There is a growing body of evidence that links events in the first 1,000 days of life to an increased risk of disease in adulthood and to the rapid expansion of metabolic and allergic diseases throughout the world. Both paternal and maternal nutritional status can be significant determinants of pregnancy outcomes and the longer term health of the offspring. Moreover, these effects can also be transmitted to the next generation and so extending the burden of metabolic disease and disorders. Nutrition is one of the most important modifiable factors within the first 1,000 days. Nutrition has been shown to quite clearly influence foetal and postnatal growth and development but also affect the risk of allergic and metabolic disease in later childhood and adulthood.1–7

The evidence is drawn from many longitudinal studies and birth cohort studies, including the British Avon Longitudinal Study of Parents and Children and the Dutch Generation R study, which have made significant and important contributions in this area.8–11

The references cited above are important and strong examples of the effect of nutrition and nutritional status within the first 1,000 days on obesity, coronary heart disease and other cardiometabolic diseases and allergy. This information should be considered knowing that, for example, in Australia about 60% of the adult population are overweight or obese,12 and that about 40% of women have a gestational weight gain greater than that recommended.13 Both of these factors are associated with negative health outcomes for the infant and young child. Equally, nutrition in the first year of life is of extreme importance with one of the best examples derived from the health benefits of breastfeeding for any length of time including protection against some immune mediated disorders,14 reduced risk of obesity,15 and possibility improved cognitive function.16

Whilst the evidence may be strong and convincing, the challenge is now to adequately educate both healthcare professionals and parents regarding the importance of the first 1,000 days and to initiate behaviour change over the short and long term to enable better outcomes in the future. Behaviour change is no easy task—appropriate and effective strategies should be sought from experts in this particular area.

References: