

## **Assessment of the Dietary Intake of Schoolchildren in South Africa: 15 Years after the First National Study**

Nelia Steyn<sup>1</sup>, Gabriel Eksteen<sup>2</sup>, and Marjanne Senekal<sup>1</sup>

<sup>1</sup>Division of Human Nutrition, Department of Human Biology, University of Cape Town, 8000, South Africa: [nelia.steyn@uct.ac.za](mailto:nelia.steyn@uct.ac.za); [marjanne.senekal@uct.ac.za](mailto:marjanne.senekal@uct.ac.za)

<sup>2</sup>South African Heart and Stroke Foundation, Cape Town, 8000, South Africa; [gabriel@heartfoundation.co.za](mailto:gabriel@heartfoundation.co.za)

There has not been a national dietary study in children in South Africa since 1999. Fortification of flour and maize meal became mandatory in October 2003 to address micronutrient deficiencies found in the national study in 1999. The purpose of this review was to identify studies done after 1999 in schoolchildren, 6–15 years old, in order to determine whether dietary intakes reflected improvements in micronutrients, namely: iron, zinc, vitamin A, folate, thiamine, riboflavin, vitamin B6, and niacin. An electronic and hand search was done to identify all studies complying with relevant inclusion criteria. The search yielded 10 studies. Overall, there is a paucity of dietary studies which have included the fortified nutrients; only four, of which only one, reported on all micronutrients; making it difficult to determine whether fortification has improved the micronutrient intake of schoolchildren. This is further complicated by the fact that different dietary methods were used and that studies were only done in three of the nine provinces and thus are not generalizable. The results of these studies clearly point to the importance of doing a national study on the dietary intake of schoolchildren in order to confirm the outcomes of the fortification process