FEEDING PRACTICES OF PREMATURE INFANTS DURING HOSPITALISATION AND POST-DISCHARGE: PRELIMINARY FINDINGS FROM THE SPROUT STUDY

Juliane Alves Santos[1], Anne Doolan[2], Fiona Dunlevy[3], John Kearney[1], Aileen Kennedy[1]

1. *School of Biological, Health and Sports Sciences, Technological University Dublin, Dublin, Ireland*
2. *Neonatal Department, The Coombe Hospital, Dublin, Ireland*
3. *Nutrition and Dietetics Department, The Coombe Hospital, Dublin, Ireland*

BACKGROUND

- Preterm infants are discharged during a nutritionally critical period when high nutrient requirements coincide with physiological and oral feeding immaturity.
- Sustaining breastfeeding and managing feeding difficulties remain challenging after hospitalisation.
- This study describes milk feeding practices, complementary feeding, and feeding challenges in the first year of life (reported by corrected age).

METHODS

- SPROUT is an observational cross-sectional study of infants <1500 g assessed at 6–12 months corrected age.
- Feeding practices and difficulties were collected via parent questionnaire and hospital discharge data.
- Ethical approval was obtained from The Coombe Hospital and TU Dublin.

RESULTS

- **Twenty-five** infants have been recruited (mean corrected age of 8.5 ± 1.9 months).

Table 1. Clinical and demographic characteristics of the study sample (n = 25).

	N (%)	Median (range)
Female	15 (60%)	
Gestational age at birth (weeks)		28^{+5} (22^{+4}–32^{+4})
Birth weight (g)		960 (426–1480)
Length of hospital stay (days)		59 (27–131)
Weight at discharge (g)		2401 (1910–3880)
CGA at discharge (weeks)		37^{+6} (35^{+1}–43^{+3})
Maternal age (years)		34 (24–43)

CGA = Corrected gestational age.

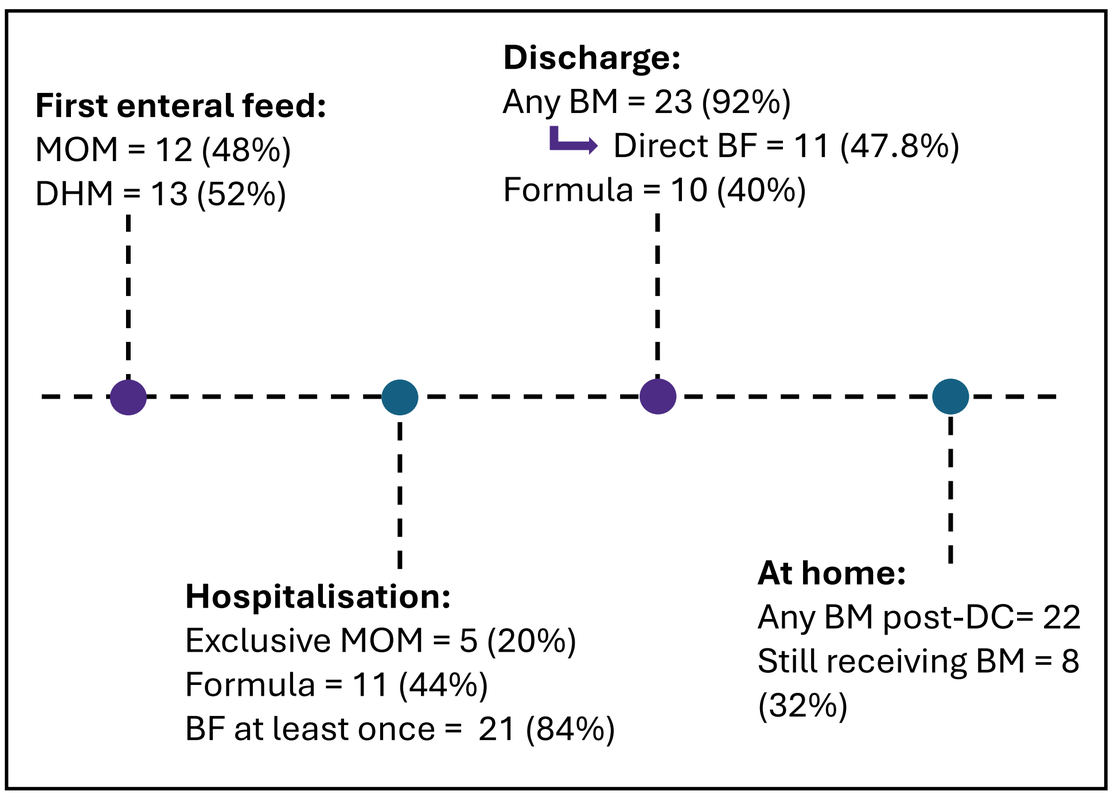

Figure 1. Milk feeding trajectory during hospitalisation and post-discharge.

- Among those who stopped BM intake, corrected age at cessation was **5.7 ± 2.3 months**.

6 of 11 infants who were **directly breastfed** at discharge were still receiving breast milk at recruitment.

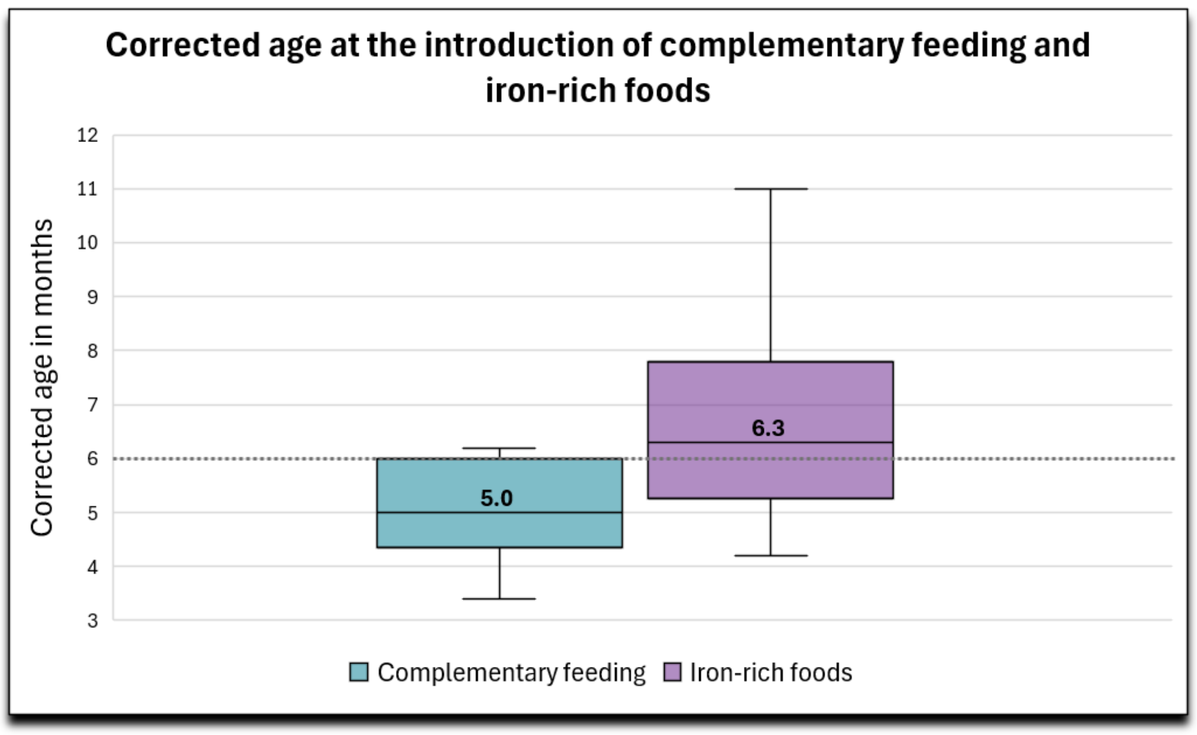

Figure 2. Complementary feeding was introduced at 5.0 months (range: 3.4–6.2), while iron-rich foods were introduced later at 6.3 months (range: 4.2–11), with greater variability in timing.

- Overall, 22 of 25 infants (88%) had introduced iron-rich foods, and six infants were receiving iron supplementation at recruitment.

Most reported **difficulties** were poor latch, reflux, and texture progression.

CONCLUSION

- Despite high breast milk exposure during hospitalisation and at discharge, continuation declined substantially by late infancy.
- Variation in timing of iron-rich food introduction may indicate challenges in meeting nutritional recommendations.
- These preliminary findings support the need for structured post-discharge lactation and feeding support for these very low birth weight premature infants.