

Detergent,



Soap and Eczema:

How One Mother's Extreme Home Makeover Made a Difference

When A.J. Lumsdaine's four-month-old baby developed small, bumpy red patches on his legs, the pediatrician identified the rash as eczema. His solution: Slather the baby's skin with moisturizers.

Unfortunately, the eczema got worse. A blistery red rash soon blossomed over the baby's entire body and face.

Desperate to find relief for her baby, A.J. began to research the problem on her own. She and her husband refused to accept the opinion that the breakouts were just random events, so they set out to problem-solve their son's situation.

"We realized there were many different causes of eczema," she recalls. "We

considered every possibility and systematically worked through each. Everything he breathed, ate or touched was suspect."

One day, a sentence in a classic child care book (*Touchpoints* by T. Berry Brazelton, MD) caught her attention: "Pure, mild soaps must be used for [baby's] bath and ... clothes. Traces of detergents stay in clothes and can produce skin rashes in sensitive infants."

Thus began a journey that turned the family's laundry room and cleaning closet upside down – and ultimately restored their baby's soft skin and his ability to wriggle and giggle in his usual exuberant way.

Environmental Detective

A.J. drew heavily on her university training as a scientist and engineer, consulting a wide range of experts to make sense of the detergent connection. “I’ve tried to understand my son’s eczema from a biological perspective by talking to chemists, microbiologists and doctors,” she explains. “Detergents increase skin membrane permeability in a way that soaps and water do not.” This effect is so strong that cleaning instructions for water-repellant clothing and camping gear often warn against using detergents.

“Eliminating detergent from our home environment was not as simple as switching to soap flakes in the laundry,” recalls A.J. “To get rid of our son’s breakouts, we had to completely remove all detergent sources in our home. Just touching his skin with water from a clean dish out of the dishwasher was enough to give him serious contact eczema within 30 minutes. Our son’s face didn’t clear up completely until we began to wash our own hair in a soap-based shampoo.”

Finding Soap

Soaps by definition are made from plant and animal fats; detergents are synthetic chemicals originally made from petroleum and now often from plant oils. Unfortunately, pure-soap laundry and cleaning products are few and far between in the U.S. – you can’t just walk in and buy them at the corner grocery. Because plant-based detergents are now commonly used by the natural products industry, finding true soaps even in health food stores can be a challenge.

Luckily, if you want to find soap products, A.J. has done a lot of the leg-work for you. “Completely disregard the word ‘soap’ on the front label or product advertising,” she says. “The word is used liberally for all kinds of detergent products. I always check and doublecheck product ingredient lists by calling or sending e-mails to



A.J.’s son reacted to detergent in his parents’ clothes and hair too.

companies to be sure their products are true soap.”

For personal bathing, she recommends finding a soap that is not too drying, such as a tallow soap. “Many solid bar soap products in health food stores are true soap,” A.J. says. Her Web site lists traditional soapmakers like Ipswich Bay Soap Company (www.ipswichbaysoap.com, 978.412.8121) or Oregon Soap Company (www.oregonsoap.com, 800.549.0299).

A.J. finds personal products and laundry/household cleaners from Cal

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Ben Soaps (www.calbenpuresoap.com, 800.340.7091) and Vermont Soapworks (www.vermontsoap.com, 866.762.7482). Other nondetergent laundry products include Dri-Pak Soap Flakes (www.soap-flakes.com) and Nikwax Tech Wash® (www.nikwax-usa.com).

The Makeover

A.J. learned that rinsing with water is not enough to remove detergent buildup from cloth or hard surfaces. Instead, she recommends using soap to wash away the detergent residue.

On her Web site (www.solveeczema.org), she recommends a multicycle process of superwashing for clothes, towels and bed linens:

- 1 – Wash laundry with soap flakes and a booster like Borax or Oxo Brite™
- 2 – Repeat
- 3 – Wash with soap only
- 4 – Wash full cycle with water only
- 5 – Repeat with water only

With most fabrics, she found this 5-step process cleaned clothes enough that they did not irritate the baby’s skin. Occasionally, however – especially with synthetic-blend fabrics – it took more washing and rinsing.

“Detergent residues in clothing must be completely removed,” she says. “If they aren’t, switching to soaps in the laundry can initially be more irritating. You really need to wash away the detergent residues with soap to get the benefit.”

A.J. also replaced all her family’s shampoos and body cleansers with soap-based versions and used soap to remove detergent residue from kitchen utensils, dishes and hard surfaces around the home such as chairs, tables, sinks and floors.

“It took four months of careful observation and detective work to track down all the sources of detergent in our home environment,” A.J. recalls. “We were flabbergasted that such small amounts of detergents, such



A.J.'s son thrived once their household was detergent-free.

as that left on dishes from the dishwasher, could cause such a severe rash and that more rinsing with water didn't help. At first, we just couldn't believe it, but then we switched to a nondetergent dishwasher powder, and that solved that segment of the problem."

What's To Eat?

Eczema in babies is often blamed on food allergy, but A.J. knew from her chemistry lab days how hard it is to wash chemical residue from glass or plastic containers. She suspected some of her son's apparent allergies were actually a reaction to detergent.

When he first began eating solid foods, he seemed to be allergic to everything. For instance, he broke out in a rash after eating plain rice porridge A.J. had cooked herself. However, when she switched to soap-based dishwashing cleanser and washed away the detergent residue on the rice cooker, the baby began to eat her home-cooked porridge happily with no reaction.

Store-bought foods were also a problem for him. "Many processed

foods, especially produce that has to be washed as part of the processing, seem to contain enough traces of detergents to give our son contact eczema," A.J. says. "It's interesting to note that many of the foods people think of as causing eczema are also ones likely to accumulate detergent residue from processing, such as eggs and some dairy."

Is It Worth It?

A.J. Lumsdaine knows that her soap solution is not a universal cure: "This will not help everyone with eczema. But if the detergent sensitivity described here is the cause of your

child's eczema, this solution could allow you to eliminate it. If you are willing to do the work, the results are nothing short of miraculous."

"My son seems less reactive as he gets older and his skin becomes naturally less permeable. Being in a detergent-free home and allowing his skin to stay mostly healed makes it less susceptible to breakouts outside the home. Once parents understand all this, they are able to predict breakouts from exposure and eliminate them quickly. I hear over and over again what a relief is that they feel some control over the eczema and that it is no longer random." ■ L.R.

Possible Signs of Detergent Sensitivity

If you're wondering if your child might be sensitive to detergent, A.J. Lumsdaine lists these signs to consider:

- Your child's eczema begins when he is an infant.
- The eczema appears more where there is sweating or moisture.
- One or both parents have skin problems, eczema or asthma.
- He gets eczema all over, but you use disposable diapers and the diaper area is relatively clear of eczema.
- His eczema changes noticeably, either for better or worse, following a bath or shower.
- His eczema sometimes seems to fluctuate wildly from day to day.
- Washing just with water can sometimes cause an outbreak.
- He gets particularly bad eczema on his cheeks or chin where he rests it on your shoulder or against your hair when you hold him.
- He reacts to many things by allergy skin testing but relatively few by allergy blood testing.
- His eczema is worse on exposed skin, especially as he crawls around during the day.
- His eczema does seem related to what you are using to wash him or the laundry with, but switching products has never made it go away.

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