

Micronutrient Deficiencies and Morbidity in Indian Rural Pre School Children

Jyothi Lakshmi A, Khyrunissa Begum, Saraswathi G. and Jamuna Prakash*

Department of Studies in Food Science and Nutrition, University of Mysore, Manasagangotri, Mysore 570 006, Karnataka, India

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ABSTRACT The investigation was undertaken with the objective of evaluating the impact of interventions (food and nutrient) on health status of preschool children at different intervals on withdrawal of interventions. 205 preschool children attending Anganwadi centers (functional unit of a national women and child welfare program) from rural areas near Mysore city, a district of Karnataka State, Southern India were enrolled. Nutrition and health status was assessed. Children were divided into five groups based on economic status with statistician's assistance for intervention. Each group constituted 30-50 children. Two groups were supplemented with biscuits fortified with calcium, iron and vitamin A, another two groups received the fortificants in the tablet form on alternate days for a period of 6 months. One of the two groups in both the categories were priorly dewormed. One group served as control. The impact of the programme evaluated at the end of 6 months showed a reduction in the occurrence and duration of illnesses. On withdrawal of interventions, morbidity rates of all the groups reverted to their pre-intervention state but the extent of reversion was comparatively higher in the control group. A significant improvement in hemoglobin status, lowering of duration and incidence of illnesses at the end of intervention and deterioration of health status six months after withdrawal of interventions clearly demonstrated benefits of nutrient supplements.