Early Solid Food Introduction: Role in Food Allergy Prevention and Implications for Breastfeeding

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Food allergy is estimated to affect 2%-10% of the population worldwide.[1] The US Centers for Disease Control and Prevention reported an increase in food allergy prevalence in the US from 3.4% to 5.1% between 1997 and 2011.[2] As a result, the focus in food allergy research has shifted from treatment to prevention.[2]

Some studies have suggested that early introduction of allergenic solids, before age 6 months, may be an effective means of prevention, particularly for egg and peanut allergy.[3] However, earlier introduction of solid food risks directly contradicting current World Health Organization (WHO) recommendations, as well as many general pediatric guidelines, specifying exclusive breastfeeding until age 6 months.[4-6] The WHO recommendations were not meant for allergy prevention and were developed before recent research that has solidified a relationship between food allergy prevention and early solid food introduction. However, the potential implications of earlier solid food introduction on the benefits of exclusive breastfeeding, as well as total breastfeeding duration, must be evaluated as well. Here we explore the evidence suggesting that introduction of solid foods before age 6 months might reduce the risk of food allergy. In addition, we review the possible implications of earlier solid food introduction on both the benefits of exclusive breastfeeding and the total duration of breastfeeding.

The Role of Solid Food Introduction Before Age 6 Months in Food Allergy Prevention

Several key observational studies published over the last decade have suggested that the introduction of potentially allergenic solid foods before age 6 months may be associated with a decreased risk of developing food allergy (see the **Table** for a summary of key studies). In 2008, a questionnaire-based survey found a 10-fold higher prevalence of peanut allergy among Jewish schoolchildren in the United Kingdom compared with Jewish schoolchildren in Israel (1.85% vs 0.17%; $P < .001$).[7] This difference in prevalence was attributed to earlier and more frequent peanut exposure in the first year of life in Israel compared with the United Kingdom. In 2010, an Australian population-based cross-sectional study of 2589 infants found that introduction of egg at age 4-6 months was associated with a lower prevalence of egg allergy compared with later introduction (aOR, 1.6 for introduction at 10-12 months and 3.4 for introduction after 12 months).[8] In the same year, a prospective study of the feeding history of more than 13 000 Israeli infants found that regular exposure to cow's milk formula starting within the first 14 days of life was associated with a lower risk of cow's milk allergy compared with later exposure (OR, 19.3 for introduction after 14 days).[9] In addition, a case-control study noted that delaying cow's milk introduction for more than 1 month after birth, or feeding it irregularly, was associated with a higher rate of cow's milk allergy (aOR, 23.7 compared with control and 10.2 compared with the egg allergy group).[10]

Several recently published observational studies also have suggested that increased food diversity early in life can decrease the risk of allergic diseases, including food allergy. In 2011, a longitudinal birth cohort of 594 infant–mother pairs in the US noted that complementary food introduction before age 4 months reduced the risk of peanut sensitization (aOR, 0.2; $P = .007$), and perhaps egg sensitization as well (if egg-specific IgE ≥ 0.70 kU/L was used as a cutoff; OR, 0.5; $P = .022$) at age 2 years in children with parents with allergies or asthma.[11]

AAP	American Academy of Pediatrics
CPS	Canadian Paediatric Society
EAT	Enquiring About Tolerance
LEAP	Learning Early About Peanut
NNT	Number needed to treat
SPT	Skin prick test
WHO	World Health Organization

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Table. Key food allergy prevention studies in the 4- to 6-month interval

Authors and countries	Year	Number of participants	Study design	Outcome studied	Key findings
Observational studies					
Du Toit et al[7], United Kingdom and Israel	2008	5171 Jewish schoolchildren in the United Kingdom and 5615 Jewish schoolchildren in Israel	Clinically validated questionnaire to determine peanut allergy prevalence and its relationship to peanut consumption during infancy	Peanut allergy (identified on questionnaire; followed by peanut-specific IgE or SPT or oral challenge)	Higher incidence of peanut allergy in United Kingdom children compared with Israeli children (1.85% vs 0.17%; $P < .001$). Peanut introduced earlier and eaten more frequently in Israel than in the United Kingdom.
Johnson et al[11], US	2011	594 infant–mother pairs from the general population	Longitudinal birth cohort investigating relationship between early food introduction and food sensitization	Food sensitization (specific IgE to egg, milk, peanut) at age 2-3 y	Decreased peanut sensitization with complementary food introduction before age 4 mo (aOR, 0.2); decreased egg sensitization if egg-specific IgE ≥0.70 kU/L used as cutoff (OR, 0.5) in children with parental atopy
Katz et al[9], Israel	2010	13 019 infants from the general population	Prospective birth cohort to determine risk factors for cow's milk allergy development	Cow's milk allergy (cow's milk SPT and oral challenge)	Decreased incidence of cow's milk allergy with cow's milk introduction in first 14 d of life (OR, 19.3 for introduction >14 d)
Koplin et al[8], Australia	2010	2589 infants from the general population	Population-based cross-sectional study investigating relationship between egg allergy and age of solid introduction	Egg allergy (egg SPT an oral challenge)	Decreased egg allergy with egg introduction at age 4-6 mo (aOR, 1.6 at for introduction at age 10-12 mo)
Nwaru et al[12], Finland	2010	994 infants from the general population with HLA-conferred susceptibility to type I diabetes	Prospective birth cohort examining relationship between age of introduction of solid foods and allergen-specific IE levels at age 5 y	Food allergen sensitization (defined by allergen-specific IgE levels) at age 5 y	Increased food allergen sensitization with delayed introduction of multiple foods including potatoes (>4 mo), oats (>5 mo), wheat (>6 mo), and meat (>5.5 mo)
Onizawa et al[10], Japan	2016	51 infants with IgE-mediated cow's milk allergy	Retrospective case-control study comparing infants with cow's milk allergy with 102 matched controls and 32 matched infants with egg allergy	Variables associated with cow's milk allergy development	Increased cow's milk allergy with delayed (>1 mo after birth) or infrequent (<1/d) cow's milk exposure (aOR, 23.7 compared with control; 10.1 compared with egg allergy group)
Clinical trials					
Bellach et al[20], Germany	2016	406 infants from the general population (screened by egg-specific IgE first; included those who were negative)	Randomized controlled trial of pasteurized raw egg powder introduction 3 times/wk at 4-6 mo vs placebo until age 1 y	Egg allergy (egg-specific IgE and oral challenge) at age 12 mo	No difference in rate of egg allergy (2.1% vs 0.6%; $P = .35$) or egg sensitization (5.6% vs 2.6% $P = .24$); high reaction rate (~5%) with early introduction
Du Toit et al[13], United Kingdom	2015	640 infants age 4-11 mo with eczema or egg allergy	Randomized controlled trial of early peanut introduction (6 g of peanut protein distributed into 3 or more meals per week) at age 4-11 mo or avoidance until age 5 y	Peanut allergy (oral food challenge) at age 5 y	Decreased peanut allergy with peanut introduction at age 4-11 mo compared with 5 y (3.2% vs 17.2%; adjusted relative risk, 14; NNT, 7.1)
Natsume et al[16], Japan	2016	121 infants with eczema	Randomized controlled trial of heated egg powder daily from age 6 mo vs avoidance until age 12 mo	Egg allergy at age 12 mo	Decreased egg allergy with early introduction (8.3% vs 37.7%; $P = .0013$)
Palmer et al[18], Australia	2013	86 infants with moderate to severe eczema	Randomized controlled trial of daily pasteurized raw egg powder introduction at age 4 mo vs avoidance until age 8 mo	Egg allergy at age 1 y (egg SPT and pasteurized raw egg challenge)	Nonsignificant decrease in egg allergy with introduction at 4 mo (33% vs 51%; $P = .11$), but increased egg-specific IgG4 ($P < .001$); high rate of reactions with early introduction (31% of 4-mo group)
Palmer et al[19], Australia	2016	820 infants with a family history of atopy	Randomized controlled trial of daily pasteurized raw egg powder introduction at age 4-6.5 mo vs avoidance until age 10 mo	Egg allergy at age 1 y (egg SPT and pasteurized raw egg challenge)	Nonsignificant decreased in egg allergy with introduction at 4-6.5 mo (7.0% vs 10.3%; $P = .20$), but increased egg-specific IgE in 4-6.5 mo group vs 10 mo group ($P < .0001$)
Perkin et al[15,28], United Kingdom	2016	1303 exclusively breastfed infants from the general population	Randomized controlled trial to early (3 mo) or standard (6 mo) introduction of 6 allergenic foods (cows milk, egg, wheat, fish, peanut, sesame)	Food allergy to 1 of 6 intervention allergens at age 1-3 y (oral food challenge)	Nonsignificant difference in rate of food allergy in intention-to-treat analysis; decreased rates of peanut allergy (0% vs 2.5%; NNT, 40) and egg allergy (1.4% vs 5.5%; NNT, 26) in per protocol analysis
Tan et al[17], Australia	2016	319 infants with a family history of atopy and SPT <2 mm to egg	Randomized controlled trial of daily pasteurized whole egg powder at age 4 mo vs placebo (egg introduction at age 8 mo)	Egg allergy at age 1 y (egg SPT and egg oral challenge)	Decreased rate of egg sensitization (20% vs 11%; OR, 0.46); nonsignificant trend toward reduced egg allergy with introduction at age 4 mo vs 8 mo.
Ongoing studies					
PreventADALL (ongoing), Norway		2500 infants from the general population	Open label randomization to either, both, or neither of 2 interventions: introduction of allergenic foods (egg, milk, wheat, peanut) by age 4 mo and regular emollient use	Presence of atopic dermatitis and food allergy to 1 of the 4 intervention allergens	Ongoing
PEAAD (ongoing), Germany		Children with eczema aged 5-30 mo	Primary care provider chooses regular peanut consumption or avoidance for 1 y	Peanut allergy 1 y after enrollment	Ongoing

HLA, human leukocyte antigen; *IgE*, Immunoglobulin E.

Data from a prospective Finnish birth cohort of 994 children found that delayed introduction of multiple foods, including oats (>5 months) and wheat (>6 months), was significantly associated with food allergen sensitization.[12]

Although observational studies can show association but not causation, the evidence indicating that earlier solid food introduction is strongly associated with a lower rate of food allergy has been further supported by key randomized controlled trials over the past several years. The most compelling evidence to date comes from the Learning Early About Peanut (LEAP) study, which randomized 640 high-risk infants (with high-risk defined as severe eczema, egg allergy, or both) in the United Kingdom into early (age 4-11 months) and delayed (avoidance until age 5 years) peanut introduction.[13] The LEAP study demonstrated a significant reduction in the development of peanut allergy with early peanut introduction; peanut allergy developed in 3.2% of the early introduction group, compared with 17.2% of the avoidance group ($P < .001$; absolute risk reduction, 14; number needed to treat [NNT], 7.1). The LEAP study stratified the participants by screening skin tests into 2 groups—a peanut skin test–negative group and a minimally skin test–positive group—as a measure of risk stratification. (Children with a skin prick test [SPT] result of ≥5 mm were excluded and considered highly likely to already be allergic.) The treatment effect was heterogeneous with respect to skin testing, with an NNT of 8.5 for children with a negative test and an NNT of 4 for those with a mildly positive test. A subsequent follow-up study (LEAP-ON) investigating intentional peanut avoidance in both groups for 12 months after the end of the LEAP study from age 5-6 years demonstrated no significant increase in peanut allergy in either group, supporting the idea that early peanut tolerance is not a transient phenomenon.[14]

A sister trial, the Enquiring About Tolerance (EAT) study, examined infants in the general population without preexisting risk of allergic disease randomized to early introduction of multiple, sequential allergenic foods.[15] The EAT study randomized 1303 infants to early (3 months) or standard (6 months) introduction of 6 allergenic foods (milk first for all children, then randomly ordered introduction of egg, wheat, sesame, peanut, and fish) and examined the prevalence of food allergy at age 1-3 years. Although this study found no difference in the rates of allergy development between groups in an intention-to-treat analysis, significant reductions were seen in the rates of peanut allergy (0% vs 2.5%; $P = .003$; NNT, 40) and egg allergy (1.4% vs 5.5%; $P = .009$; NNT, 26) in the early introduction group in an adjusted per protocol analysis. However, this study had critical issues with protocol adherence; only 42.8% of the patients in the early introduction group adhered to the diet, to some foods better than others, raising the issues of possible reverse causality and questionable statistical power owing to dropout.

To date, several trials have investigated the effects of early egg introduction. The most successful results are from a randomized controlled trial of Japanese infants with eczema, which was halted early owing to its overwhelming success.[16] Results from this study of 121 infants with eczema show that randomization to heated egg powder at age 6 months was associated with a significantly lower rate of egg allergy compared with avoidance until age 12 months (8% vs 38%; $P = .0001$), with no difference in the rates of most adverse events between the 2 groups. Other early egg introduction trials have had less success in demonstrating any significant effect in reducing risk of egg allergy development. The Beating Egg Allergy study found that in 319 infants with a family history of atopy, introduction of pasteurized whole egg powder at age 4 months vs placebo up to age 8 months was associated with a significantly lower risk of developing egg sensitization (OR, 0.46; $P = .03$), but showed only a nonsignificant trend toward a reduced risk of developing egg allergy.[17] Although approximately 10% of participants reacted to an initial egg exposure despite negative egg skin tests at age 4 months, no cases of anaphylaxis occurred, and overall there were no differences in the rates of adverse events between groups. The Solids Timing for Allergy Research placebo-controlled study of 86 infants with moderate-to-severe eczema found that the introduction of pasteurized raw egg powder at age 4 months vs egg at age 8 months was associated with a trend toward a lower rate of developing egg allergy at 1 year (33% vs 51%; $P = .11$), although a significant rate of allergic reactions (31%) was noted among the egg-sensitized children randomized to early introduction at age 4 months, which prompted discontinuation of the study.[18] In the Starting Time of Egg Protein study, in 820 infants without eczema with a family history of atopy, early introduction of pasteurized raw egg powder at age 4-6.5 months vs 10 months was associated with a nonsignificant trend toward a reduced risk of egg allergy (7.0% vs 10.3%; absolute risk reduction, 0.75; $P = .20$), although significantly decreased egg sensitization was noted in the early introduction group.[19] Data from the Hen's Egg Allergy Prevention study are the most potentially concerning. In that trial of 406 infants from the general population, early introduction of pasteurized raw egg powder at age 4-6 months was not associated with any difference in the rate of development of egg allergy or egg sensitization at age 1 year compared with placebo.[20] However, among 23 children with baseline egg sensitization who were excluded from randomization but then challenged with egg separately, 11 of 17 experienced anaphylaxis on this initial introduction, calling into question the safety of early introduction of pasteurized raw egg.

A recent meta-analysis of studies investigating the timing of introduction of allergenic foods and the risk of developing allergic disease (5 trials, 1915 patients) found evidence of moderate certainty indicating that egg introduction at age 4-6 months reduced the rate of egg allergy (relative risk, 0.56; $P = .009$).[3] Through subsequent trial sequential analysis, the authors noted that many additional participants were needed to reach a 30% effect size for the intervention with certainty. Similarly, this meta-analysis found moderately certain evidence based on 2 trials (1550 patients) that introduction of peanut between age 4 and 11 months reduced the risk of peanut allergy (relative risk, 0.29; $P = .009$), although sequential analysis could not be performed owing to insufficient numbers of participants in these trials.

Additional prevention trials to explore the relationship between early food introduction and the development of food allergy are ongoing. The Preventing Atopic Dermatitis and Allergies in Children study (ClinicalTrials.gov ID NCT02449850) is a European population-based prospective birth cohort with open-label randomization of approximately 2500 infants to 2 interventions, early introduction of 4 allergenic foods (egg, milk, wheat, and peanut) by age 4 months and regular emollient use. Infants will be randomized to observation, early allergen introduction, skin care, or both early introduction and skin care. Primary outcome measures are the presence of atopic dermatitis and food allergy to 1 of the intervention allergens. It is anticipated that this study will continue into adulthood. The Preventing Peanut Allergy in Atopic Dermatitis study is examining the age of peanut introduction and the risk of peanut allergy in high-risk infants with eczema.[21] Infants are enrolled between 5 and 30 months of age, and each infant's care provider chooses peanut consumption or avoidance for 1 year, with the primary study outcome being the presence of peanut allergy at 1 year after enrollment.

In summary, there is accumulating evidence indicating that earlier introduction of solid food may prevent food allergy. This evidence is backed by observational studies for milk, egg, and peanut, as well as randomized controlled trials for peanut and egg in infants at risk, although data on earlier egg introduction are mixed and may be dependent on the introduction of raw vs cooked egg. A large randomized trial of multiple, sequential early food introduction in standard-risk infants found no difference in the prevalence of allergies to any of the foods between 3 months and 6 months, likely owing to poor adherence, and a per protocol analysis found small protective effects for both peanut and egg. At worst, these findings strongly suggest the noninferiority of such an approach, and at best, they point to a small protective effect in children at standard risk. The benefits of early allergenic food introduction have been further supported by the recent large meta-analysis. Although more studies are needed to better understand the relationship between early introduction and protection from food allergy, there is a strong groundswell suggesting that this may be an effective strategy for combating the rising rates of food allergy.

Impact of Earlier Solid Food Introduction on the Benefits of Exclusive Breastfeeding

Earlier introduction of solid food would directly contradict current WHO recommendations for exclusive breastfeeding for at least 6 months, as well as recommendations for exclusive breastfeeding for approximately 6 months by the American Academy of Pediatrics (AAP) and for exactly 6 months by the Canadian Paediatric Society (CPS).[4-6] However, these breastfeeding recommendations were designed to enhance other outcomes (primarily infectious), not specifically to prevent allergic disease. Whether recommendations for both early allergen introduction and prolonged exclusive breastfeeding have mutually complementary benefits has yet to be explored in any trial.

A recent Cochrane Review concluded that the main benefits of exclusive breastfeeding for 6 months rather than 3-4 months are reduced infant morbidity from gastrointestinal and respiratory tract infections, more rapid maternal weight loss after delivery, and delayed resumption of maternal menstruation.[22] The main evidence for a reduced rate of gastrointestinal infections was from the Promotion of Breastfeeding Intervention Trial, conducted in the Republic of Belarus in 1996-1997, which noted a reduced risk of 1 or more gastrointestinal infections in the intervention group (provided with breastfeeding education/support) compared with the control group (usual feeding practices) (9.1% vs 13.2%; aOR, 0.60), with 7.9% of the intervention group vs 0.6% of controls still exclusively breastfed at age 6 months ($P = .01$).[23] The extent of protection and the duration of protection against gastrointestinal infection in other studies are unclear, however.[24,25]

Data on reductions in the rate of respiratory tract infections are mixed. The Promotion of Breastfeeding Intervention Trial noted no reduction in the risk of respiratory tract infection in the intervention group compared with the control group (39.2% vs 39.4%; aOR, 0.87).[23] In contrast, large cohort studies from the US and The Netherlands have shown a reduction in the incidence of lower respiratory tract infection with exclusive breastfeeding during the 4- to 6-month interval,[24,26] although, as with gastrointestinal infection, the extent of protection is uncertain. The beneficial impacts on maternal weight loss and delayed menstruation appear to be better described in developing countries than in developed countries.

No study of early introduction has been conducted in areas where HIV or other early-life infections are endemic, and whether there is a significant prevalence of food allergies in these areas is unclear. Thus, there are no data for use in evaluating the possible impact of early allergen introduction on the numerous other beneficial outcomes associated with exclusive breastfeeding, which arguably may be more important than food allergy prevention in certain areas of the world. This situation highlights the need for careful harmonization and balance when developing new food allergy prevention policies, given the heterogeneity of risk to benefit in the scope of newborn health that must be considered in different areas of the world.

Impact of Early Solid Food Introduction on Duration of Total Breastfeeding

There are little available data on the effect of early solid food introduction on breastfeeding duration. Nonetheless, the data that do exist suggest that early solid food introduction does not have an impact on total breastfeeding duration.

A prospective longitudinal study of 506 infant–mother pairs in Sweden had mothers complete daily recordings of infant feedings, noting breastfeeding frequency, suckling duration, and age at introduction of solids.[27] That study found that solid food introduction had no significant effect on breastfeeding frequency or suckling duration; suckling duration declined slowly, and breastfeeding frequency was unchanged during the first month of solid food introduction. Most importantly, the age

of introduction of solid foods was not associated with total breastfeeding duration. In contrast, formula feeding was associated with decreased breastfeeding frequency and suckling duration, as well as decreased total breastfeeding duration.

The EAT and LEAP studies collected data for assessing the impact of earlier introduction of solid foods on breastfeeding duration. In the EAT study, for which exclusive breastfeeding at the time of randomization was an inclusion criterion, early introduction of solid foods did not affect breastfeeding rates. At age 6 months, 97% of infants in the early introduction group were still breastfeeding, which far exceeded government-reported rates in the United Kingdom and was not significantly different from the breastfeeding rate of 98% in the standard introduction group ($P = .99$) when the study began.[28] In this trial, it was intended that the infants in the standard introduction group continue to exclusively breast feed until the introduction of solid food at age 6 months, and that breast milk continue to remain an important source of nutrition until age 6 months in the early introduction group, who started eating solid foods at age 3 months.

In the LEAP study, there was no significant difference in breastfeeding duration postrandomization between the peanut consumption group and the peanut avoidance group (mean, 4.7 ± 4.9 months vs 4.9 ± 4.8 months; $P = .56$).[29] However, only approximately 10% of the overall study population was exclusively breastfed at study entry, and only 39.6% the peanut consumption group and 44.2% of the peanut avoidance group continued to breastfeed after enrollment, which may make these results somewhat difficult to interpret.

Specific Advice on the Timing of Introduction of Allergenic Solid Foods

The 2008 AAP guidelines,[30] as well as the 2013 American Academy of Allergy, Asthma and Immunology[31] and 2013 CPS[5] guidelines, specifically recommend that solid food introduction not be delayed past either age 4-6 months (AAP, American Academy of Allergy, Asthma and Immunology) or age 6 months (CPS). However, this is passive advice, and none of these guidelines actively recommends when solid foods should be introduced. The Australasian Society of Allergy and Clinical Immunology's recently updated guidelines stipulate that solid food introduction occur "around 6 months, but not before 4 months" of age.[32]

In the summer of 2015, an internationally endorsed Consensus Communication, representative of North America, Europe, Japan, Israel, Australia, and New Zealand, recommended that in the wake of the LEAP study, strong consideration should be given to peanut introduction as early as age 4-6 months in children meeting the high-risk criteria for peanut allergy (ie, severe eczema and/or egg allergy).[33] This guideline made no specific recommendation for how to introduce peanut, providing options for at-home or in-office (with testing and/or observed ingestion) introduction at the mutual preference of provider and patient.

In January 2017, a National Institute of Allergy and Infectious Diseases–sponsored expert panel released formal addendum food allergy guidelines recommending early peanut introduction.[34] These addendum guidelines recommend that in high-risk infants (ie, those with severe eczema and/or egg allergy), peanut should be introduced as early as age 4-6 months. In addition, strong consideration should be given for in-office evaluation in these infants for peanut sensitization, followed by oral challenge for children with an SPT result of 3-7 mm. (Children with an SPT of 0-2 mm can have peanut introduced at home, and children with an SPT ≥8 mm have a high likelihood of peanut allergy). For infants with moderate to mild eczema, peanut should be introduced around age 6 months, but in-office evaluation is not recommended. Finally, for infants with no eczema and no food allergy, peanut should be introduced at an appropriate age in accordance with parental preference and cultural norms. For all children, introduction should be attempted only after the child has successfully integrated other food(s) into the diet.

At present, there are no guidelines for early introduction of any other foods, such as egg. Moreover, there are no data assessing the readiness of caregivers, providers (including allergy providers), or other stakeholders to embrace such recommendations. Both the Consensus Communication and the National Institute of Allergy and Infectious Diseases–sponsored guidelines were promulgated in the absence of this potentially critical input, which could help assess barriers to implementation and knowledge translation of the change in policy.

Conclusion

Whether the age of complementary food introduction as a means of allergy prevention should be 4 months or 6 months is far from established, given that few studies have been designed to specifically compare outcomes of introduction at 4 months vs 6 months. Multiple observational studies, several randomized controlled trials, and a recent meta-analysis support the early introduction of certain allergenic foods, such as peanut and egg, as a means of food allergy prevention, although changes in policy reflecting such recommendations are lacking, except for peanut. Level one evidence is needed for key dietary staples such as milk, and better-designed studies are needed to continue to explore the effect of early egg introduction, including variability based on cooked vs raw egg. Further trials are needed to investigate the possibility of an even earlier window for introduction associated with good outcomes, as has been suggested in observational studies of cow's milk introduction.

The degree to which 6 months of exclusive breastfeeding is superior to 4 months of exclusive breastfeeding in developed countries remains to be elucidated. Data pertaining to infection protection are mixed, with some studies showing a greater benefit than others. There are some data showing that introduction of complementary foods before age 6 months does not affect total breastfeeding duration.

One compromise may be to recommend solid food introduction "at around 6 months but not before 4 months," as recommended in the recently published Australasian guidelines. Regardless of the solution, harmonization of early

introduction guidelines with breastfeeding guidelines is needed to maximize the benefits of both exclusive breastfeeding and early complementary food introduction. ■

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