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## Evaluation of the Nutritional Status of Children under Age of Five in Relation to their Feeding Patterns: Case Study-El Fau Rural Area, Sudan

MUNA ALI ABDALLA<sup>1,2</sup>, ABDELGADER H. KHATAB<sup>2</sup>, ABDULLAHI H. EL TINAY<sup>2</sup>

<sup>1</sup>*Georg-August-Universität Göttingen, Institute of Organic and Biomolecular Chemistry, Germany*

<sup>2</sup>*University of Khartoum, Faculty of Agriculture, Department of Food Science and Technology, Sudan*

### Abstract

In the El Fau rural area of Gadarif state, the villages 11, 14 & 15 were selected due to their ideal characteristics for investigation [e.g., illiteracy, rampant poverty, lack of basic health services, unsafe drinking water, high prevalence of malaria, bilharziasis and diseases related to poor sanitation & hygiene].

Mothers were asked regarding breastfeeding, weaning practices, complementary feeding & feeding patterns after weaning. Children were examined to indicate the clinical signs of protein energy malnutrition, nutritional anaemia, vitamin A deficiency and iodine deficiency disorders (IDD).

The results indicated that the high illiteracy among mothers (76.7%) affected the children feeding patterns, where 100% of the infants were fed by KISRA blended with water in the early month of breastfeeding ( $\leq 4$  month). Their complementary foods were ACEDA, WEIKA & ROUB beside milk. The lack nutritional education, where the importance of the food diversification (ACEDA, WEIKA, fresh or cooked ROUB & milk) coupled with insufficient daily food intake may represent stumbling block for the well-being of the children. Added to that the wrong feeding habits of the family during which the children (50%) share adults the same family's pot. This situation leads to the prevalence of wasting where 6% of the children are moderately malnourished and 3.3% are severely malnourished. In addition to that, high prevalence of nutritional anaemia was shown, where 65.3% of the children with haemoglobin concentration of 50% or below. None of the children were suffering from vitamin A deficiency because of the continuous national Expanded Programme Immunisation (EPI), which included distribution of vitamin A capsules. None of the children were found suffering from Goiter, which indicates that IDD in this area was very seldom.

**Keywords:** Children under 5, feeding patterns, malnutrition, nutritional anaemia, rural area