

Impact of Synthetic Vitamin A and Horticulture Intervention on Vitamin A Status and Iron Status of Rural School Children

B.Kasturiba^{*1}, Rama K. Naik¹ and P.W.Basarkar²

*1. Department of Food Science and Nutrition, College of Home Science,
University of Agricultural Sciences, Dharwad 580 085, Karnataka, India*

*2. Department of Biochemistry, College of Agriculture, University of Agricultural Sciences,
Dharwad 580 085, Karnataka, India*

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ABSTRACT The investigation focused on vitamin A status, Iron status and impact of synthetic and horticulture intervention on vitamin A status and iron status. Vitamin A status of 153 school children of Dharwad taluk was assessed by biochemical analysis. Children with serum retinol level less than 20 µg/100ml were included in intervention study. Children from group-1 formed the control, a single massive oral dose of 2,00,000 IU of vitamin A was given to group-II, horticultural intervention was given to group-III daily for 3 months, where standardized recipes (fenugreek chapathi, drumstick leaves chapathi and carrot bhaji) met day's vitamin A allowance (2400µg/day). Serum retinol level and haemoglobin levels, were recorded before and after supplementation period. Both synthetic vitamin A and horticulture intervention improved the serum retinol and haemoglobin level. The synthetic supplementation showed high increment value for serum retinol level compared to horticulture supplementation group. Nevertheless, the increment value for haemoglobin level was high in horticulture intervention group. Horticulture intervention is cost effective, long-term, natural and sustainable strategy to solve existing vitamin A deficiency problem.