



GOING NUTS

NAVIGATING THE COMPLEXITIES
OF
CHILDHOOD
FOOD
ALLERGIES



The number of children with severe food allergies has risen sharply over the last 15 years. Fortunately, treatment options are starting to keep pace.

For 10-year-old Lindsay Ehrenpreis, having a severe allergy to tree nuts felt like living in a bubble. Not only did Lindsay have to stay away from all the “normal” food other kids could enjoy, she couldn’t have play dates at friends’ houses. Sleepovers were out of the question. And any time she went on a field trip, one of her parents came too, with a cooler full of food just for her. The worst part, though, was not the alienation from her classmates, or the extreme vigilance required of herself and her parents; it was facing the reality that exposure to even a minuscule amount of the allergen could be life-threatening. “She started to become terrified of any food that didn’t come from our kitchen,” says her mom, Ellen. “The consequences loomed large for her.”

Every day, nearly 6 million children (and almost two and a half million adults) face that same reality. If it seems like food allergies are becoming more and more commonplace, that’s because they are. “An epidemic” is how Dr. Kari Nadeau, director of the Stanford University Sean N. Parker Center for Allergy Research, characterized the situation in a PBS NewsHour documentary. The Centers for Disease Control and Prevention has found that food allergies among children increased roughly 50 percent between 1997 and 2011, and that increase was sharpest amongst children between 3 and 5 years old, which means the numbers are only going to grow. The non-profit group Food Allergy Research & Education—the largest private source

of funding for food allergy research—estimates that one out of every 13 children in the U.S. is affected.

The good news? Just as food allergies are increasing, so too is the medical field’s understanding of how to prevent and treat them.

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New thinking about early exposure

Most food allergies present themselves in the first year or two of life—which means, for parents, a baby’s first bite of eggs or peanut butter can be fraught



Lindsay Ehrenpreis was seriously allergic to tree nuts until she went through oral immunotherapy at Lucile Packard Children's Hospital Stanford. Now she eats nuts every day to maintain her body's ability to tolerate them.

Photos: Sarah Heberstreit/Modern Kids Co.

with anxiety. According to Dr. Sharon Chinthrajah, a clinical professor of allergy/immunology and pulmonary/critical care medicine at Stanford, however, early exposure can be a good thing. "The thinking on this has changed: It's now believed that diversifying a child's diet early on in life, not withholding particular foods, helps prevent allergies from developing," she says. She points to a landmark study released in early 2015 by King's College London that found early exposure to peanuts decreased the odds of a child developing a peanut allergy by 70 to 80 percent.

One important exception is among children who are at a higher risk for food allergies: "If you have a family history of allergies, or your child has had eczema, you need to be much more cautious," she says. "You should talk to your pediatrician or allergist about how and when to introduce foods."

Diagnosis & treatment

If your child does have a reaction to a particular food, Chinthrajah is quick to point out that it doesn't mean you're sentenced to a life of EpiPens. "Often people who think they have a food allergy actually have an intolerance, which is milder," she says. A true allergic reaction often involves hives, wheezing, swelling, abdominal pain, and, in severe cases, anaphylactic shock. Food intolerance, on the other hand, may involve a single symptom, like bloating. Since one true allergic reaction doesn't predict future reactions—the first exposure can produce something as mild as a rash but the next one can lead to anaphylaxis—getting an accurate diagnosis from an allergist is key. The process involves blood tests, skin tests, and food challenges, in which a child is exposed to a small amount of a potential allergen under a doctor's supervision.

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If a child is diagnosed with a food allergy, the standard protocol is strict avoidance and reaction medicines. That was exactly how Lindsay's parents, Ellen and Ira Ehrenpreis, and her doctors approached her condition until they read about Dr. Nadeau's success in desensitizing other severely allergic children with a new treatment called oral immunotherapy. "I thought, 'Sign us up!'" Ellen says. "I couldn't believe that there was a possibility Lindsay wouldn't have to live with this the rest of her life."

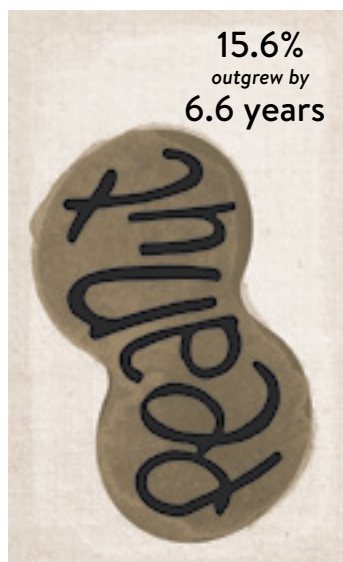
“Very carefully, we start with minuscule amounts of that food and give it at trace levels that won’t cause a reaction in [the allergic] person,” explains Nadeau. Every couple of weeks, doctors increase the dosage to desensitize the patient until she can tolerate a serving size (a process that typically takes a few years). Nadeau has also found that combining food exposure with a dose of omalizumab, a drug used to treat asthma, speeds up the success.

“With oral immunotherapy we’re slowly retraining the immune system not to mount a response to the food,” explains Chinthrajah. Once patients have completed the clinical trial, they still need to continue to carry their reaction meds and EpiPens at all times, and eat a serving of the food daily to keep the allergy from resurfacing. And the doctors are adamant that parents not try this at home. “It is absolutely only safe in a hospital setting,” says Chinthrajah.

When Lindsay began the trial at Stanford last year, her parents were anxious but hopeful. “She was reaching an age where she craved more independence,” says Ellen. “Her allergies were really beginning to restrict her socially.” After Lindsay was cleared to eat a daily dose of nuts, one of the first things she wanted to try was animal-shaped marzipan.

Not All Allergies Are Forever

The good news is that kids can outgrow allergies. Here are the percentages of kids that were found to outgrow the major food allergies, and the average ages at which they did so (according to a 2013 study published by the Annals of Allergy, Asthma & Immunology).





Although oral immunotherapy is still in clinical trials at Stanford and other hospitals, the treatment has seen its share of success stories, including Lindsay, who completed the program earlier this year and now just goes in for checkups every few months. Now 12 years old, Lindsay regularly eats out at restaurants with her family, goes out for ice cream with her friends, and even attended sleepaway camp for two weeks this summer—something that was inconceivable a year ago, says her mom. “She’s a totally different kid now; she has a whole new sense of freedom and independence.”

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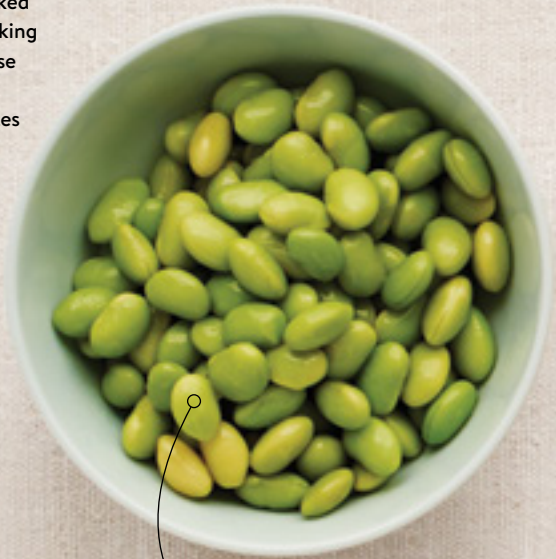
“The really rewarding part of what we do is seeing patients who come back and say their life has changed,” says Chinthrajah. “They can go to birthday parties, travel, eat out, and not live in fear.”



Learn more about oral immunotherapy treatment for food allergies at med.stanford.edu/allergies

eggs

An egg allergy doesn’t need to mean a life without baked goods. Look for vegan baking recipes, which typically use ingredients like banana, flaxseed, or egg substitutes for binding.



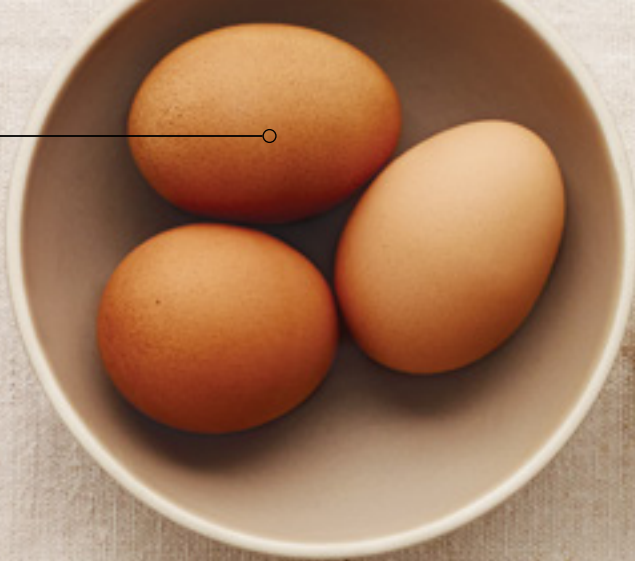
soy

Soy is often found in many packaged foods you wouldn’t suspect, including cookies, crackers, canned soups, and even canned tuna.

treenuts

Tree nuts and peanuts are often processed in the same facilities—so kids who are allergic to one are advised to avoid the other, to avoid the risk of cross-contamination.





milk

A true milk allergy will present itself through a range of symptoms, including hives, wheezing, and vomiting; someone who is lactose intolerant will only have digestive symptoms.



peanuts

Many people with peanut allergies have no reaction to foods made with peanut oil. It's believed that the proteins in peanuts that cause a reaction are not present once it's processed into oil.



fish

Someone with a fish allergy isn't necessarily allergic to all fish. The most common allergy triggers are salmon, tuna, and halibut.



wheat

Good news for anyone with a wheat allergy: Between 2011 and 2013, the gluten-free foods market grew by 44 percent—with breads, cookies, and snacks making up a big chunk of that growth.

shellfish

Unlike many other types of allergies, an allergy to shellfish often shows up in adulthood. Among kids, it's more common in boys; among adults, it's more common in women.