Supplemental Online Content

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Association between earlier introduction of peanut and prevalence of peanut allergy in infants in Australia

Authors: Victoria X Soriano, PhD[1,2,3], Rachel L Peters, PhD[1,2], Margarita Moreno-Betancur, PhD[1,2], Anne-Louise Ponsonby, PhD[2,3,4,5], Grace Gell, BSc[1], Alexsandria Odoi, BNS[1,2], Kirsten P Perrett, PhD [1,2,3,6] , Mimi LK Tang, PhD[1,2,3,6], Lyle C Gurrin, PhD[3,5], Katrina J Allen, PhD[7], Shyamali C Dharmage, MD, PhD[3,5], Jennifer J Koplin, PhD[1,2,3,5].

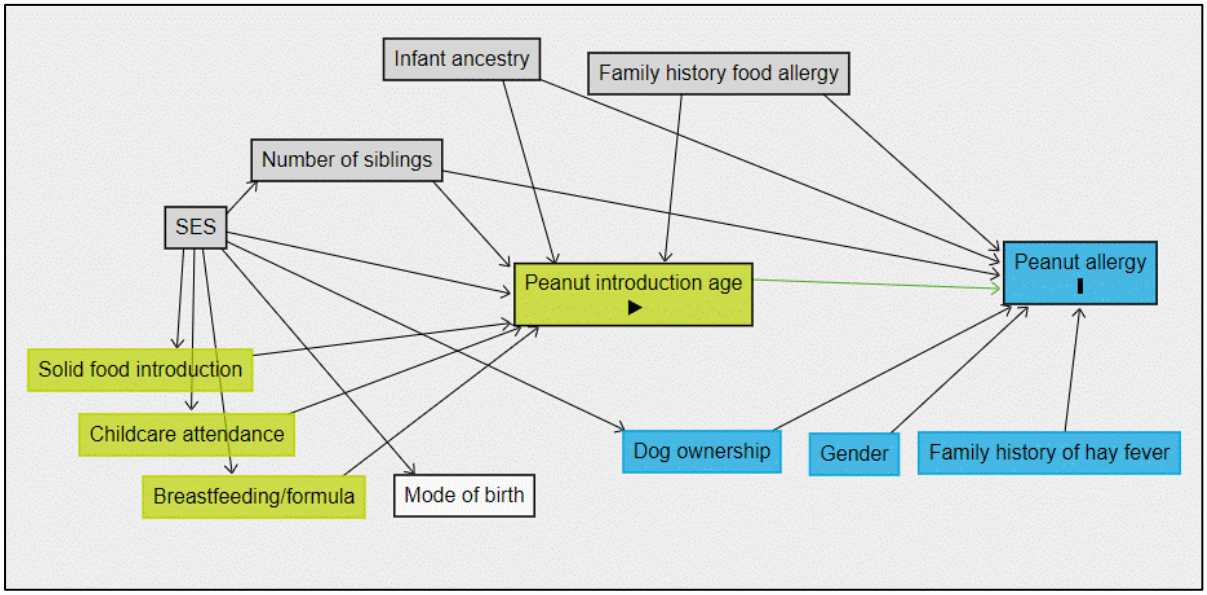
Affiliations: [1]Murdoch Children's Research Institute, Parkville, VIC, Australia, [2]Department of Paediatrics, University of Melbourne, Parkville, VIC, Australia, [3]Centre for Food and Allergy Research (CFAR), Murdoch Children's Research Institute, Parkville, VIC, Australia, [4]Florey Institute of Neuroscience and Mental Health, Parkville, VIC, Australia, [5]School of Population and Global Health, University of Melbourne, Parkville, VIC, Australia, [6]Department of Allergy and Immunology, Royal Children's Hospital, Parkville, VIC, Australia, [7]Federal Parliament of Australia.

Supplementary material

eBox 1. Short, anonymous non-responder survey.

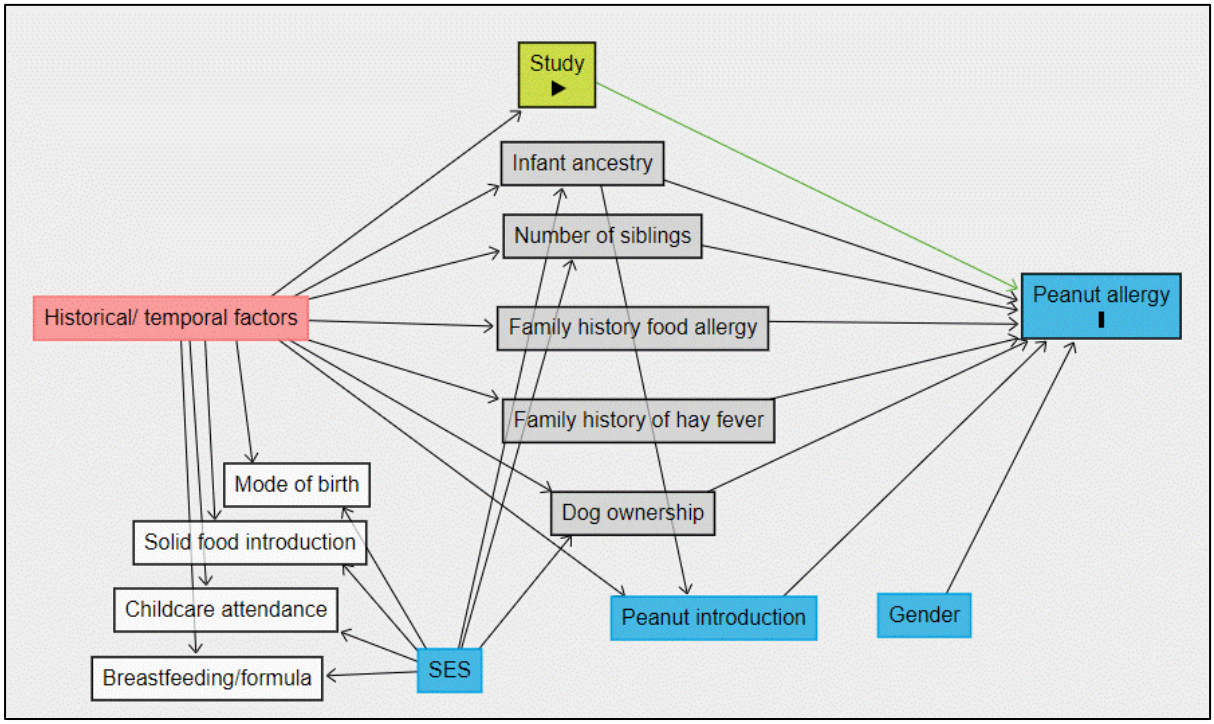
- Reason for not participating,
- Has the child eaten peanut and if yes, reacted to peanut products and age introduced?
- Does the child have any food allergies?
- Has the child ever had eczema?
- Family history of asthma, eczema, hay fever, or food allergy (child's siblings or parents).

eFigure 1. Directed acyclic graph of the association between peanut introduction and peanut allergy.



SES, socioeconomic status. Green rectangles, indicate the exposure and ancestors of the exposure. Gray rectangles, indicate variables adjusted for in the primary model. Blue rectangles, indicate the outcome or ancestors of the outcome. Pink rectangles, ancestor of exposure and outcome. White rectangles, factors not associated to peanut introduction or peanut allergy.

eFigure 2. Directed acyclic graph of temporal changes between studies that may alter the prevalence of peanut allergy.



SES, socioeconomic status. Green rectangle, indicates exposure. Gray rectangles, indicate variables adjusted for in the primary model. Blue rectangles, indicate the outcome or ancestors of the outcome. Pink rectangles, ancestor of exposure and outcome. White rectangles, factors not associated to peanut allergy. Peanut introduction was considered in a subsequent analysis.

eMethods.

Definitions

Baseline study: the HealthNuts study which recruited from 2007-2011 as described in text.

Comparator study: the EarlyNuts study which recruited from 2018-2019 as described in text.

Participation level

Complete participation: Participants were deemed complete participants if they completed questionnaire data and the child underwent a study-run skin prick test in community or in clinic. All infants were required to have a skin prick test to participate in the 2007-2011 study.

Partial participation (2018-2019 study only): In 2007-2011, uptake of skin prick tests was very high as most parents had not introduced peanut and wanted to find test their child's peanut allergy status prior to introducing peanut for the first time. In contrast, most 2018-2019 study parents had already introduced peanut and many declined a skin prick test either because they were eating and tolerating large amounts of peanut or because they had reacted to peanut and had already undergone a test as part of a doctor diagnosis of peanut allergy (see Results).

Participants were deemed partial participants if they completed questionnaire data, but did not have a skin prick test for any reason. To minimize and measure the potential effect of participation bias in the 2018-2019 study, we offered parents who declined skin prick tests the opportunity to participate via questionnaire only.

The primary analyses in this manuscript focus on participants with complete participation in the 2018-2019 study to facilitate comparisons with the 2007-2011 cohort.

Non-participation: Families were deemed non-participants if they declined to participate in the study. Non-participants were asked to answer a brief, anonymous survey (eBox 1).

Exposures

Infant ancestry: Parent-reported maternal and paternal country of birth. Infant ancestry corresponded well with ethnicity (91.5% of Australian ancestry are Caucasian ethnicity and 95.8% of East Asian ancestry are Asian ethnicity) in the 2018-2019 study.

Eczema: Parent-reported eczema was defined according to a response to the question 'Has your child ever been diagnosed with eczema?', followed by 'What age was your child diagnosed with eczema'.

History of tolerating peanut: Infants were considered to be tolerating peanut where parents reported frequent peanut ingestion, multiple times (at least 5 separate times or current weekly ingestion), at least 2 smaller portions, or one large portion (deemed likely over the eliciting dose in 50% of patients (ED50) of 30mg of peanut protein,[2] e.g., a piece of toast with peanut butter), with no reported reactions to the food.

Outcomes

Peanut sensitization: Peanut sensitization was defined as a skin prick test wheal of 2 mm or greater than the negative control.

Peanut allergy: Peanut allergy was defined as a positive oral food challenge or a clear history of recent reaction (within the past 2 months) in infants with a skin prick test wheal of ≥1mm. A 1mm wheal size cut-off was used as a threshold for proceeding to challenge because previous studies in this age group have shown that immunoglobin E (IgE)-mediated peanut allergy can occur in infants with wheal sizes of 1-2mm.[1,3]

Skin prick test: Infants underwent a skin prick test (2007-2011 study: ALK-Abello [Madrid, Spain]; 2018-2019 study : ALK-Abello [Madrid, Spain], Inmunotek S.L.-AMSL supplier [Madrid, Spain], and Greer-Stallergens Greer Ltd, as ALK-Abello was no longer approved for use in Australia soon after the 2018-2019 study began) at recruitment to four foods including peanut and positive and negative controls (histamine and saline, respectively). Skin prick tests were administered on the infant' back using a single-tine lancet (2007-2011 study supplier: Stallergenes Greer Ltd) or Quin-tips® (2018-2019 study supplier: Stallergenes Greer Ltd). Sample skin prick tests were performed by nurses to compare results with the different extracts and showed comparable results. The Quin-tips lancets used in the 2018-2019 study have been shown to give equivalent results as those obtained with single-tine lancets.[4]

Oral food challenge: All infants with a skin prick test wheal size 1 mm or greater than the negative control were invited to a research clinic at The Royal Children's Hospital for a repeat test and an open oral food challenge.[5] Oral food challenges were administered using smooth peanut butter (the brand Bega®, Bega Cheese Limited) mixed into apple puree (the brand SPC®, Shepparton Partners Collective Ltd) following a previously published protocol.[6] Positive and negative challenges were defined as in Osborne et al.[6] Briefly, objective stopping criteria were decided *a priori*. A challenge was deemed *positive* if the infant developed one or more of the following objective symptoms: 3 or more concurrent non-contact urticaria lasting minimum 5 minutes, periorbital or perioral angioedema, vomiting (excluding gag reflex), or evidence of respiratory or circulatory compromise (wheezing, difficulty breathing, physical collapse, etc.), occurring within 2 hours of food ingestion during the food challenge or on the subsequent 7 days of home introduction if the child did not react on day 1. A challenge was deemed *negative* if the infant was able to consume the top dose of the challenge without developing any of the objective symptoms on day 1, and had no reactions in the subsequent 7 days of home introduction servings. Infants who refused to eat the challenge food in clinic were deemed inconclusive.

History of recent reaction: Infants had a history of recent reaction if parents reported a reaction within the previous 2 months, or anaphylaxis ever, with described symptoms equivalent to the oral food challenge stopping criteria occurring within 2 hours of ingestion of the food, and infants had a 1 mm or greater skin prick test wheal (n=13, 1 x 2mm, 12 x 3+ mm) and the child was currently avoiding the food.

Probable/possible allergy: Infants with a skin prick test ≥8mm were considered to have a probable allergy based on the 95% PPV of this cut-off for our population.[7] For participants missing skin prick test outcomes, infants were considered to have probable allergy if parents reported a previous doctor diagnosis of peanut allergy via skin prick test, IgE, or oral food challenge, or a history of recent reaction within 1 hour with symptoms consistent with challenge stopping criteria. If the child underwent an oral food challenge with our study, the challenge result was considered the most up-to-date allergy outcome and overrode any reaction history reported by parents.

Unclear: Infants were considered to have unclear allergy status where we did not have enough data to categorize them.

Statistical analysis

Inverse probability weighting: We conducted a sensitivity analysis using inverse probability weighting to assess whether the prevalence estimates were impacted by potential selection bias due to participation. Weights for each participant were estimated as the inverse of the predicted propensity score or probability of complete participation (vs partial participation) obtained from a logistic regression model fitted with the following covariates associated with participation in the study. These covariates were the history of peanut introduction, parent-reported peanut reactions, parent-reported eczema, and family history of allergy in response to observed differences. Weighted prevalence estimates were then obtained.

eTable 1. Interactions assessed using likelihood ratio testing.

Interactions	2018-2019 study P value	2007-2011 study P value
Peanut introduction and covariate [a]		
Socioeconomic status [b]	.87	.11
Number of siblings, continuous	.26	.57
Infant ancestry	**.002**	.83
Family history of allergy	.32	.33
Dog ownership	.29	.57
Parent-reported early onset eczema [c]	.11	.93

Study year is of enrollment. (a) Interactions were assessed using likelihood ratio testing of the logistic regression models adjusted for socioeconomic status, siblings, parent country of birth, childcare, family history of allergy and dog ownership. (b) Socioeconomic status decile as measured by the Australian Bureau of Statistics, in the IRSAD statistical area 1, 2006 and 2016 based on family postcodes. (c) separate model adding eczema and the interaction with eczema.

eTable 2. Parent-reported country or region of birth in the "Other infant ancestry" category.

Country/region of birth	Mother		Father	
	2018-2019 study n (%)	2007-2011 study n (%)	2018-2019 study n (%)	2007-2011 study n (%)
N	601	1540	601	1540
Australia	178 (29.62%)	562 (36.49%)	120 (19.97%)	377 (24.48%)
UK/Britain	49 (8.15%)	182 (11.82%)	79 (13.14%)	298 (19.35%)
Europe	61 (10.15%)	280 (18.18%)	68 (11.31%)	151 (9.81%)
Middle East	24 (3.99%)	87 (5.65%)	34 (5.66%)	119 (7.73%)
Africa	32 (5.32%)	94 (6.10%)	46 (7.65%)	114 (7.40%)
South America	19 (3.16%)	45 (2.92%)	17 (2.83%)	35 (2.27%)
North America	22 (3.66%)	53 (3.44%)	13 (2.16%)	56 (3.64%)
Oceania	44 (7.32%)	142 (9.22%)	62 (10.32%)	166 (10.78%)
South Asia	141 (23.46%)	46 (2.99%)	153 (25.46%)	215 (13.96%)
East Asia	31 (5.16%)	49 (3.18%)	9 (1.50%)	9 (0.58%)

Study year is of enrollment. Australia and East Asia appear in the other ancestry group, as this is comprised of all infants who do not have both parents born in Australia, both parents born in East Asia, or one parent born in East Asia and the other in Australia. Therefore, some infants in the other category may have one parent from Australia or East Asia, but the other is from one of the other 8 country/regions.

eTable 3. Participant demographics in 2018-2019 and 2007-2011 studies, stratified by parent country of birth.

Characteristic	Australian-born parents, N (%)		East Asian-born parents, N (%)		Other-born parents, N (%)	
	2018-2019 study	2007-2011 study	2018-2019 study	2007-2011 study	2018-2019 study	2007-2011 study
N	864 (49.3)	3023 (59.3)	289 (16.5)	535 (10.5)	601 (34.3)	1540 (30.2)
Infant's sex (male)	456 (52.8)	1514 (50.3)	138 (47.9)	293 (55.2)	321 (53.4)	766 (50.2)
Infant's sex (female)	408 (47.2)	1497 (49.7)	150 (52.1)	238 (44.8)	280 (46.6)	761 (49.6)
Mode of birth (vaginal)	560 (65.0)	2010 (66.6)	191 (66.3)	355 (67.1)	369 (61.5)	1026 (67.2)
Pre-term (<37 weeks)	72 (8.5)	171 (5.8)	13 (4.6)	30 (6.1)	45 (7.6)	92 (6.4)
Parent-reported eczema diagnosis	221 (26.1)	730 (25.3)	126 (44.8)	199 (41.5)	144 (24.8)	336 (23.2)
Any peanut introduced? (<12 months)	729 (92.9)	642 (22.5)	191 (71.8)	83 (16.7)	455 (82.6)	316 (21.6)
Socioeconomic status by postcode [a], median (IQR)	9 (7-10) [n=860]	9 (7-10) [n=3014]	9 (7-10) [n=286]	9 (7-10) [n=535]	9 (7-10) [n=597]	8 (7-10) [n=1536]
Mother age (> 34 years)	291 (34.0)	1051 (34.9)	98 (34.9)	161 (30.4)	243 (41.0)	498 (32.6)
Mother's age, mean (SD)	33.4 (4.6)	33.1 (4.7)	33.4 (4.2)	32.8 (4.7)	33.9 (4.5)	32.7 (4.9)
Number of siblings	N=847	N=2999	N=279	N=532	N=592	N=1521
0	406 (47.9)	1454 (48.5)	134 (48.0)	297 (55.8)	294 (49.7)	762 (50.1)
1	317 (37.4)	1005 (33.5)	105 (37.6)	158 (29.7)	222 (37.5)	516 (33.9)
2	102 (12.0)	417 (13.9)	36 (12.9)	56 (10.5)	52 (8.8)	169 (11.1)
3 or more	22 (2.6)	123 (4.1)	4 (1.4)	21 (3.9)	24 (4.1)	74 (4.9)
Siblings with history of allergy [b, c]	164/344 (47.7)	630/1545 (40.8)	76/119 (63.9)	110/235 (46.8)	112/197 (56.9)	284/759 (37.4)
History of allergy in the infant's family [b]	596 (69.1)	2245 (74.3)	204 (70.8)	351 (65.6)	356 (59.4)	950 (61.7)
Asthma	315 (36.6)	1050 (34.7)	49 (17.1)	119 (22.2)	144 (24.1)	407 (26.4)
Eczema	261 (30.3)	1008 (33.3)	107 (37.4)	151 (28.2)	154 (25.7)	406 (26.4)
Hay fever	421 (48.9)	1628 (53.9)	138 (48.1)	265 (49.5)	250 (41.8)	664 (43.1)
Food allergy	178 (20.6)	394 (13.0)	59 (20.5)	74 (13.8)	95 (15.9)	194 (12.6)
Mother with history of allergy [b]	384 (58.8)	1477 (48.9)	101 (45.7)	202 (37.8)	216 (56.8)	575 (37.3)

Father with history of allergy [b]	371 (56.8)	1245 (41.2)	127 (57.5)	225 (42.1)	199 (52.4)	478 (31.0)
Childcare attendance						
No daycare	505 (59.3)	2137 (72.5)	216 (77.1)	417 (80.5)	408 (69.2)	1118 (75.0)
Yes, 1-6 months	59 (6.9)	218 (7.4)	10 (3.6)	39 (7.5)	33 (5.6)	90 (6.0)
Yes, 7-12 months	287 (33.7)	593 (20.1)	54 (19.3)	62 (12.0)	149 (25.3)	282 (18.9)
Pet dog ownership						
No	484 (56.5)	1828 (60.5)	228 (81.7)	465 (86.9)	473 (79.8)	1237 (80.3)
Yes, allowed inside	232 (27.1)	774 (25.6)	31 (11.1)	48 (9.0)	85 (14.3)	222 (14.4)
Yes, outdoors only or undisclosed location	140 (16.4)	421 (13.9)	20 (7.2)	22 (4.1)	35 (5.9)	81 (5.3)
Infant lives on a farm	11 (1.3)	32 (1.1)	1 (0.4)	0 (0.0)	3 (0.5)	7 (0.5)

Self-reported country of birth. Study year is of enrollment. One or both East Asia comprised of: both parents born in East Asia, or one parent born in East Asia and the other born in Australia. Other comprised of at least one parent from: UK/Britain, Europe, Middle East, Africa, South America, North America, Oceania not including Australia, South Asia. (a) Socioeconomic status decile as measured by the Australian Bureau of Statistics, in the IRSAD statistical area 1, 2006 and 2016 based on family postcodes. (b) Family comprised of the infant's mother, father, and siblings. Allergy history includes asthma, eczema, hay fever, or food allergies. (c) This excludes participants without siblings.

eTable 4. Demographic characteristics of both studies compared to population data from the Victorian Perinatal Data Collection.

Characteristic					VPDC
	2018-2019 study	95% CI	2007-2011 study	95% CI	2016
N	1933		5276		
Sex (% male)	51.8	49.6 - 54.0	50.8	49.5 - 52.2	51.3 [a]
Sex (% female)	48.2	46.0 - 50.4	49.2	47.8 - 50.5	48.7
Mode of delivery (% vaginal)	63.7	61.4 - 65.8	66.8	65.5 - 68.0	66.0
Maternal age mean (years)	33.6	SD 0.1	33.0	SD 0.1	31.1 [a]
% mothers > 34 years	36.8	34.6 - 39.1	33.9	32.6 - 35.2	25.3
% Pre-term birth (<37 weeks)	7.5	6.3 - 8.8	6.1	5.5 - 6.8	8.3
Maternal country of birth (% Australia)	60.9	58.6 - 63.2	71.8	70.5 - 73.0	61.5 [b]
Family history of asthma (%)	29.5	27.4 - 31.7	30.7	29.5 - 31.9	NA
Family history of eczema (%)	30.1	28.0 - 32.3	30.5	29.3 - 31.8	NA
Family history of hay fever (%)	46.2	43.9 - 48.5	50.0	48.7 - 51.4	NA
Family history of food allergy (%)	19.2	17.4 - 21.1	12.9	12.1 - 13.9	NA

Study year is of enrollment. VPDC, Victorian Perinatal Data Collection 2016. **(a)** Australian Institute of Health and Welfare **(b)** Data from 2005-2006 were 75.2%.

eTable 5. Characteristics of the 2018-2019 study participants compared to non-participant survey.

Characteristic	Participants with skin prick tests [a]			Participants without skin prick tests [b]			No participation [c]		
	n/N	%	95% CI	n/N	%	95% CI	n/N	%	95% CI
Eaten peanut ever	1167/1343	**86.9**	85.0-88.6	424/448	**94.6**	92.1-96.4	581/698	**83.2**	80.3-85.8
Reacted to peanut, ever	45/1164	**3.87**	2.90-5.14	21/423	**4.96**	3.25-7.51	16/567	**2.82**	1.73-4.56
Parent-report food allergy	132/1039	**12.7**	10.8-14.9	63/439	**14.4**	11.4-18.0	53/691	**7.7**	5.9-9.9
Parent-report eczema	393/1327	**29.6**	27.2-32.1	131/467	**28.1**	24.1-32.3	217/692	**31.4**	28.0-34.9
Family history allergy	881/1325	**66.5**	63.9-69.0	302/472	**64.0**	59.5-68.2	106/689	**15.4**	12.9-18.3

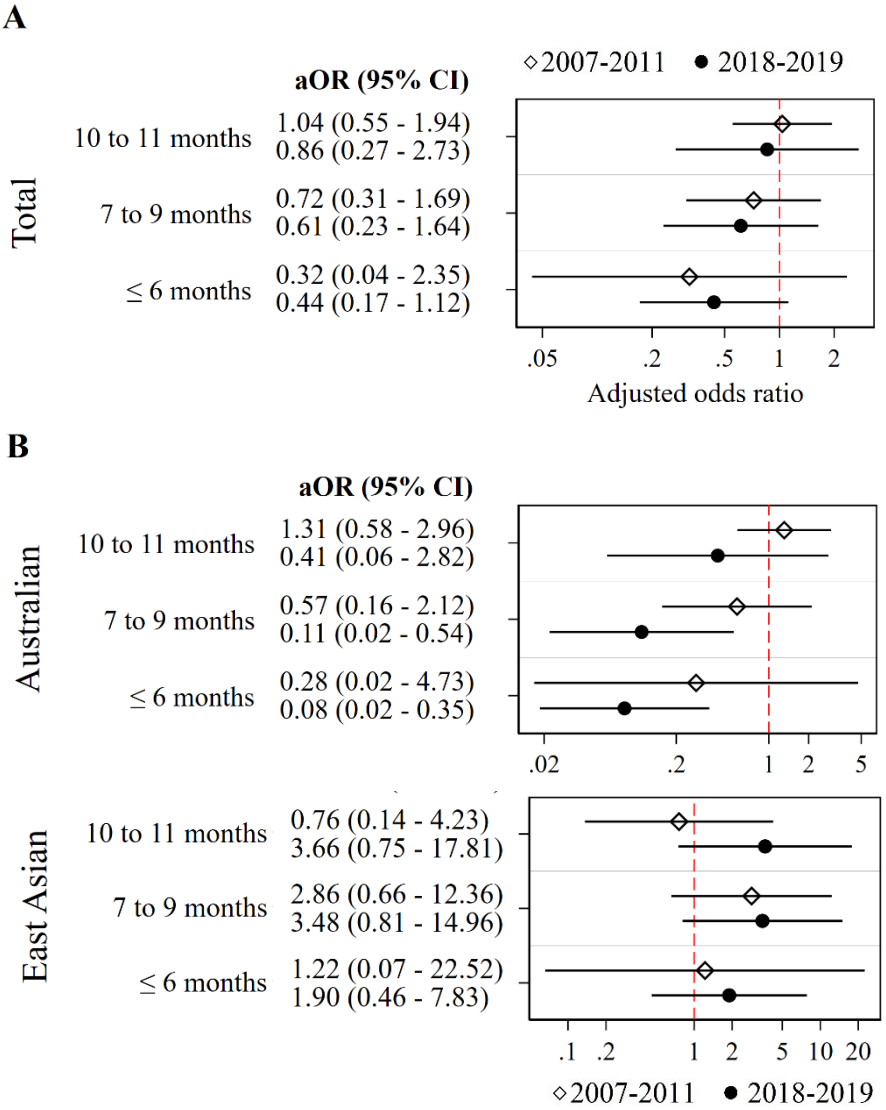
Difference between Ns are due to missing values. **(a)** Family completed both questionnaires and skin prick test. **(b)** Families completed study questionnaires, but refused consent for a skin prick test. Among the 21 partial participants who reacted to peanut, 18 reported a previous diagnosis of peanut allergy: 4 by oral food challenge and 15 by IgE/skin prick test. Among the 63 partial participants who reported any food allergy, 53 reported doctor diagnoses of food allergy: 8 by oral food challenge and 45 by IgE/skin prick test. (c) Individuals who refused participation, but responded to a short, anonymous non responder survey.

eTable 6. Observed peanut introduction before 12 months, stratified by infant ancestry and early eczema.

Peanut introduction at <12 months of age	2018-2019 study		2007-2011 study	
	n/N	% (95% CI)	n/N	% (95% CI)
Whole cohort	**1506/1759**	**85.6 (83.9-87.2)**	**1074/4971**	**21.6 (20.5-22.8)**
Early eczema	175/210	83.3 (77.6-87.8)	83/557	14.9 (12.2-18.1)
No early eczema	1166/1348	86.5 (84.6-88.2)	901/4006	22.5 (21.2-23.8)
Australian ancestry	**729/785**	**92.9 (90.8-94.5)**	**642/2857**	**22.5 (21.0-24.0)**
Early eczema	87/ 93	93.5 (86.2-97.1)	54/309	17.5 (13.6-22.1)
No early eczema	602/648	92.9 (90.6-94.6)	539/2336	23.1 (21.4-24.8)
East Asian ancestry [a]	**191/266**	**71.8 (66.1-76.9)**	**83/498**	**16.7 (13.6-20.2)**
Early eczema	37/ 54	68.5 (54.6-79.8)	6/100	6.0 (2.7-12.9)
No early eczema	137/188	72.9 (66.0-78.8)	62/322	19.3 (15.3-24.0)
Other ancestry [b]	**455/551**	**82.6 (79.2-85.5)**	**316/1466**	**21.6 (19.5-23.7)**
Early eczema	35/ 46	76.1 (61.1-86.5)	19/140	13.6 (8.8-20.4)
No early eczema	383/460	83.3 (79.6-86.4)	271/1211	22.4 (20.1-24.8)

Study year is of enrollment. Early eczema defined as eczema diagnosed by 6 months and use of topical steroids (see details in Methods). **(a)** Both parents born in East Asia, or one parent born in East Asia and the other born in Australia. **(b)** Other comprised of mixes of parents from Australia, UK, Europe, Middle East, Africa, South America, North America, Oceania, South Asia, and East Asia with prevalence of ancestries varying between studies.

eFigure 3. Association between age of peanut introduction and peanut allergy at 1 year with early eczema as an additional potential confounding variable.



(A) In each whole cohort (n=4,074 in 2007-2011 study, diamond, and n=1,056 in 2018-2019 study, solid circle) and **(B)** stratified by infant ancestry (Australian: n=2,383 in 2007-2011 and n=537 in 2018-2019; East Asian: n=367 in 2007-2011 and n=179 in 2018-2019). Firth's penalized likelihood logistic regression was used in (B) because sample sizes were too small to use a conventional maximum likelihood logistic regression. Reference group is infants who delayed peanut introduction to 12 months or beyond. aOR, odds ratio adjusted for SES, number of siblings, family history of food allergy, early-onset eczema, and infant ancestry (unless stratified by the factor).

eTable 7. Unadjusted association between age of peanut introduction and peanut allergy at 1 year.

Peanut introduction	2018-2019 study	2007-2011 study
	OR (95% CI)	**OR (95% CI)**
Whole cohort	N=1,311	N=4,786
≥ 12 months	1.00	1.00
10 to ≤ 11 months	0.62 (0.21 - 1.77)	0.83 (0.47 - 1.45)
7 to ≤ 9 months	0.47 (0.20 - 1.06)	0.57 (0.26 - 1.23)
≤ 6 months	0.37 (0.17 - 0.80)	0.56 (0.17 - 1.76)
Australian ancestry	N=599	N=2,773
≥ 12 months	1.00	1.00
10 to ≤ 11 months	0.24 (0.03 - 2.14)	1.08 (0.51 - 2.31)
7 to ≤ 9 months	0.15 (0.03 - 0.65)	0.57 (0.18 - 1.86)
≤ 6 months	0.08 (0.02 - 0.33)	0.48 (0.07 - 3.49)
East Asian ancestry [a]	N=207	N=459
≥ 12 months	1.00	1.00
10 to ≤ 11 months	2.21 (0.52 - 9.50)	0.65 (0.15 - 2.84)
7 to ≤ 9 months	2.38 (0.63 - 8.99)	0.93 (0.21 - 4.10)
≤ 6 months	1.90 (0.53 - 6.85)	0.93 (0.12 - 7.33)

Univariate logistic regression model. Reference group is those who delayed introduction to 12 months or beyond. Study year is of enrollment. **(a)** Both parents born in East Asia, or one parent born in East Asia and the other born in Australia. **(b)** Other comprised of mixes of parents from Australia, UK, Europe, Middle East, Africa, South America, North America, Oceania, South Asia, and East Asia with prevalence of ancestries varying between studies.

eTable 8. Peanut allergy prevalence in 2018-2019 compared to 2007-2011, stratified by infant ancestry.

Infant ancestry	2018-2019 study			2007-2011 study		
	Peanut allergy		Standardized peanut allergy [a]	Peanut allergy		
	n/N	% (95% CI)	% (95% CI)	n/N	% (95% CI)	P value
Australia	12/636	1.9 (1.1-3.3)	2.0 (1.0-3.2)	67/2935	2.3 (1.8-2.9)	.74
East Asian [d]	21/220	9.5 (6.3-14.2)	10.4 (6.4-14.6)	37/493	7.5 (5.5-10.2)	.28

P value for difference between 2007-2011 and adjusted 2018-2019 study values. Study year is of enrollment. **(a)** Standardized to baseline 2007-2011 distribution of the confounding factors dog ownership, number of siblings, and family history of hay fever or food allergy. **(b)** Both parents born in East Asia or one parent born in East Asia and one born in Australia.

eTable 9. Peanut allergy prevalence by presence of early-onset eczema.

Eczema	2018-2019 study Peanut allergy		2018-2019 study Standardized peanut allergy [a]	2007-2011 study Peanut allergy		P value
	n/N	% (95% CI)	% (95% CI)	n/N	% (95% CI)	
No	22/1090	2.0 (1.3-3.0)	1.8 (1.1-2.6)	67/4140	1.6 (1.3-2.1)	.62
Yes	20/165	12.1 (7.9-18.1)	9.3 (5.2-13.9)	73/516	14.1 (11.4-17.4)	.08

P value for absolute difference between 2007-2011 and adjusted 2018-2019 study values. Study year is of enrollment. (**a**) Standardized to baseline 2007-2011 study distribution of the confounding factors infant ancestry, dog ownership, number of siblings, and family history of hay fever or food allergy.

eTable 10. Peanut allergy prevalence by age of introduction of peanut in 2018-2019 compared to 2007-2011.

Age of introduction	2018-2019 study Peanut allergy	2018-2019 study Standardized peanut allergy [a]		2007-2011 study Peanut allergy			P value
	n/N	%	95% CI	n/N	%	95% CI	
≤ 6 months	14/597	2.4	1.1 - 3.9	3/162	1.9	0.6 - 5.6	.82
7 to ≤ 9 months	11/373	2.3	1.0 - 3.7	7/368	1.9	0.9 - 3.9	.98
10 to ≤ 11 months	5/129	3.7	1.1 - 7.2	14/513	2.7	1.6 - 4.6	.74
≥ 12 months	13/212	5.2	2.7 - 8.3	123/3743	3.3	2.8 - 3.9	.24

P value for the change from standardized 2018-2019 to 2007-2011 study. Study year is of enrollment. **(a)** Standardized to baseline 2007-2011 study distribution of the confounding factors infant ancestry, dog ownership, number of siblings, and family history of hay fever or food allergy.

eTable 11. Peanut allergy prevalence in 2018-2019 by age of introduction of peanut, adjusted adding early eczema into the model compared to the observed 2007-2011 prevalence as a sensitivity analysis.

Age of introduction	2018-2019 study Standardized peanut allergy [a]		2007-2011 study Peanut allergy	
	%	95% CI	%	95% CI
≤ 6 months	2.6	1.4 - 4.0	1.9	0.6 - 5.6
7 to ≤ 9 months	3.0	1.5 - 4.5	1.9	0.9 - 3.9
10 to ≤ 11 months	4.1	2.0 - 6.2	2.7	1.6 - 4.6
≥ 12 months	4.3	2.6 - 6.1	3.3	2.8 - 3.9

Study year is of enrollment. **(a)** Standardized to baseline 2007-2011 study distribution of the confounding factors infant ancestry, dog ownership, number of siblings, family history of hay fever or food allergy, and parent-reported eczema.

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