# **The Peanut Puzzle**

For two decades, peanut allergies have been rising in America—to the bewilderment of the medical community. Now doctors are getting closer to understanding why. We asked Michael Pistiner, M.D., a leading researcher in the field and dad of a child with food allergies, to share the latest thinking about this life-threatening condition affecting one in 13 kids.

by **Emily Elveru** 



### 1. Kids who don't eat peanuts in early childhood have a greater risk of becoming allergic.

Although you've probably heard that you no longer need to wait until the toddler years to give your peanut their first taste of PB, you may wonder if there's any harm in being cautious. Turns out, delaying the introduction of peanuts (and other top allergens) may actually raise their risk of developing an allergy, says Dr. Pistiner, director of food-allergy advocacy, education, and prevention at MassGeneral Hospital for Children's Food Allergy Center, in Boston.

How researchers figured this out is pretty interesting: Some 640 babies who were considered at higher risk for developing peanut allergies because they had severe eczema, egg allergy, or both were enrolled in a long-term study called Learning Early About Peanut Allergy (LEAP). Half the group avoided peanuts until their fifth birthday. The other half received 2 grams of peanut protein three times a week. Seventeen percent of the peanut avoiders were diagnosed with the allergy compared with just 3 percent of the peanut-eating group.

There is solid evidence suggesting that giving babies and toddlers peanuts can help achieve "tolerance"—meaning they can eat the food without having an allergic reaction. But why would avoiding peanuts *raise* the risk of developing an allergy? Unlike the gut's immune system, which may play a role in establishing tolerance, the skin's immune system may actually increase sensitivity to peanuts. If your baby's skin is routinely exposed to peanuts in their surroundings—you or the rest of the family regularly touch them after eating peanuts without first washing your hands-fine particles may get on their skin. Another route is through peanut dust on carpets or a mattress.

Regularly exposing kids to peanuts through the skin but not diet is the double whammy that doctors call the "dualexposure hypothesis." It may have contributed to the surge in peanut allergies when, from 2000 to 2008, the American Academy of Pediatrics (AAP) recommended delaying the introduction of peanuts until age 3. In fact. Dr. Pistiner. who is also a member of the AAP Executive Committee for the Section of Allergy and Immunology, notes that his now-teenage son had a severe allergic reaction to walnuts when he ate them for the first time in a chocolate bar at age 4. Prior to that incident, Dr. Pistiner and his wife had often eaten walnuts at home.

## 2. Severe eczema complicates matters.

Normal skin has a healthy barrier function that helps keep peanut particles from penetrating. On the other hand, kids with the dry, red, itchy skin associated with severe eczema have a poorly functioning barrier because of underlying inflammation. The difference in barrier function may explain why kids with severe eczema are more at risk for food allergies.



#### 3. Most kids should start eating peanuts by the time they're 6 months old.

The latest guidance from the National Institute of Allergy and Infectious Diseases (NIAID) and endorsed by the AAP suggests that you can introduce peanuts as early as 6 months, unless your baby has severe eczema or an egg allergy. In that case, it's recommended that 4 to 6 months be the goal, but your baby should be screened for peanut allergy before you give them a taste. It's good to know that having a peanut allergy in the family isn't considered high risk.

#### 4. You don't need to offer a lot of peanuts for kids to get protection.

NIAID recommends that kids eat 2 teaspoons of peanut butter (or 2 grams of peanut protein) three times a week until age 5. Kids in the LEAP study ate either smoothedout peanut butter or Bamba, a peanut-containing snack consumed regularly by children in Israel. You can keep it simple and stress-free by stirring peanut butter into oatmeal, pureed fruit or veggies, breast milk, or formula. Just don't give whole peanuts, chunks, or chunky peanut butter since all are a choking risk for kids under 4 years old.

While some packaged snack products are marketed as a way to help introduce peanuts to kids, they don't always contain enough to meet the minimum recommendation. However, they can be convenient. Make sure to check the Nutrition Facts label to see that the snack contains enough peanut protein.

#### 5. It's okay to introduce other common food allergens early as well.

While guidelines haven't been released, studies support that early introduction to eggs may protect against egg allergy. In fact, there's no reason to delay giving allergenic foods, according to the AAP.

#### 6. Kids don't usually outgrow a peanut allergy.

About 80 percent of kids with a peanut allergy and 90 percent of kids who are allergic to tree nuts have their condition for a lifetime. But those stats flip for a milk or egg allergy—about 80 percent of kids can tolerate these foods as they grow up.

## 7. Your pregnancy diet isn't a factor.

There's no strong scientific evidence to suggest that eating a highly allergenic food while pregnant could prevent food allergy in your child or put them at a higher risk of developing one.

#### 8. New treatments can help kids manage peanut allergy.

If your child has already been diagnosed, stay plugged in to their health-care team. While no treatments are available for infants, earlier this year the FDA approved an oral immunotherapy treatment for kids ages 4 to 17. Another treatment currently being studied, a small patch applied to a child's skin daily that contains a dose of peanut protein, is still awaiting FDA approval. Talk to your baby's doctor to figure out your plan for introducing solid food. It's best to start the conversation early, says Dr. Pistiner. 🛽