Nip allergies in the Bub: a qualitative study for a public health approach to infant feeding for allergy prevention

Sandra L. Vale,¹⁻³ Ingrid Roche,^{2,4} Merryn Netting,^{2,5-7} Maria Said,^{1,2,8} Preeti Joshi,^{2,3,9} Rhonda Clifford,¹ Dianne E. Campbell,^{3,9,10} Sandra M. Salter¹

n response to increasing incidence of food allergy internationally 1-4, there has been a focus on primary prevention of food allergy. Since 2015, the Learning Early About Peanut (LEAP) study⁵, and subsequent metaanalyses of primary prevention randomized controlled trials examining egg and peanut, provided high-level evidence to support introducing peanut and well-cooked egg early and regularly into an infant's diet as a key strategy to reduce peanut and egg allergy.⁶⁻⁹ Internationally, many food allergy prevention guidelines have been updated in response to this changing evidence base. 10-²⁴ Further, several food allergy prevention guidelines¹⁰⁻²² have extrapolated the benefits of early peanut and egg introduction, recommending the early introduction of all common food allergens²⁵ alongside a healthy balanced diet. While evidence to support the benefit of introducing all common food allergens before one year of age is limited, there is no known evidence to suggest harm in introducing other common food allergens in the first year of life as part of a varied diet.²⁵ It is likely that consumers remain confused about current best practice with respect to infant feeding and allergy prevention.

Abstract

Objective: To identify a brand, key messages and resources to underpin a public health approach to food allergy prevention.

Methods: A focus group design was used to explore perceptions and opinions of potential brands, infant feeding messages and resources for providing standardised food allergy prevention information. Focus groups were conducted in February 2018 using interview guides and were transcribed verbatim. A content analysis of the transcripts was undertaken using thematic analysis software. The University of Western Australia provided ethics approval: RA/4/20/4280

Results: Seven focus groups with 39 participants were conducted. Four slogans and styles of imagery were considered. 'Nip Allergies in the Bub' was the most favoured slogan and images of babies with food were most favoured. Participant feedback was sought regarding messages and supporting messages were considered important. Participants were consulted about useful resources and a website was identified.

Conclusions: Conducting focus groups assisted the selection of a brand, messages and resources to underpin a public health approach to implementing allergy prevention guidelines. Implications for public health: This is the first focus group research undertaken for food allergy prevention. Identification of a meaningful brand, key messages and resources will support a public health approach to implementing allergy prevention guidelines.

Key words: focus groups, infant feeding, food allergy prevention

guidelines provide advice that is opposite to that of older guidelines (pre-2006),²⁶ which advised delayed introduction of common food allergens until after one year of age and in some cases until 2–3 years of age.²⁵ In 2016, the Australasian Society for Clinical

Immunology and Allergy (ASCIA), the peak medical body for allergy in Australia and New Zealand, released updated guidelines for infant feeding and allergy prevention (ASCIA Guidelines for Infant Feeding and Allergy Prevention), 13,14 however, these have

- 1. Faculty of Health and Medical Sciences, The University of Western Australia, Western Australia
- 2. National Allergy Strategy, New South Wales

Modern (post-2006) allergy prevention

- 3. Australasian Society of Clinical Immunology and Allergy, New South Wales
- 4. Perth Children's Hospital, Western Australia
- 5. Women and Kids Theme, South Australian Health and Medical Research Institute, South Australia
- 6. Department of Paediatrics, University of Adelaide, South Australia
- 7. Nutrition Department, Women's and Children's Health Network, South Australia
- 8. Allergy & Anaphylaxis Australia, New South Wales
- 9. Department of Allergy and Immunology, The Children's Hospital at Westmead, New South Wales
- 10. Discipline of Child and Adolescent Health, The University of Sydney, New South Wales

Correspondence to: Sandra L. Vale, 7 West Parade, Hazelmere 6055 WA: e-mail: sandravale@iinet.net.au

Submitted: October 2021; Revision requested: February 2022; Accepted: February 2022

The authors have stated the following conflicts of interest: Ms Vale is employed by the Australasian Society of Clinical Immunology and Allergy. Dr Netting reports support from an NHMRC fellowship (Early Career Fellow APP1156518); honoraria have been paid to Dr Netting's institution to support professional development by the Nestle Nutrition Institute, outside the submitted work. Dr Campbell reports other from DBV-technologies (part-time salary), personal fees from Allergenis (advisory board), personal fees from Westmead Fertility Centre (governance board) and grants from National Health and Medical Research Council of Australia (to institution), outside the submitted work.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

Aust NZ J Public Health. 2022; 46:438-43; doi: 10.1111/1753-6405.13241

not been actively promoted or presented to parents or health professionals. Moreover, there are inconsistencies in other published infant feeding information, with allergy prevention guidelines differing from general infant feeding guidelines.²⁵ Given these differences, it is not unreasonable for both parents and health professionals to be hesitant to heed the most recent advice. Indeed, fear of an allergic reaction may drive health professionals and parents to continue to follow the previous advice. It is therefore of utmost importance to promote the current advice and provide evidence-based information and support to both health professionals and parents to encourage current guideline uptake.²⁵ In context, a standardised, public health approach to providing health professional and consumer advice offers the best chance to overcome confusion around infant feeding advice for allergy prevention.

The World Health Organization defines social marketing as "...the application of commercial marketing technologies to the analysis, planning, execution and evaluation of programs designed to influence the behaviour of target audiences in order to improve the welfare of individuals in society". 27(p343) The use of branding, a strategy commonly used in commercial marketing, has also been used in social marketing as an important component of public health campaigns.^{28,29} Brands are used to influence consumer perceptions about products, services and messages including health messages.^{29,30} The brand, a symbolic representation, is designed to increase the likelihood that brand characteristics will be remembered (known as brand equity),31,32 In public health campaigns, branding is used to promote the desired health behaviour (which is the 'product').30 Public health brands can expedite both the communication of health messages and engagement in the desired health behaviours.³⁰ Furthermore, branding can provide long-term value through the establishment of brand equity within the target audience.30

In relation to infant feeding information for allergy prevention, a recent audit of Australian infant feeding information indicated that there were inconsistencies in infant feeding information.³³ Therefore, this study considered the use of a brand important to help direct parents and health professionals to any resources developed.

In order to simplify provision and promotion of standardised food allergy prevention information to health professionals and parents, this study aimed to: i) Explore perceptions and opinions of potential brand concepts to communicate allergy-appropriate infant feeding advice; ii) explore perceptions of key infant feeding statements consistent with the ASCIA guidelines for infant feeding and allergy prevention (ASCIA guidelines) to support the brand; and iii) identify a mechanism for providing standardised food allergy prevention information to health professionals and parents.

Methods

Study design, sampling and recruitment

A focus group design was used to identify the most suitable brand identity, key infant feeding statements and mechanism for providing standardised infant feeding information to health professionals and parents. The slogans and imagery were developed by a graphic design agency and the key messages (consistent with the ASCIA guidelines) were developed through previous stakeholder engagement.

Purposive sampling was used to recruit participants with a relationship or potential relationship with infant feeding. Health professionals who frequently provide information about infant feeding (such as general practitioners [GPs], maternal child health nurses, dietitians, pharmacists) were recruited. Members of the public including pregnant women, parents with an infant or people with children who were planning to have a subsequent child in the next two years were eligible for inclusion in the study. People without children (except pregnant women) were excluded from the study. Focus groups were structured to be small (n=6-8 based on the richness of data that can be obtained from groups of smaller sizes).34

Parents and health professionals were recruited via research recruitment agencies in Perth and Sydney. Recruitment of parents with a history of allergy or parents with a first child with food allergy was conducted by advertisement through Allergy & Anaphylaxis Australia (A&AA) social media networks. All participants were screened using a recruitment questionnaire developed by the study principal investigator and a focus group consultant. Participation in the focus

group was voluntary and to help cover travel costs and time investment a small monetary compensation was provided.

Data collection

Two consultants experienced in qualitative research were engaged to coordinate and facilitate a series of focus groups. Focus group participants were provided with information about the purpose of the research through a promotional flyer and on commencement of the focus group. Ethics approval was provided by The University of Western Australia: RA/4/20/4280.

The focus groups were conducted using interview guides (Supplementary Files), developed by the focus group consultant and the study principal investigator. The guides were designed to identify participants' views about: experiences with food allergies and introducing foods for allergy prevention; sources of information and advice about introduction of foods for allergy prevention; perceptions of headline and supporting statements; preferred brand concepts (slogans and imagery); and what resources would be useful. In addition, a health professional discussion guide sought to elicit information about: what questions parents ask in relation to allergies and allergy prevention; and what allergy advice health professionals provide (and the basis of that advice). A creative agency was engaged to develop a set of brand options (slogans and imagery) that were informed by engagement with key stakeholders including consumers. Figure 1 provides an overview of the slogans, imagery and messaging presented to participants.

While participants with similar backgrounds were included together, consideration was given to avoid any perception of one participant having more power than another (e.g. doctors and nurses were not grouped together; first-time mothers and experienced mothers were not grouped together). Groups were arranged as follows: GPs; other health professionals; mothers and or pregnant women, based on level of allergy concern; and fathers. The level of allergy concern was defined by whether the parent themselves had a food allergy or if the parent had a child with a food allergy (considered high concern). The focus groups took 90 minutes each and were conducted between 15 and 21 February 2018. Seven focus groups were conducted (four with parents and three with health professionals). The focus groups were

Vale et al. Article

conducted face to face with the facilitator and participants in a centrally located venue and were conducted until data saturation was reached³⁵ within each group. All focus groups were audio-recorded and transcribed verbatim.

Data analysis

A content analysis of each of the transcribed focus groups was undertaken using thematic analysis software (NVivo for Windows, Version 12). Two researchers reviewed the transcribed interviews to develop a coding guide. Differences in coding were reviewed together and consensus was reached. The transcripts were then read again to fully understand what was being described.

Results

A total of seven focus groups with 39 participants were conducted across two regions (Western Australia [WA] and New South Wales [NSW]); Table 1. As the focus groups were all different, data saturation was reached when no new or additional constructs were identified in each focus group.

The following key themes were identified:
Perceptions and opinions of potential brand concepts: The slogan must include reference to allergy and the imagery needs to include babies eating the common food allergens.
Key infant feeding statements identified:
Supporting statements should support the

message.

Mechanism for providing food allergy prevention information: A website clearly identified as being developed by a credible source was considered the most beneficial

headline statement to provide clarity of the

Perceptions about brand identity (slogans and imagery)

The results are presented below indicating the key themes from parents and health professionals in relation to their perceptions of the slogans, imagery and messaging.

Slogans

mechanism.

Four slogans were considered: 'Done by 1'; 'Eat it to Beat it'; 'Food's a Friend'; and 'Nip Allergies in the Bub'. The two most favoured slogans were slogans 1 and 4 (the latter chosen by 74% of participants). Slogan 4 was more favoured than slogan 1, with the main rationale provided by participants that it was the only message that was clearly linked to allergy. Slogan 4 was also considered to be catchy, clever or playful and engaging by parents, even though some health professionals thought the message was not clear.

Slogan 1 was the next favoured slogan (chosen by 23% of participants) with feedback that it was catchy with an appealing style and tone (especially for fathers and health professionals); however, some participants felt it was not allergy focused and over-promised (i.e. allergies do not always resolve by one year of age).

Slogan 2 was considered by focus groups to be a positive, catchy message. However, some participants thought it was confusing, unclear, hard to read and an over-promising message. It was not considered to be allergy focused and some participants felt it was a message more appropriate for a campaign targeting teens rather than parents.

Slogan 3 was the least favoured slogan. Some participants felt it was more targeted at children than parents and many commented

that the brand did not make you think about allergy, even though it was a positive message and visually easy to read.

Imagery

Image 4 was the most favoured (chosen by 77% of participants). The images of the babies were considered to be age-appropriate. Participants commented that the type of foods included in the imagery needed to be more appropriate (i.e. not choking hazards like peas) and that common allergens should be included.

Image 1 was considered age-appropriate by 21% of participants, that is, it reinforced that the brand is about babies and that the babies looked happy. However, many participants commented that the imagery did not relate to food allergy and that the imagery should include food.

Image 3 was the least favoured, with the reasoning given that it did not relate to food allergy. Two participants commented that the imagery was scary. While image 2 was considered simple and reflective of a wide variety of foods, the type of foods included needed to reflect the common food allergens

Figure 1: Slogans, imagery and messaging.

Slogan	Slogan 1:	Slogan 2:	Slogan 3:	Slogan 4:	
	done of	BEAT IT	FOOD'S FRIEND	ALLERGIES	
Imagery	Image 1:	Image 2:	Image 3:	Image 4:	
Key message	To help prevent food allergy, give your child the common allergy-causing foods before they turn one.				
Supporting messages	· ·	nd nut spreads, cooked hs. One new food at a f		products regularly.	

Table 1: Summary of focus groups.					
Focus group (FG) number	Type of participants	Location	Number of participants		
FG1	Mothers and expectant mothers (first time mothers) - range of concern levels including first time mothers	Sydney, NSW	7		
FG2	Fathers - range of concern levels	Sydney, NSW	6		
FG3	Health professionals - child and maternal health nurses and dietitians	Sydney, NSW	4		
FG4	Mothers and expectant mothers - high concern and/or family history (no first time mothers)	Perth, WA	5		
FG5	Mothers and expectant mothers - low/mixed concern (no first time mothers)	Perth, WA	6		
FG6	Health professionals - child and maternal health nurses and dietitians	Perth, WA	7		
FG7	Health professionals – general practitioners	Perth, WA	4		

and not include foods that would not normally be given to babies.

Perceptions about headline and supporting messages

Headline message

The headline message: To help prevent food allergy, give your child the common allergy-causing foods before they turn one' was reported by both parents and health professionals to be clear, concise and easy to follow. The inclusion of 'allergy prevention' and 'before one' were considered important by participants in providing clarity.

Suggested changes to the headline message included changing 'child' to 'baby', which participants suggested better reflected the 'before one' age group. In addition, changing 'before one' to 'between 6 and 12 months' was suggested by health professionals for increased clarity regarding the timing of introduction.

Both health professionals and parents commented that the common allergycausing foods should be clearly communicated.

Supporting messages

The statement: 'Offer them peanut and nut spreads, cooked egg, dairy and wheat products regularly. From around 6 months. One new food at a time' was tested as a supporting statement to the headline. Almost all participants reported that the supporting statement was needed as it answered many of the questions raised if the headline statement was to stand alone. All participants who felt the headline statement was sufficient on its own were low-concern parents, confident with infant food introduction recommendations.

The wording 'From around 6 months' was variably interpreted; some parents and particularly health professionals commented that it was too ambiguous. 'One new food at a time' was also contentious, with most participants indicating that it was acceptable if it related only to the common food allergens. In addition, many parents reported that greater clarity was needed regarding how long the interval between introducing new food allergens should be. It was also noted by maternal child health nurses that this advice was contradictory to the advice they currently provide to parents.

While the word 'regularly' was considered an important inclusion, participants reported

that more clarity was required – does it mean, for example, every week? Or every month?

Perceptions about a mechanism for providing food allergy prevention information

The results presented below provide the key themes which emerged from parents' and health professionals' perceptions around sources of information.

Sources of information

Parents reported using a range of sources of information when seeking information about the introduction of common food allergens, and as a result, reported confusion regarding conflicting advice presented in the different sources. Conversely, health professionals had a strong understanding of the current guidelines; however, some (particularly GPs) commented about the frequent changes to the guidelines.

Health professionals familiar with ASCIA felt that including ASCIA as the source of information would be important for health professionals but not necessarily for parents, indicating that parental knowledge of ASCIA was likely to be low. Low knowledge of ASCIA by parents was confirmed in the parent sessions; however, parents very strongly reported that including ASCIA (a medical allergy body) as the source of the information was important and more trustworthy than including a government logo.

Resources

Both parents and health professionals preferred a website as a means to obtain information that could be downloaded and printed. Parents were particularly supportive of a centralised resource.

Information that parents considered important to include in a resource was: detail from relevant guidelines; a food checklist and timeline; recipes and food ideas; information about how to recognise and respond to an allergic reaction; and reassuring information (i.e. the proportion of children who outgrow their food allergies). A mobile phone app was considered potentially useful by both parents and health professionals and a fridge magnet with a food checklist was suggested by health professionals.

Information considered to be important by health professionals included links to professional training, information regarding when to refer to a specialist and information for parents translated into different languages.

Discussion

This is the first focus group research to be undertaken to identify a brand, key messages and resources for food allergy prevention. A series of focus groups with parents and health professionals sought to identify a brand and associated messaging to promote the introduction of common food allergens for food allergy prevention. Engagement with parents and health professionals through focus groups was critical to ensure a public health approach to successfully translate the ASCIA food allergy prevention guidelines.

This research identified the brand 'Nip Allergies in the Bub' and a website as the preferred mechanism to promote evidenced-based infant feeding practices associated with the primary prevention of allergic disease, and a suite of resources with this brand has subsequently been implemented.³⁶

Australia was the first country where the peak specialist body provided guidelines to actively encourage the introduction of all common food allergens by 12 months of age in all infants including those considered at increased risk of developing food allergy.^{25,26,37} Around the world, a more cautious approach has been undertaken with some countries' peak specialist bodies recommending allergen skin testing by an allergist prior to peanut introduction in infants.38,39 However, since the release of the Nip Allergies in the Bub resources, Food Allergy Canada has released several resources for parents and health professionals⁴⁰ and appears to be the most closely aligned with Australia's approach.

The World Health Organization defines public health as "the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society". 41 Public health campaigns cannot rely simply on the provision of information to effect behaviour change, but rather need to adopt the evidence-based approach of advertising.31 Development of a brand to underpin resource development and broadscale promotion is a concept that has been used in public health campaigns in Australia and internationally, such as the Smarter than Smoking*, Go for 2 $\&\,5^{\circ}$ and National Truth* campaigns. 42-44 Using a brand, as is done in the commercial sector, is essential to remind

Vale et al. Article

and reinforce key messages and ultimately change behaviours over time. 31,44 Brands are being used increasingly in social marketing strategies as part of more recent public health campaigns. 30 A study evaluating a brand developed as part of a social marketing campaign to promote healthy behaviour in relation to youth smoking has shown that positive brand equity is possible when promoting health. 30

Conducting focus groups provided an opportunity to identify what resources would assist health professionals and parents to access standardised infant feeding information for allergy prevention and therefore, potentially improve compliance with the ASCIA guidelines. Focus group participants clearly indicated that a website would be useful and as a result, the Nip Allergies in the Bub website³⁶ was developed. ASCIA was identified as a credible source of information by participants, therefore the website information was underpinned by the ASCIA guidelines, written simply to provide simple and practical advice for parents, with the ASCIA logo included on the website. A separate section for health professionals included links to training and resources.

However, the development of a website alone, even a credible website, may not be sufficient to enact behaviour change²⁹ and a social marketing campaign following traditional marketing principles may be more effective.⁴⁵ Traditional marketing relies on the 4 Ps: Product, Price, Place and Promotion.⁴⁵ In this study, the Nip Allergies in the Bub website is the product (containing the health message). The health message (introducing the common food allergens by one year of age), needs to reach the target audience (parents and health professionals), in such a way that they wish to take notice.⁴⁵ Consideration to place (where they receive the information) and promotion (how you direct that information to them) also need to be considered⁴⁵. As such, the development of the Nip Allergies in the Bub brand is only the first step in the use of social marketing and a public health approach to help communicate infant feeding information in relation to allergy prevention.

This research provided a platform for the National Allergy Strategy,⁴⁶ an allergy health promotion body in Australia, to promote food allergy prevention advice consistent with the ASCIA guidelines for infant feeding to parents and health professionals.

There are some limitations to this study. While seven focus groups were conducted and an attempt was made to include people of varying backgrounds (parents with varied experience with food allergy; first time and experienced mothers; fathers; general practitioners; and allied health including nurses), this study only engaged with 39 participants. This study has not evaluated the effectiveness of the brand (i.e. parents' abilities to recall the brand and follow the advice associated with the brand) hence it is not possible to conclude that the Nip Allergies in the Bub brand, will be successful. To evaluate the effectiveness of the Nip Allergies in the Bub brand, it is recommended that a brand equity study be undertaken. In addition, a robust end-user evaluation of the website would be beneficial to ensure the website provides the information being sought by parents and health professionals. Monitoring of infant food allergy and anaphylaxis and also food allergy prevalence in all age groups is also recommended to determine if there has been an impact on the rise of food allergy.

Conclusion

Conducting focus groups with parents and health professionals assisted the selection of a brand and resources to provide information consistent with the ASCIA guidelines. Engaging consumers through focus groups provided insight into resources that may support common food allergen introduction. Evaluation of brand equity and website usefulness along with monitoring infant anaphylaxis and food allergy prevalence in all age groups is recommended to evaluate the effectiveness of the final product and public health messaging.

Acknowledgements

We would like to thank all study participants. We would like to thank Clinical Associate Professor Richard Loh (OAM) for his initial involvement in the project as a National Allergy Strategy representative. We would like to thank Dr Kevin Murray, for his role as a PhD supervisor.

Funding

The focus groups were funded by the National Allergy Strategy which receives funding from the Australian Government Department of Health.

Ethics approval

The University of Western Australia Research Ethics Committee granted approval, reference RA/4/20/4280.

References

- Jackson KD, Howie LD, Akinbami LJ. Trends in allergic conditions among children: United States, 1997-2011. NCHS Data Brief. 2013;121:1-8.
- Sicherer SH, Muñoz-Furlong A, Godbold JH, Sampson HA. US prevalence of self-reported peanut, tree nut, and sesame allergy: 11-year follow-up. J. Allergy Clin. Immunol. 2010;125:1322–6.
- McKean M, Caughey AB, Leong RE, Wong A, Cabana MD. The timing of infant food introduction in families with a history of atopy. Clin. Pediatr. 2015;54:745–51.
- Osborne NJ, Koplin JJ, Martin PE, et al. Prevalence of challenge-proven IgE-mediated food allergy using population-based sampling and predetermined challenge criteria in infants. J Allergy Clin Immunol. 2011;127(3):668-76.
- Du Toit G, Roberts G, Sayre PH, et al. Randomized trial of peanut consumption in infants at risk for peanut allergy. N Engl J Med. 2015;372(9):803-13.
- Perkin MR, Logan K, Tseng A, et al. Randomized trial of introduction of allergenic foods in breast-fed infants. N Engl J Med. 2016;374(18):1733–43.
- Perkin MR, Logan K, Marrs T, et al. Enquiring About Tolerance (EAT) study: Feasibility of an early allergenic food introduction regimen. J Allergy Clin Immunol. 2016;137(5):1477-86.e8.
- Lavery WJ, Assa'ad A. How to prevent food allergy during infancy: What has changed since 2013? Curr Opin Allergy Clin Immunol. 2018;18:265-70.
- Natsme O, Kabashima S, Nakazato J, et al. Two-step egg introduction for prevention of egg allergy in high-riak infants with eczema (PETIT): A radnomized, double-blind, placebo-controlled trial. *Lancet*. 2016;389:276-86.
- Fleischer DM, Sicherer S, Greenhawt M, et al. Consensus communication on early peanut introduction and the prevention of peanut allergy in high-risk infants. Ann Allergy Asthma Immunol. 2015;115(2):87-90.
- Greer FR, Sicherer SH, Burks AW, Committee on Nutrition, Section on Allergy and Immunology. The effects of early nutritional interventions on the development of atopic disease in infants and children: The role of maternal dietary restriction, breastfeeding, hydrolyzed formulas, and timing of introduction of allergenic complementary foods. *Pediatrics*. 2019;143(4):e20190281.
- Tham EH, Shek LP, Van Bever HP, et al, Asia Pacific Association of Pediatric Allergy, Respirology & Immunology (APAPARI). Early introduction of allergenic foods for the prevention of food allergy from an Asian perspective-An Asia Pacific Association of Pediatric Allergy, Respirology & Immunology (APAPARI) consensus statement. Pediatr Allergy Immunol. 2018;29(1):18-27.
- Joshi PA, Smith J, Vale S, Campbell DE. The Australasian Society of Clinical Immunology and Allergy infant feeding for allergy prevention guidelines. *Med J Aust*. 2019;210(2):89-93.
- Australasian Society of Clinical Immunology and Allergy. ASCIA Guidelines: Infant feeding and Allergy Prevention [Internet]. Sydney (AUST): ASCIA; 2016 [cited 2020 Jan 27]. Available from: https://allergy.org. au/hp/papers/infant-feeding-and-allergy-prevention
- Stiefel G, Anagnostou K, Boyle RJ, et al. BSACI guideline for the diagnosis and management of peanut and tree nut allergy. Clin Exp Allergy. 2017;47:719–39.
- Turner PJ, Feeney M, Meyer R, Perkin MR, Fox AT. Implementing primary prevention of food allergy in infants: New BSACI guidance published. *Clin Exp Allerav*. 2018:48:912-15.
- Abrams EM, Hildebrand K, Blair B, Chan ES. Timing of introduction of allergenic solids for infants at high risk. Paediatr Child Health. 2019;24(1):56-7.

- Fewtrell M, Bronsky J, Campoy C, et al. Complementary feeding: A position paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition. J Pediatr Gastroenterol Nutr. 2017;64(1):119-32.
- Chan JKC, Chan AWM, Ho MHK, Lee TH. HKIA Position Paper on Prevention of Peanut Allergy in High Risk Infants. Causeway Bay (HK): Hong Kong Institute of Allergy; 2016 [cited 2020 Apr 13]. Available from: http:// www.allergy.org.hk/HKIA%20-%20Guildelines%20 for%20Prevention%20of%20Peanut%20Allergy%20 (Final).pdf
- di Mauro G, Bernardini R, Barberi S, et al. Prevention of food and airway allergy: Consensus of the Italian Society of Preventive and Social Paediatrics, the Italian Society of Paediatric Allergy and Immunology, and Italian Society of Pediatrics. World Allergy Organ J. 2016;9:28.
- Ebisawa M, Ito K, Fujisawa T, Committee for Japanese Pediatric Guideline for Food Allergy, The Japanese Society of Pediatric Allergy and Clinical Immunology, The Japanese Society of Allergology. Japanese guidelines for food allergy 2017. Allergol Int. 2017;66(2):248-64.
- Togias A, Cooper SF, Acebal ML, et al. Addendum guidelines for the prevention of peanut allergy in the United States: Report of the National Institute of Allergy and Infectious Diseases–sponsored expert panel. World Allergy Organ J. 2017;10(1):1.
- Recto MST, Genuino MLG, Castor MAR, et al. Dietary primary prevention of allergic diseases in children: The Philippine guidelines. Asia Pac Allergy. 2017;7(2):102-14.
- Scientific Advisory Committee on Nutrition. Assessing the Health Benefits and Risks of the Introduction of Peanut and Hen's Egg into the Infant Diet before Six Months of Age in the UK [Internet]. London (UK): Committee on Toxicity Chemicals in Food, Consumer Products and the Environment; 2018 [cited 2020 Mar 17]. Available from: https://cot.food.gov.uk/sites/ default/files/jointsacncotallergystatementfinal2.pdf
- Fleischer DM, Chan ES, Venter C, et al. A consensus approach to the primary prevention of food allergy through nutrition: Guidance from the American Academy of Allergy, Asthma, and Immunology; American College of Allergy, Asthma, and Immunology; and the Canadian Society for Allergy and Clinical Immunology. J Allergy Clin Immunol Practice. 2021;9(1):22–43.e4.
- Vale SL, Lobb M, Netting MJ, et al. A systematic review of infant feeding food allergy prevention guidelines – can we AGREE? World Allergy Organ J. 2021;14(6), 100550.
- Smith BJ, Tang KC, Nutbeam D. WHO health promotion glossary: New terms. Health Promot Int. 2006;21(4):340–5.
- Mackert M, Case K, Lazard A, et al. Building a health communication brand for University of Texas System tobacco control. J Am Coll Health. 2019;67(4):291–8.
- Pinkney E, Wong HF, Wong PF. Social marketing in health promotion and behaviours in lifestyle modification. In: *Primary Care Revisited*. Singapore (SGP): Springer; 2020. p. 277–94.
- Vallone D, Greenberg M, Xiao H, et al. The effect of branding to promote healthy behavior: reducing tobacco use among youth and young adults. Int J Environ Res Public Health. 2017;14(12):1517.
- Wilson A, Danenberg N. Why Public Health Campaigns Often Neglectthe Simple Rules of Advertising [Ehrenberg-Bass news]. Sydney (AUST): B & TWeekly; 2018.
- Asbury LD, Wong FL, Price SM, Nolin MJ. The VERB campaign: Applying a branding strategy in public health. Am J Prev Med. 2008;34(6 Suppl):5183–57.
- Netting MJ, Allen KJ. Advice about infant feeding for allergy prevention: A confusing picture for Australian consumers? J Paed Child Health. 2017;53:870-5.
- Carlsen B, Glenton C. What about N? A methodological study of sample-size reporting in focus group studies. BMC Res Methodol. 2011;11:26.
- Saunders B, Sim, J, Kingstone T, et al. Saturation in qualitative research: Exploring its conceptualization and operationalization. Qual Quant. 2018;52(4):1893– 907

- National Allergy Strategy. Nip Allergies in the Bub [Internet]. Balgowlah (AUST): NAS; 2018 [cited 2021 Aug 26]. Available from: www.preventallergies.org.au
- Netting MJ, Campbell DE, Koplin JJ, et al. An Australian consensus on infant feeding guidelines to prevent food allergy: Outcomes from the Australian Infant Feeding Summit. J Allergy Clin Immunol Pract. 2017;5(6):1617–24.
- Togias A, Cooper SF, Acebal ML, et al. Addendum guidelines for the prevention of peanut allergy in the United States: Report of the National Institute of Allergy and Infectious Diseases–sponsored expert panel. World Allergy Organ J. 2017;10(1):1.
- 39. Mikhail IJ. Implementation of early peanut introduction guidelines. *Immunol Allergy Clin North Am.* 2019;39(4):459–67.
- Food Allergy Canada. Practical and Credible Information and Resources for Parents and Caregivers of Children with Food Allergy [Internet]. Ontario (CAN): FAC; 2019 [cited 2021 Aug 26]. Available from: https:// foodallergycanada.ca/living-with-allergies/ongoingallergy-management/parents-and-caregivers/earlyintroduction/
- 41. World Health Organization. WHO Definition of Public Health [Internet]. Abuja (NGA): Nigerian Government Department of Public Health; 2019 [cited 2021 Aug 29]. Available from: https://www.publichealth.com.ng/who-definition-of-public-health/
- Wood LJ, Dip P, Rosenberg M, et al. Encouraging young Western Australians to be smarter than smoking. Am J Health Promot. 2009;23(6):403–11.
- Pollard CM, Miller MR, Daly AM, et al. Increasing fruit and vegetable consumption: Success of the Western Australian Go for 285°campaign. *Public Health Nutr.* 2008;11(3):314–20.
- Basu A, Wang J. The role of branding in public health campaigns. J Commun Manag. 2009;13(1):77–91.
- 45. Suarez-Almazor M. Changing health behaviours with social marketing. *Ann Rheum Dis.* 2013;71:19.
- National Allergy Strategy. Food Allergy Prevention Project. Balgowlah (AUST): NSA; 2021 [cited 2021 Sep 20]. Available from: www.nationalallergystrategy.org. au/projects/food-allergy-prevention

Supporting Information

Additional supporting information may be found in the online version of this article:

Supplementary File 1: Parent interview guide.

Supplementary File 2: Health professional interview guide.