The nutrient intake of children aged 12–36 months living in two communities in the Breede Valley, Western Cape province, South Africa

TA Balogun**, MJ Lombard† and M McLachlan*

*Division of Community Health, Stellenbosch University, Stellenbosch, South Africa
†Division of Human Nutrition, Stellenbosch University, Stellenbosch, South Africa
*Corresponding author, email: toluopeb@sun.ac.za

Objective: The objective of this study was to describe the current macro- and micronutrient intake of children (both boys and girls) in two selected communities in the Breede Valley, Worcester.

Design: This was a quantitative cross-sectional study.

Setting: The study focused on two disadvantaged communities in Worcester (Avian Park and Zweletemba) in the Breede Valley, Western Cape province.

Subjects: The study subjects were 248 children (Avian Park, n = 117; Zweletemba, n = 131) aged 12–36 months.

Method: The macro-and micronutrient intake of the children was determined using a validated, interviewer-administered quantitative food frequency questionnaire, and compared against the estimated average requirement (EAR) and adequate intake (AI) of nutrients. The nutrient adequacy ratio was calculated, as well as percentage deviation from the EAR and AI.

Results: More than 20% of the children had a calcium and folate intake that deviated by more than 50% below the EAR in both communities and for both genders. More participants in Zweletemba had an intake that deviated by more than 50% above the EAR and AI, compared to Avian Park, for carbohydrate, thiamine, niacin and iron.

Conclusion: With the exception of folate, calcium and selenium, the average reported nutrient intake of the children (boys and girls) in both the communities was adequate.

Keywords: food frequency questionnaire, macronutrients, micronutrients, nutrient intake