

PROMOTING THE ASCIA GUIDELINES FOR INFANT FEEDING AND ALLERGY PREVENTION USING A NOVEL TOOL – HAVE WE MADE A ‘SMARTSTART’?

Background:

- Promotion of the Australasian Society of Clinical Immunology and Allergy (ASCIA) Guidelines for infant feeding and allergy prevention has not previously been undertaken at a national level.
- This study aimed to determine if the SmartStartAllergy tool was effective in encouraging parental introduction of peanut in infants, and if parents of high-risk babies were more likely to introduce peanut.

Methods:

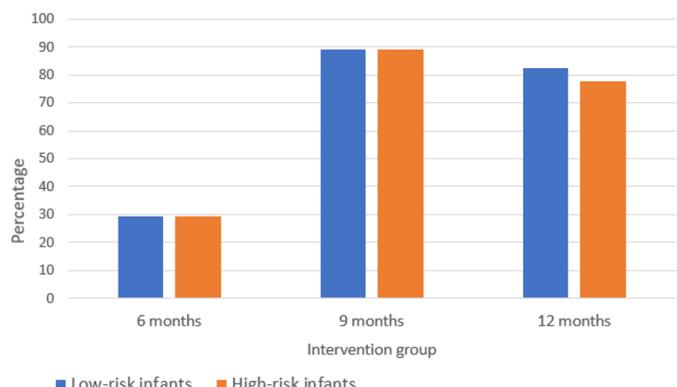
- SmartStartAllergy is a smartphone-based application which integrates with general practice management software to send a short message service (SMS) to parents of infants up to 12 months of age to collect information about the timing of peanut introduction.
- Parents in the intervention group were sent an SMS at 6, 9 and 12 months of age; parents in the control group were sent an SMS at 12 months of age.
- A questionnaire link was provided to parents to collect additional information about other common food allergen introduction, reactions to food, eczema, and family history of atopy.
- Infants with severe eczema and/or a family history of atopy were considered high-risk



Results:

- A total of 29,092 parents were enrolled – 18,090 intervention and 11,002 control.
- When comparing the intervention and control groups for peanut introduction by 12 months of age, 97.5% (n=6,470/6,635) of the intervention group had introduced peanut compared to 88.3% (n=5,291/5,990) in the control group, with an odds ratio of 5.18 ($p<0.0001$; 95% CI of 4.35 to 6.16).
- Logistic regression analysis indicated that there was no statistically significant difference in peanut introduction for infants considered high-risk when comparing the intervention with the control group.
- There was no statistically significant difference in peanut introduction at 6 (odds ratio of 0.994; $p=0.97$; 95% CI= 0.72 to 1.38), 9 (odds ratio of 1.03; $p=0.93$; 95% CI= 0.58 to 1.82) or 12 (odds ratio of 0.74; $p=0.67$; 95% CI= 0.18 to 2.98) months of age when considering high-risk infants and low-risk infants (Figure 1).

Figure 1: Percentage of parents who introduced peanut for low-risk versus high-risk infants in the intervention group



Conclusion:

SmartStartAllergy appears to be an effective tool for encouraging parents to introduce peanut by 12 months of age.