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## Dietary patterns and nutritional status: Their implication for nutritional intervention in North Shewa, Ethiopia

Tibebeselassie Seyoum Keflie<sup>1</sup>, Aregash Samuel<sup>2</sup>, Christine Lambert<sup>1</sup>, Donatus Nohr<sup>1</sup> and Hans Konrad Biesalski<sup>1</sup>

<sup>1</sup>University of Hohenheim, Stuttgart, Germany

<sup>2</sup>Ethiopian Public Health Institute, Ethiopia

**Statement of the Problem:** There has been extensive focus on the quantity of food produced and consumed, and much less attention given to the nutritional quality of foods and diets. The aims of this study were to assess and examine the interactions between dietary patterns, dietary adequacy, nutritional quality and nutritional status, and to highlight their implications in nutritional interventions.

**Methodology & Theoretical Orientation:** A community based cross-sectional study was carried out in North Shewa zone of Amhara Regional State, Ethiopia from December, 2014 to February, 2015. Multistage sampling techniques were employed to recruit study subjects. A total of 640 subjects involved in the study. Data were collected using structured and seven-day recall questionnaires developed from the guidelines for measuring household and individual dietary diversity. Chi-Square test, Kruskal-Wallis test, spearman correlation, multiple linear and multinomial regression models were used for inferential analyses.

**Findings:** The main dietary patterns included cereals, vegetables and legumes. About 40% of subjects consumed either plant or animal source of vitamin A and 13.75% consumed meat, organs or fish source of haem iron. The median (range) of food variety score (FVS) and diet diversity score (DDS) were 16 (8-25) and 3.43 (1.14-5.57), respectively. About 28.1% of subjects were malnourished. FVS correlated with DDS ( $r=0.502$ ,  $p<0.0001$ ), body mass index (BMI) ( $r=0.145$ ,  $p<0.0001$ ) and average meal frequency ( $r=-0.102$ ,  $p=0.01$ ). The correlation between DDS and BMI was 0.190 ( $p<0.0001$ ). FVS was determined by family size and educational status, but the later determined DDS.

**Conclusion & Significance:** Poor dietary adequacy and nutritional quality as well as high risks for micronutrient deficiencies were identified. These underlined the implications of nutritional interventions and therefore, it is recommended to improve food and nutrition security in the area.

tibebe.fscuhoh@gmail.com