

at 8 and 24 years was related to reported symptoms at 24 years: An Ara h 2-IgE of 9.53 and 1.54 kU_A/L at 8 and 24 years, respectively, corresponded to a 95% likelihood of peanut symptoms at 24 years.

Conclusion: Sensitization to peanut extract plateaus after 8 years of age. Development of Ara h2 sensitization rarely emerges after eight years of age. Ara h 2 sensitization is a strong predictor of reported peanut allergy in adulthood.

1497 | Early introduction of peanut, egg, and milk among black and white food-allergic children in the forward study

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Background: Early dietary introduction of certain allergenic foods before 6 months of age may decrease food allergy (FA) incidence. Considering racial differences in US FA prevalence, this study characterizes timing of peanut, egg, and milk introduction among food-allergic Black and White children.

Method: Black and White children (0-12 years old) with a diagnosed FA were enrolled into a prospective, multi-site, cohort study. In the intake survey, parents of children with peanut (n = 182; 68 Black/114 White), egg (n = 136; 99 White/37 Black), and milk (n = 82; 27 Black/55 White) allergies reported timing of dietary introduction of each allergenic food. Age of introduction was categorized into ≤ 6 months, 7-10 months, and ≥ 11 months. Pearson X² tests were used to compare timing of food introduction by race.

Results: Only 2.9% of Black children with peanut allergy were introduced to peanut at ≤ 6 months, 8.8% between 7-10 months, and 88.2% at ≥ 11 months, compared to White children (21.9%, 25.4%, and 52.6% respectively) (X² = 4.66; P < .001). For milk, 25.9% of Black children were introduced at ≤ 6 months, 18.5% between 7-10 months, and 55.6% at ≥ 11 months, compared to White children (49.1%, 23.6%, and 27.3%) (X² = 6.52; P = .04). Finally, 10.8% of Black children were introduced egg at ≤ 6 months, 27.0% between 7-10 months, and 62.2% at ≥ 11 months, compared to White children (25.3%, 32.3%, and 42.4%) (X² = 5.07; P = .08).

Conclusion: Peanut, milk, and egg are introduced earlier to White children compared to Black children, which may contribute to racial differences in FA prevalence. Additional education on the NIAID's 2017 Prevention of Peanut Allergy Guidelines may be needed.

1531 | Prenatal egg consumption and infant sensitization to egg and peanut in the CHILD cohort

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Background: Egg and peanut are common food allergens in young children. We examined associations between maternal egg consumption during pregnancy and infant sensitization to egg and peanut at ages 1 and 3 years. We also investigated if the timing of infant introduction to egg and peanut modified these associations.

Method: CHILD participants were recruited from the general population before birth. Number of days per week on which egg was consumed during pregnancy was reported prenatally. Infant diet was reported at birth and every 3-6 months. At ages 1 and 3 years, sensitization to egg and peanut were measured by skin prick testing and atopic dermatitis was diagnosed clinically. Multivariable logistic regression was used to examine associations among frequency of maternal egg consumption during pregnancy, timing of infant dietary egg and peanut introduction, and infant sensitization to egg and peanut.

Results: Among 2912 CHILD participants at 1 year, 7.4% were sensitized to egg and 5.0% were sensitized to peanut; at 3 years, 2.2% were sensitized to egg and 3.8% were sensitized to peanut. Infant sensitization to egg and peanut at 1 and 3 years did not vary depending on frequency of prenatal egg consumption as long as it was less than daily. After evaluating for potential confounding by moderate-severe atopic dermatitis in the first year, timing of breastfeeding, parental food allergy and other atopic conditions, older siblings, sibling food allergies, race, sex, study centre and socioeconomic status, infants of mothers who ate egg at least daily while pregnant (3.8%) were over twice as likely to be sensitized to egg at ages 1 year (adjusted odds ratio [OR] 2.63; 95% confidence interval [CI]: 1.46-4.72) and 3 years (OR 4.19; 95% CI: 1.80-9.76). The associations persisted regardless of timing of infant dietary egg introduction before or after 6, 9 or 12 months. Furthermore, infants of mothers who ate egg at least daily while pregnant were over twice as likely to be sensitized to peanut at ages 1 year (OR 2.48; 95% CI: 1.24-4.99) and 3 years

(OR 2.68; 95% CI: 1.19-6.01). The associations persisted regardless of timing of infant dietary peanut introduction.

Conclusion: Infant sensitization to egg and peanut was more likely with daily maternal consumption of egg prenatally, even after accounting for ages of infant dietary egg and peanut introduction, respectively. Investigations of the mechanisms of these associations are ongoing.

1563 | No cashew allergy in children introduced to cashew by age 1 year

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Background: Evidence that introduction of peanut and egg before 12 months of age reduces the risk of food allergy has led to a paradigm shift in infant feeding advice, with guidelines recommending introduction of allergenic foods such as egg and peanut in the first year of life. However, due to lack of evidence, there was no specific recommendation for tree nut introduction. We aimed to determine whether the introduction of cashew in the first year of life is associated with cashew allergy risk at age 6 years.

Method: A population-based sample of 5276 children was recruited into the HealthNuts study at age 1 year and followed up to age 6 years. At recruitment, parents completed a questionnaire including data on the timing of food introduction in the infant's diet; skin prick testing (SPT) was performed to 4 foods (not cashew) and infants with evidence of sensitisation were invited for oral food challenge (OFC). At age 6, participants completed a comprehensive health assessment which included SPT to 8 foods including cashew. Those with SPT wheal \geq 1 mm were offered OFC. Cashew allergy at age 6 years was informed by OFC, SPT and questionnaire responses.

Results: Complete data on cashew introduction, relevant confounders were available for 2925 with a cashew allergy outcome and 2539 for cashew sensitisation. By 12 months of age 4.8% (N = 140/2925, 95%CI 4.0%-5.6%) of infants had consumed cashew. The prevalence of cashew sensitisation at age 6 years was 4.8% (95%CI 4.0-5.7) and cashew allergy was 3.4% (95%CI 2.8%-4.1%). No child who ate cashew \leq 12 months of age developed cashew allergy at age 6 (0%; 95%CI 0%-2.6%), compared to 3.6% (95%CI 2.9%-4.4%) of children who had not consumed cashew by age 12 months. After adjustment for confounding variables, there was weak evidence that introduction of cashew by age 12 months was associated with reduced odds of cashew allergy (aOR 0.19, 95% CI 0.00-1.09; P = .07); this association was independent of age of peanut introduction. The magnitude of association was similar for cashew sensitisation but confidence intervals were wider (aOR 0.22; 95% CI, 0.03-1.61; P = .14).

Conclusion: We present the first evidence that introduction of cashew in the first year of life is associated with a reduced risk of cashew allergy in a population-based cohort, although confidence intervals were wide and marginally crossed the null. Clinical trials are required to assess how cashew, can be safely and effectively introduced into the infant's diet and its impact on cashew allergy.

OAS 32 Diagnosis and Management of Drug Allergy

0514 | Title: Treating Through in Drug Allergy: What do the allergists think about?

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Background: The standard approach to drug hypersensitivity reactions (HSR) is to replace the agent that causes the reaction with a safe alternative. After a risk-benefit analysis, the treatment regime with a presumed culprit drug could be maintained despite the possibility of a HSR and this approach is termed as 'treating through (TT)'. We aimed to observe the perspective of allergists on this approach.

Method: A 20-question survey, specially prepared for the study, was sent to adult and pediatric allergy fellows and consultants via e-mail.

Results: 180 allergists (81 adult, 69 pediatric) completed the survey. The majority (57%) were seeing at least one or even more patients with the suspicion of drug allergy daily and considering themselves (61%) as sufficiently knowledgeable in regards to drug allergy. TT method hasn't been heard by 39% of pediatric allergists and 22% of adult allergists (P = .031). A total of 56 physicians (38%) reported having no experience in TT before, 83% have described it as a risky procedure. The ones who had performed this approach have opted in drug HSR presented with urticaria (57.5%), maculopapular erythema (37.8%), and flushing (27.2%) and they haven't experienced any serious side effects. The majority of physicians prefer not to use this method for cases with nephropathy, high liver enzyme values, diffuse pustulosis and anaphylaxis. Physicians stated that they would never perform a TT with agents such as allopurinol, aspirin and taxanes.

Conclusion: Mild drug HS reactions seem to encourage allergists to perform TT. Awareness about this approach and careful determination of risk-benefit analyze may increase the use of this practical method by allergists in selected cases.