

# Self-reported breastfeeding problems, use of infant formula and early cessation of breastfeeding.

## Similarities and differences between healthy weight and overweight mothers

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## Background

- Women who enter pregnancy above a healthy weight tend to have poorer breastfeeding outcomes compared to healthy weight women.
- Differences between overweight and healthy weight women's experience of specific breastfeeding-related problems and reasons for use of formula have not been systematically investigated.

## Aim

- To compare self-reported breastfeeding problems in healthy weight and overweight women and identify the main reasons for use of infant formula during the first month postpartum.

## Method

### Design and Participants

- Secondary analysis of data from 477 mothers enrolled in the New Beginnings: Healthy Mothers and Babies study (de Jersey, Nicholson, Callaway, & Daniels, 2013) – a prospective cohort study that recruited a consecutive sample of 664 women (63% response rate) who were receiving antenatal care between August 2010 and January 2011 at the Royal Brisbane and Women's Hospital.
- Data for the present analysis were collected at baseline (16 weeks gestation), from hospital records at time of delivery and at 4 months postpartum.

### Measures

- Pre-pregnancy BMI (kg/m<sup>2</sup>) was calculated based on self-reported pre-pregnancy weight and measured height. Women were categorized as healthy weight (hw: BMI <25) or overweight (ow: BMI >25).
- Women self-reported whether they had ceased breastfeeding at the time of the survey (~4 months postpartum).
- Breastfeeding problems during the first month postpartum were self-reported (yes/no)
- Reasons for use of infant formula in the first month postpartum were self-reported (agree/disagree)

### Data Analysis

- Logistic regressions were used to compare proportion of hw and ow participants who reported listed breastfeeding problems or agreed with reasons for using infant formula.
- Analyses were adjusted for covariates that differed ( $P < .1$ ) between weight groups (see Table 1).

## Results and Discussion

- Participant characteristics are shown in Table 1.

Table 1. Characteristics of women and their infants included in the study.

Characteristic	Total (N=477)	Healthy weight	Overweight	Difference <sup>a</sup>
		(n=315)	(n=162)	P value
		% (n)		
Education (university degree)	47 (224)	52 (163)	38 (61)	.003
Age (mean ± SD)	30 (5)	30 (5)	30 (5)	.83
Parity (>1 child)	42 (197)	41 (128)	43 (69)	.74
Marital status (married/de facto)	96 (457)	96 (301)	96 (156)	.70
Country of birth (Australia)	72 (341)	68 (212)	80 (129)	.005
Health care card (yes)	15 (71)	14 (44)	17 (27)	.43
Infant gender (boy)	52 (244)	52 (164)	50 (80)	.72
Infant birth weight (g)	3457 (520)	3448 (450)	3473 (637)	.66
Gestational age (weeks)	40 (1)	40 (1)	40 (1)	.94
Method of delivery (vaginal [ including assisted])	70 (333)	76 (238)	59 (95)	<.001
Edinburgh Postnatal Depression Scale (Cox et al., 1987) Score <sup>b,c</sup>	6 (4)	6 (4)	6 (5)	.29
Smoking status (non-smoker) <sup>b</sup>	93 (444)	94 (297)	91 (147)	.19

Healthy weight group: BMI <25 kg/m<sup>2</sup>; Overweight group: BMI ≥25 kg/m<sup>2</sup>  
<sup>a</sup> Difference (P value) for Pearson Chi-Square statistic (categorical variable) or Independent samples t-test (continuous variable)  
<sup>b</sup> Self-reported at 4 months postpartum  
<sup>c</sup> score range from 0 to 30

### Breastfeeding problems

- Frequency of self-reported breastfeeding problems was similar across weight status groups.
- The most common breastfeeding problems were: sore nipples (61%), latching or attachment difficulties (53%), difficulties positioning (37%), too much milk (26%), not enough milk (25%) and delay in milk coming in (21%).
- "Not enough milk" (23% hw vs 32% ow,  $P = .09$ ) was the predominant reason for giving infant formula and predicted breastfeeding cessation.

### Reasons for using formula

- Half of all women who used formula in the first month cited "not enough milk" as an important reason.
- Overweight women were more likely than healthy weight women to agree that infant formula was "as good as breastmilk" and less likely to agree that "medical advice" was important in the decision to use infant formula.

### Implications

- Guidance regarding indicators of adequate milk supply and the potential risks of using infant formula may be important in supporting exclusive breastfeeding, particularly for overweight women.

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