),

Department of Food Science, Nutrition and Technology,  
University of Nairobi.

P. O. Box 25093-00625 Nairobi, Kenya.

Figure 1: Loss of dietary diversity of the diet as a result of seasonal change (Modified from Ngala, 2015)

