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Dietary intake of New Zealand European women with different body composition profiles – The women's EXPLORE study



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Introduction: Dietary intake is a significant contributor in determining body composition; body fat content may vary as a result in women within the same BMI category. The aim was to investigate dietary intakes of young New Zealand European (NZE) women with different body composition profiles (BCP).

Methods: Post-menarche, pre-menopausal NZE women (16–45 years) ($n=231$) completed a validated 220-item, self-administrated, semi-quantitative food frequency questionnaire (FFQ) assessing dietary intake over the previous month. Body mass index (BMI, kg/m^2) was calculated from height and weight; body fat percentage (BF%) was measured using air displacement plethysmography (BodPod). Participants were categorised into three BCPs: normal BMI (18.5–24.9 kg/m^2), normal BF% (<30%) (NN); normal BMI, high BF% ($\geq 30\%$) (NH); high BMI ($\geq 25 \text{ kg}/\text{m}^2$), high BF% (HH). Micronutrient and macronutrient intakes were examined.

Results: Insufficient intakes of multiple nutrients were observed for many women (vitamin D, 55%; iron, 82%; calcium, 28.5%; folate, 48%; fibre, 28%). Percentage of energy intake was outside the acceptable macronutrient distribution range (AMDR) for carbohydrate (below the AMDR, mean \pm SD $41.9 \pm 7\%$) and saturated fat (above the AMDR, $13.9 \pm 3.5\%$). Fewer serves of fruit and vegetables and more of diet soft drinks, chocolate bars and cooking oil were consumed by the HH BCP; they also had lowest calcium (1159.5 mg/d) and highest energy (9296 kJ/d), total (89.4 g/d) and saturated (36.5 g/d) fat intakes. No significant associations were found with BF%. Vitamins A, E, D, and zinc intakes were adequate, and comparable between BCPs.

Conclusion: Pre-menopausal NZE women are at risk of nutritional deficiencies (iron, vitamin D,

folate, calcium, dietary fibre) due to poor intakes, irrespective of body fatness. On average, NZE women do not follow dietary guidelines; consuming diets low in carbohydrates and high in saturated fat. Targeted interventions should be developed to improve NZE women's dietary quality, particularly reducing energy and fat intakes of those with excess adiposity.

<https://doi.org/10.1016/j.orcp.2016.10.246>

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The infant feeding practices of Chinese immigrant mothers in Australia: A qualitative exploration



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Background and significance: The Australian Infant Feeding Guidelines recommend exclusive breastfeeding for the first six months of life and that solid foods be introduced at around six months while continuing breastfeeding. A majority of Australians are not meeting this guideline and new immigrant populations are potentially most at risk. Evidence suggests that Chinese immigrant mothers in Australia are more likely to introduce infant formula and solid foods earlier. Shorter duration of exclusive breastfeeding is associated with higher risks of overweight in Chinese children. A better understanding of the facilitators and barriers to achieving best practice in infant feeding is needed to support at risk populations achieve best early feeding outcomes.

Methods: This qualitative study describes Chinese immigrant mother's infant feeding experiences and explores factors influencing their early feeding choices. Semi structured interviews were conducted with 36 Chinese immigrant mothers who had children aged 0 to 12 months, living in Melbourne, Australia. Interviews were conducted in Chinese, using an interpreter, or in English, and audio recorded. Recordings were transcribed and analysed thematically.

Results: Eight themes were identified. Key themes included Chinese immigrant mothers were supportive of exclusive breastfeeding, however