

THE ECZEMA EFFECT

As if itchy, flaky skin—and the teasing it often evokes—weren't bad enough, this chronic rash often ushers in food allergies, asthma, and other conditions, according to new research. Here's everything we know about how to keep these troubles at bay.

by **HOLLY PEVZNER** / illustrations by **JAMES YANG**

ALEXANDRA FUNG, a mom of three in Chicago, thought she had her baby's eczema under control. After all, her older kids, ages 10 and 12, have the skin condition (like nearly 10 million kids in the U.S.), and so does she. Fung knew to use gentle detergents and moisturizers. She put tiny mittens on her baby's hands at night to curb his

scratching. But the red and pink patches on his cheeks, which arrived when he was a few months old, only worsened. Then other sensitivities began to appear. Eating dairy exacerbated his rash and made him fussy. He had a reaction to eggs at 10 months (a bout of vomiting, which Fung wasn't too concerned about), then another to peanuts at 1 year (swollen

lips, which was far more worrisome). She took her son to an allergist. "He was diagnosed with several food allergies, including a life-threatening one to nuts," says Fung. "And that's when I first learned that eczema is closely related to those allergies."

Research has shown that kids with eczema are vulnerable to a phenomenon



called the atopic march, in which eczema's trademark raw, open skin helps bring about any or all of the following conditions: food allergies, asthma, and hay fever (also known as allergic rhinitis). It can also result in bullying, and does for many kids. That all sounds alarming, of course. But even if your child is already acquainted with the skin ailment, there's no need to panic. New insights about preventive care, early intervention, and diligent maintenance are revealing that eczema may be more treatable—and the allergic progression less inevitable—than previously thought.

The Gateway Rash

Eczema is a chronic condition in which patches of skin become red, scaly, and itchy. It usually appears on the face, scalp, and/or trunk, first arriving anywhere from several weeks to several months after birth. It typically creeps to the elbows and knees when the child is around 6 months old, though it can affect any part of the body.

The thing is, every baby is a little bundle of highly sensitive skin, which makes it difficult to know whether you're dealing with eczema or just garden-variety irritation. But there are some clues to watch for. "If you, your partner, or your other children have ever suffered from eczema or allergies, it's especially important to bring any skin issues to your pediatrician's attention," says Sandy Skotnicki, M.D., assistant professor of dermatology at the University of Toronto and coauthor of *Beyond Soap*. These factors put kids at a high risk for developing eczema, and thus, the atopic march.

Even if you're fairly confident that your child has eczema, you may need to be persistent with your pediatrician to get a diagnosis. Ayren Jackson-Cannady, of Arlington, Virginia, whose oldest child, Trey, suffers from eczema, knew what the condition looked like because her husband is also a lifelong sufferer. Yet that information, coupled with Trey's itchy rash, didn't ring any warning bells for his doctor. "I think she just assumed it would be a temporary thing," says Jackson-Cannady. "I know that some kids outgrow it with a little extra moisturizing. But some don't."



What to Look For in a Moisturizer

Using a dye- and fragrance-free emollient is key to controlling eczema. The problem? Eighty-three percent of the best-selling moisturizers featuring a "hypoallergenic" label include at least one potentially allergenic chemical, and 45 percent that claim to be "fragrance free" are not, found a 2017 study in *JAMA Dermatology*. Your best bet is to choose "greasy" ointments and creams (high oil content more effectively keeps moisture in and irritants out) that feature the National Eczema Association Seal of Acceptance, such as CeraVe Baby Healing Ointment and Aveeno Baby Eczema Therapy Moisturizing Cream. You can also search for products on the association's website (nationaleczema.org).

Unfortunately, misunderstandings about the condition—and who is at greater risk—appear to be widespread among physicians. More than 50 percent of parents whose child has eczema have seen up to five doctors before their child was diagnosed and treated, according to a 2016 survey by the National Eczema Association. That delay can have long-lasting negative consequences. "Early diagnosis and intervention might help prevent certain aspects of the atopic march, and it certainly can ease severity," says Neeta Ogden, M.D., a pediatric allergist and spokesperson for the American College of Allergy, Asthma & Immunology.

Picture eczema, food allergies, asthma, and hay fever as dominoes. Each one can fall down on its own, but they are all more likely to be knocked over if the first domino—eczema—falls. According to a review of studies in the *Journal of Allergy and Clinical Immunology*, 81 percent of kids with eczema go on to develop at least one food allergy. If this occurs, they are then seven times more likely to be diagnosed with asthma and nearly 12 times more likely to develop seasonal allergies.

Why is this so? "It's a hard concept to understand," says Dr. Skotnicki. "Essentially, atopic eczema is a skin-barrier disruption—leaky skin, if you will." The skin is supposed to keep water in and irritants and allergens out. But eczema-affected skin fails to provide such a barrier, and its susceptibility to dryness and irritation can cause microtears that allow even tiny amounts of allergens to enter the body. Think peanut dust on a bakery table that hasn't been wiped down thoroughly enough, on which your little one rests her forearm. Think pollen floating through the air (and into your child's sinuses) or chemicals in your laundry detergent, which touch your baby's face when he rests his cheek on your shoulder. When these invaders make contact with skin affected by eczema, "the immune system freaks out and mounts a response," says Peter Lio, M.D., clinical assistant professor of dermatology and pediatrics at Northwestern University Feinberg School of Medicine, in Chicago. That response can lead to an allergy

to those foods or irritants—one that can last for the rest of the child's life.

Acting Early

The good news is that parents of little ones at high risk for eczema (meaning their parents or siblings have the condition or have food allergies) are not powerless. Step one: Limit baths. “The first thing we need to do is stop washing children so much and for so long,” says Dr. Skotnicki. “Water and soap actually break down the skin barrier we want to strengthen.” According to the American Academy of Pediatrics, three short baths a week during a baby's first year is likely plenty. They should last only five to ten minutes, and you should use a mild cleanser without additives. Dr. Skotnicki adds that no small child requires more than that unless he's truly dirty or sweaty, or if he's already been diagnosed with eczema. In the latter case, you should bathe your child daily during flare-ups, but for no more than ten to 15 minutes in lukewarm water and with no soap. “Patting, not rubbing, your child dry and moisturizing within three minutes after the bath is also key,” says Dr. Skotnicki.

Another counterintuitive—but clinically proven—strategy for halting the atopic march: early exposure to peanuts. When children at high risk for eczema start consuming peanut products between 4 and 6 months old, their chance of developing peanut allergies plummets by 74 percent, a major study concluded. Of course, this should happen with a pediatrician's okay; for babies who already have severe eczema or a family history of the condition, nuts need to be introduced only under an allergist's guidance. “You want a child's first exposure to common allergic foods to occur via the gastrointestinal tract, not the skin,” says Dr. Lio. “When a baby ingests a food, the gut has special systems designed to induce tolerance so he won't become allergic. That doesn't happen with skin exposure.” In short: The goal is to get common allergic foods into your baby's belly before they can wreak allergic havoc by being absorbed through the skin.

“Some studies have also shown that moisturizing high-risk infants daily

with rich, oily emollients such as Vaseline or sunflower-seed oil can reduce the risk of eczema by up to 50 percent,” says Dr. Lio. Emollients can create a physical barrier when the skin can't provide its own, he explains. There have been conflicting studies about this practice—it's an emerging avenue of research, with new findings being published frequently—but Dr. Lio still encourages families of high-risk babies to follow it daily from birth through 6 months in order to prevent or delay eczema.

Ashleigh Bouselli, of St. Charles, Missouri, whose two oldest children have eczema, knew about the atopic march and covered her third child with Vaseline for months. Bouselli can't swear to it, but she suspects that this helped keep her son, now 22 months, eczema-free. “He's yet to have anything more than a couple of random patches of dry skin. I'm so relieved,” she says.

Treatment Advances

Parents of kids with eczema have traditionally been given the same advice because it does help: Moisturize often, limit exposure to triggers (irritants such as secondhand smoke and scented detergents), and use hydrocortisone creams and/or topical corticosteroids to stop the itching that comes with the rash. As Dr. Skotnicki says, “Daily moisturizing and proper cleansing are the cornerstones of

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They're All Connected!

Not every kid with eczema hits each stop on the atopic march. In fact, there are children with eczema who never develop any of the other related conditions, says Dr. Neeta Ogden. Although not all journeys progress in this order, here are some of the diagnoses that can follow eczema.

FOOD ALLERGIES

Common ones associated with eczema are egg, peanut, soy, and dairy, with symptoms including hives, itching, swelling of lips, face, tongue, and/or throat, and nausea or vomiting.



ASTHMA

Kids often make a whistling or wheezing sound when they exhale; cough when triggered by exercise, cold air, or sleep; and experience congestion, trouble breathing, shortness of breath, and a tight or uncomfortable feeling in the chest. Most doctors prefer not to make a definitive diagnosis until after the child turns 5 and the symptoms have been persistent and observable for several months or even years.



ALLERGIC RHINITIS

With these seasonal allergies, children are often congested; experience repetitive sneezing and a sore throat; feel itchy in their mouth, nose, ears, or eyes; and have trouble with snoring. Eczema can also bring about allergies to pet dander, mold, and dust, all of which have the same symptoms as allergic rhinitis.

eczema therapy, and they do result in better outcomes.”

However, some parents are reluctant to use corticosteroids on their children because of possible side effects, like thinning skin. Even if parents feel comfortable using the creams, doctors advise using them only during severe flare-ups, and only for seven days at a time. That’s why there’s excitement about Dupixent, a steroid-free injectable approved earlier this year for kids 12 and up with moderate-to-severe eczema, and which is likely to be FDA-approved for younger kids soon too. After 16 weeks of monthly treatments, more than 40 percent of patients showed a 75 percent improvement. “Even though it’s a shot, the fact that it’s safe and effective and it lets parents worry less about applying topical treatments makes this a game changer,” says Dr. Ogden.

Currently, babies and children with mild-to-moderate eczema have another steroid-free option: Eucrisa, an ointment that reduces symptoms by blocking the production of pro-inflammatory proteins called cytokines. When it debuted in 2016, more than a decade had passed since the FDA had approved any new topical treatments for eczema.

Alexandra Fung is expecting baby #4 now, and is already focusing on ways to help her infant sidestep eczema. “This baby is going to be so moisturized,” she says. “It’s empowering to know that I may be able to help stop this from happening again.” Dr. Ogden agrees, adding that there’s a lot that parents can do right now: “Catch eczema early, stay on top of it, learn all that you can about early peanut introduction, and above all, don’t hesitate to be proactive.” ✖