ABSTRACT

**Objectives:** Children aged 6-24 months require nutrient-dense foods because of their high nutritional requirements relative to the small amounts of food consumed. The aim of the study was to determine the nutrient density of the complementary diet for 6 to 24 month old children from low-socio economic urban and rural settings in KwaZulu-Natal, South Africa.

**Methods:** Dietary intake data was collected through repeated (two) 24-hr dietary recalls for a stratified sample of randomly selected children in three age categories: 6-11 months (n=108), 12-17 months (n=104) and 18-24 months (n=104). Reported food intake was converted to nutrients, using the SAFOODS2000 database. For each micronutrient, nutrient density (amount of nutrient per 416 kJ) of the complementary diet (excluding all milk feeds) was calculated. Median values for nutrient density across the three age categories, as well as rural versus urban were compared using a non-parametric t-test; a p-value <0.05 was considered significant.

**Results:** Energy (kJ) provided by the complementary diet increased significantly across the age categories. Nutrient density decreased significantly across the three age groups for phosphorous, vitamin A, thiamine, biotin and vitamin C. For 6-11 month old children, the urban complementary diet had a higher vitamin A density compared to the rural diet. For children aged 18-24 months, the nutrient density of the urban complementary diet was lower for plant protein and fibre; and higher for animal protein and cholesterol.

**Conclusions:** Nutrient density of the complementary diet decreased with age for certain important...
micronutrients e.g. vitamin A. The effect of urbanization on dietary intake was already prevalent in 18-24 month old children.