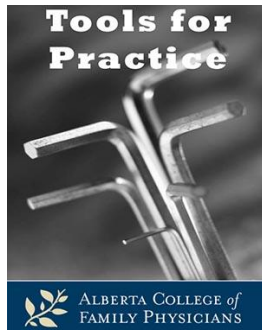


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## **Early Peanuts for Little Peanuts: The not so paltry benefits**

**Clinical Question: Does early peanut introduction in infancy influence the development of peanut allergy?**

**Bottom Line: Early peanut introduction reduces the risk of developing peanut allergy in high-risk infants from 17% to 3% at five years. Normal risk infants may also benefit. Since 9% of high-risk infants were excluded due to a positive baseline skin prick test (SPT), it may be reasonable to investigate those at highest risk prior to exposure.**

### **Evidence:**

- Randomized Controlled Trials:
  - 640 high-risk infants (severe eczema, egg allergy, or both) aged 4-11 months, randomized to consumption (6 g peanuts/week) or avoidance.<sup>1</sup> At five years:
    - Positive oral food challenge to peanuts: 3.2% consumption versus 17.2% avoidance, Number Needed to Treat=8.
    - Harms: Consumption group underwent baseline food challenge, 7/319 infants reacted, (six required antihistamine, one oral steroids). At five years, one child in avoidance group required epinephrine following oral food challenge.
    - Limitations: No placebo, infants excluded if SPT >4 mm (9% of infants).
  - Normal-risk, breastfed infants (n=1,303) aged three months randomized to early introduction of six allergens (example 2 g peanuts/week) or avoidance of allergenic foods before six months.<sup>2</sup>
    - At 1-3 years of age, no significant difference in positive oral food challenge:
      - Peanuts: 1.2% early versus 2.5% avoidance.
    - Limitations: Complex protocol led to significant difference in adherence (43% early versus 93% avoidance); excluded infants with peanut sensitization (SPT >0 mm).
- Observational study:
  - Newborns (n=2,124) followed to examine food introduction timing and sensitization.<sup>3</sup> Peanut avoidance during first year increased risk for:
    - Peanut sensitization (SPT >2 mm): Odds Ratio 1.76 (1.07-3.01).
    - Limitations: Potential recall bias, confirmatory oral food challenges not done.

**Context:**

- Early exposure hypothesis came from the 10x lower risk of peanut allergy among Israeli compared to UK children. Israeli children had greater intake of peanuts during infancy (7.1 g/month versus 0 g/month).<sup>4</sup>
- Large cohort study (10,907 participants) suggested a lower risk of peanut allergy in offspring of non-allergenic mothers who had increased peanut consumption during pregnancy,  $\geq 5$  times per weeks versus  $< 1$  per month, Odds Ratio 0.31 (0.13-0.75).<sup>5</sup>
- Guidelines recommend not restricting maternal diet or delaying food allergen introduction in high-risk infants.<sup>6,7</sup>

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**Disclosure:**

Authors do not have any conflicts of interest to declare.

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