

than CM. BMI distribution in CM was 47.5% HW, 32.2% OW and 20.3% OB. Total GNKQ scores were significantly higher in CM (OP: 65.0 ± 16.9 ; CM: 79.4 ± 12.7 ; $p < 0.005$) even after adjustment for demographic characteristics. OP scored significantly lower than CM across all four knowledge domains.

Conclusions and implications: General nutrition knowledge was lower in OP compared with CM and remained lower after adjustment for demographic characteristics. Nutrition miss-information disseminated via the wider weight loss industry or lower health literacy may explain these findings however, factors influencing general nutrition knowledge in OP warrants further investigation.

<https://doi.org/10.1016/j.orcp.2016.10.235>

235

Feeding Thing 1 and Thing 2: A discordant twin analysis of toddler's fussy eating and maternal feeding practices

Holly A. Harris^{1,2,*}, Alison Fildes², Kimberley M. Mallan^{1,3}, Clare H. Llewellyn²

¹ Queensland University of Technology, South Brisbane, QLD, Australia

² Health Behaviour Research Centre, University College London, London, England

³ School of Psychology, Australian Catholic University, Brisbane, QLD, Australia

Background: Early "fussy" eating behaviours are associated with reduced dietary variety, particularly for nutrient-dense foods. Previous research has assumed that parental feeding practices shape a child's fussy eating; however, a child-responsive model suggests that feeding practices may develop in response to a child's fussiness. We used a novel twin study design to test whether mothers vary their feeding practices for twin children who differ in their 'food fussiness', in support of a child-responsive model.

Methods: Participants were mothers and their 16 month old twin children ($n = 2026$) from Gemini, a British twin birth cohort of children born in 2007. Standardized psychometric measures of maternal 'pressure to eat', 'restriction' and 'instrumental feeding', as well as child 'food fussiness', were completed by mothers. Within-family analyses examined if twin-pair differences in 'food fussiness'

were associated with differences in feeding practices using linear regression models. In a subset of twins ($n = 247$ pairs) who were the most discordant (highest quartile) on 'food fussiness' (difference score $\geq .50$), Paired Samples T-test were used to explore the magnitude of differences in feeding practices between twins. Between-family analyses used Complex Samples General Linear Models to examine associations between feeding practices and 'food fussiness'.

Results: Within-pair differences in 'food fussiness' were associated with differential 'pressure to eat' and 'instrumental feeding' ($ps < .001$), but not with 'restriction'. In the subset of twins most discordant on 'food fussiness', mothers used more pressure ($p < .001$) and food rewards ($p < .05$) with the fussier twin. Between-family analyses indicated that 'pressure to eat' and 'instrumental feeding' were positively associated with 'food fussiness', while 'restriction' was negatively associated with 'food fussiness' ($ps < .001$).

Conclusions: Mothers appear to adjust their feeding practices according to their perceptions of their toddler's emerging fussy eating behaviour. Specifically, the fussier toddler is pressured and more likely to be offered food rewards than their less fussy co-twin.

<https://doi.org/10.1016/j.orcp.2016.10.236>

236

Targeting and recruiting socioeconomically disadvantaged families for participation in child nutrition research

Holly A. Harris^{1,*}, Kimberley Mallan^{1,2}, Lynne Daniels¹, Danielle Gallegos¹, Karen Thorpe¹

¹ Queensland University of Technology, South Brisbane, QLD, Australia

² School of Psychology, Australian Catholic University, Brisbane, QLD, Australia

Background: Parents, both through food choices and parenting behaviours, play a significant role in shaping their child's eating habits. Children from socioeconomically disadvantaged families are at particular risk of poor nutrition and obesity. The majority of studies in child feeding research consist of homogenous samples of mothers generally derived from privileged communities, while recruitment of fathers and low-income families has been challenging. The aim of the study was to explore

