Predictors for early introduction of solid food among Danish mothers and infants: an observational study

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Abstract

Background: Early introduction of complementary feeding may interfere with breastfeeding, the infants’ self-controlled appetite, and increase growth. The aim of the present study was to investigate predictors for early introduction of solid food.

Methods: In an observational study Danish mothers answered a self-administered questionnaire approximately 6 months after birth including questions about socio-demographic, psycho-social, child- and feeding factors known to influence time for introduction of solid food. The study population consisted of 4503 (63%) infants. Data were analyzed using ordered logistic regression models. Outcome variable was time for introduction to solid food.

Results: Almost all the included infants 4386 (97%) initiated breastfeeding. At week 16, 17-24, 25 or thereafter 330 infants (7%); 2923 (65%); and 1250 (28%) had been introduced to solid food, respectively. Statistically significant predictors for earlier introduction of solid food were among feeding factors: still being breastfed at 5 weeks as the most influential predictor (OR=2.52 CI: 1.93-3.28); among infant, maternal and attachment factors: being a boy, increased gestational age, and higher birth weight; lower maternal age, and being primipara; mothers’ reported perception of the infant as being temperamental at 6 months, and not recognizing the baby’s’ early cues of hunger. Supplementary analysis of interactions showed that the influence of maternal perceived
infant temperament was restricted to primiparae, that the mother’s BMI was without impact if the infant was only breastfed at week 5, and that the birth weight was particularly influential if the mother had reported uncertainty in recognizing infants’ cues of hunger in the first 5 weeks.

**Conclusions:** Breastfeeding was the single most powerful indicator for preventing early introduction to solid food and a mothers’ BMI did not influence as long as the infant was fully breastfed at 5 weeks. Especially perceived infant temperament among primiparae and having difficulty recognizing the infant’s early cues of hunger among mothers with infants of small birth weight were other modifiable factors pointing to the importance of supporting breastfeeding and learning primipara and mothers with small babies to be able to read and respond to their babies’ cues to prevent early introduction to solid food.