Deficiencies in Vitamin A and Iron Supply Potential of Selected Indigenous Complementary Foods of Infants in Uganda

Authors : Richard Kajjura, Joyce Kikafunda, Roger Whitehead

Abstract : Introduction: Indigenous complementary recipes for children (6-23 months) are bulky and inextricably linked. The potential contribution of indigenous complementary foods to infant's vitamin A and iron needs is not well investigated in Uganda. Less is known whether children in Uganda are living with or without adequate supply of vitamin A and iron nutrients. In this study, vitamin A and iron contents were assessed in the complementary foods fed to infants aged 6-11 months in a Periurban setting in Kampala District in Central Uganda. Objective: Assessment of vitamin A and iron contents of indigenous complementary foods of children as fed and associated demographic factor. Method: In a cross sectional study design, one hundred and three (153) households with children aged 6-11 months were randomly selected to participate in the assessment. Complementary food samples were collected from the children's mothers/caretakers at the time of feeding the child. The mothers' socio-demographic characteristics of age, education, marital status, occupation and sex collected a semi-qualitative questionnaire. The Vitamin A and iron contents in the complementary foods were analyzed using a UV/VIS spectrophotometer for vitamin A and Atomic Absorption spectrophotometer for iron samples. The data was analyzed using Gene-stat software program. Results: The mean vitamin A content was $97.0 \pm 72.5 \mu g$ while that of iron was $1.5 \pm 0.4 m g$ per 100g of food sample as fed. The contribution of indigenous complementary foods found was 32% for vitamin A and 15% iron of the recommended dietary allowance. Age of children was found to be significantly associated Vitamin A and Iron supply potential. Conclusion: The contribution of indigenous complementary foods to infant's vitamin A and iron needs was low. Complementary foods in Uganda are more likely to be deficient in vitamin A and iron content. Nutrient dense dietary supplementation should be intervened in to make possible for Ugandan children attain full growth potential.

Keywords : indigenous complementary food, infant, iron, vitamin A **Conference Title :** ICN 2015 : International Conference on Nutrition **Conference Location :** Cape Town, South Africa

Conference Dates : November 05-06, 2015