



## Insights into feeding preterm infants in Aotearoa, New Zealand: a mixed-method study

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Optimal nutrition is essential for preterm infants as they face many barriers to achieving exclusive breastfeeding (EBF) and successfully introducing complementary foods (CF)<sup>(1)</sup>. There is limited evidence of early feeding practices of preterm infants in Aotearoa, New Zealand (NZ). We aimed to investigate the facilitators and barriers to EBF and CF introduction in preterm infants in NZ. A nationwide self-completed electronic questionnaire was disseminated via social media to mothers of preterm infants. The survey collected quantitative data on hospital feeding practices, breastfeeding rates, timing of CF introduction, and fussy eating behaviours. Relationships between feeding practices and maternal and infant characteristics, such as ethnicity and level of prematurity, were explored using the Chi-Square statistical test in SPSS. Qualitative information regarding mothers' experiences with breastfeeding, CF introduction, type of education and support received about the nutrition of preterm infants were collected for thematic analysis using Nvivo. The survey started in April and will close on 20<sup>th</sup> August 2023. Here we present preliminary findings of a subset of responses collected to date, and full results will be available for the conference. Up to 1<sup>st</sup> August 2023, 201 mothers had completed the survey. Most mothers self-identified as of New Zealand European (58%) and Māori (13%) background. Most infants (39%) were older than 12 months of chronological age (CA) and born moderate or late preterm (32<sup>+0</sup> – 36<sup>+6</sup> weeks' gestation, 70%). Almost 50% of mothers required in-hospital supplementation of mothers' milk (infant formula, 28% and donor breastmilk, 20%), and 44% of mothers were EBF at the time of hospital discharge. EBF for 5-6 months of CA was reported by 21% of mothers, and 46% provided any breastmilk for more than 6 months of CA. Among mothers who had introduced CF (n = 138), 74% reported introducing CF between 5-8 months of CA, and the infant's first foods were primarily vegetables (65%) and fruits (60%). Fussy eating behaviour was reported by 47%, and food fussiness was significantly associated with a decreased frequency of vegetable (p<0.001) and fruit (p = 0.004) consumption. Challenges with breastfeeding included the infant's feeding difficulties, low milk supply, maternal stressors, lack of support and education from health professionals. Challenges to CF introduction included fussiness and maternal fears such as choking and lack of confidence. Support from lactation consultants and previous experience with introducing CF were the most common enablers for breastfeeding and timely CF introduction, respectively. Our findings provide the first insight into the early feeding practices of preterm infants in Aotearoa, New Zealand. This information will support strategies to improve the nutritional management of preterm infants by increasing awareness of common challenges mothers face to achieve the recommended breastfeeding guidelines and CF practices in this vulnerable population.

**Keywords:** breastfeeding; introducing complementary foods; fussy eating; preterm infants

### Ethics Declaration

Yes

### Financial Support

This research received no external funding.

### Reference

1. Baldassarre *et al.* (2022) *Italian Journal of Pediatrics* 48:143.