

Alternatives for Fragrance-allergic Children

Sharon E. Jacob, MD; and Mari Paz Castanedo-Tardan, MD

Allergy to fragrances in children has become a more widely recognized entity over the past decade.¹⁻⁵ This is not surprising given the high number of children's products containing fragrances, from detergents to diapers to moisturizers to scented toys. Unfortunately, for some children, even very small amounts of fragrances can trigger and maintain an eczematoid-type dermatitis.

Similar to the more immediate allergic-type reactions to peanuts and latex, for example, the first exposure to the al-

lergen doesn't elicit a delayed type hypersensitivity (DTH) allergic response. Rather, with each dose of the allergen, the person is more susceptible to reaching the threshold/dose at which they express the allergic reaction.

Children (and their parents) who are allergic to fragrances do not necessarily recount a specific exposure that made them sensitive. This is especially true since DTH reactions may occur 3 to 5 days following an exposure. Through patch testing, the gold standard testing tool, the diagnosis of allergic contact dermatitis to a specific allergen can be made. Furthermore, with subsequent allergen education, patients (and parents) often are able to find the products that contain fragrances in their daily routine. Fragrances may be included in non-suspect products, and patients (parents) may unwittingly use these products.

According to the Food and Drug Administration (FDA), the term "fragrance" is used to describe any natural or synthetic substance or substances used solely to impart an odor to a cosmetic product.⁶ "Unscented" refers to a product devoid of odor (the odor of nothing). And in regards to product labeling, the two terms, "unscented" and "fragrance-free," are

often confused. In order to achieve an "unscented" odor, "masking" fragrances may be added to a product to cover up the base scents of the ingredients in the product. Fragrance-free, on the other hand, generally refers to the absence of added fragrance-based chemicals, and so the base scents of the other ingredients may be smelled.

Even though companies are required by law to list all ingredients in a product, propriety protection allows the denotation of the ingredient "fragrance" without specifying which one.⁷ In addition if a fragrance-based chemical is added to a product for a purpose other than to be a fragrance (eg, a preservative, such as benzyl alcohol), the product can still claim to be "fragrance-free."⁸

SUMMARY

In 2007 "fragrances" were named "allergen of the year" by the American Contact Dermatitis Society to highlight the importance of this group of allergens. Because fragrance allergy in children is a real problem that is potentially avoidable by substituting products free of these sensitizing chemicals (see Table, page 103), action toward awareness and prevention is imperative.

Sharon E. Jacob, MD, is Assistant Clinical Professor Medicine and Pediatrics (Dermatology), University of California, San Diego, and Volunteer Clinical Associate Professor in Dermatology, University of Miami, Miami, Florida. Mari Paz Castanedo-Tardan, MD, is with Universidad Anahuac School of Medicine, Mexico City, Mexico.

Address correspondence to Sharon E. Jacob, MD: sjacob@contactderm.net.

Dr. Jacob and Dr. Castanedo-Tardan have disclosed no relevant financial relationships.

The authors thank Jordana Herschthal for the assistance with product research and the construct of the table.

TABLE.

Fragrance-free Alternatives to Products

Product Type	Fragrance-free Alternative	Web Sites
Shampoo	Free and Clear Shampoo by Pharmaceutical Specialties Inc. California Baby Super Sensitive Shampoo and Bodywash	www.psico.com www.californiababy.com
Moisturizer	California Baby Super Sensitive Everyday Lotion Vanicream Lite Lotion by Pharmaceutical Specialties Inc. Vanicream Skin Cream by Pharmaceutical Specialties Inc. CeraVe moisturizing lotion and cream by Coria	www.californiababy.com www.psico.com www.psico.com www.CeraVe.com
Toothpaste	Neutral Tooth Gel by Lavera Tom's of Maine Natural Anticavity Toothpaste for a Dry Mouth (apricot flavor)	www.lavera-usa.com www.tomsofmaine.com
Sunblock	California Baby No Fragrance SPF 18 Moisturizing Sunscreen Lotion California Baby No Fragrance SPF 30+ Sunscreen Lotion California Baby No Fragrance SPF 30+ Sunblock Stick Vanicream Sunscreens SPF 30 and 60 by Pharmaceutical Specialties Inc. Vanicream Sunscreen SPF 35 Sport by Pharmaceutical Specialties Inc. Neutrogena Sunblock Lotion Sensitive Skin SPF 30 by Johnson & Johnson	www.californiababy.com www.californiababy.com www.californiababy.com www.psico.com www.psico.com www.neutrogena.com
Detergents	Arm & Hammer Powder Laundry Detergent Perfume and Dye Free by Church & Dwight Co., Inc. Tide Liquid and Powder Free Detergent by Procter & Gamble Seventh Generation Free & Clear Laundry Liquid & Powder by Seventh Generation Inc. All Free Clear Detergent by Unilever*	www.thelaundrybasket.com www.tide.com www.seventhgeneration.com http://www.all-laundry.com
Cleansers	Free & Clear Liquid Cleanser by Pharmaceutical Specialties Inc. Neutrogena Fragrance-Free Cleansing Bar by Johnson & Johnson California Baby Super Sensitive Shampoo & Bodywash Vanicream Cleansing Bar by Pharmaceutical Specialties Inc. CeraVe hydrating cleanser by Coria	www.psico.com www.neutrogena.com www.californiababy.com www.psico.com www.CeraVe.com www.eucerin.com
Diaper cream	Aquaphor Healing Ointment by Beiersdorf Zinc oxide paste (generic)	
Baby powder	Corn starch	
Diapers	Seventh Generation-Chlorine Free Diapers by Seventh Generation Inc. Tender Care Diapers* by Tender Care International Inc. Tushies Diapers* by Tender Care International Inc. Fitti Baby Diapers* by Associated Hygienic Products, Disposable Soft Goods International Drypers Gentle Dry Diapers* by Associated Hygienic Products, Disposable Soft Goods International Cloth Diapers by Cotton Babies Inc.	www.seventhgeneration.com www.tendercarediapers.com www.tushies.com www.ahp-dsg.com/fitti_default.asp www.ahp-dsg.com www.cottonbabies.com
Baby wipes	Seventh Generation Natural Baby Wipes by Seventh Generation Inc. Fragrance-free cleanser with cloth	www.seventhgeneration.com

* "Perfume-free"

REFERENCES

1. Beattie PE, Green C, Lowe G, Lewis-Jones MS. Which children should we patch test? *Clin Exp Dermatol.* 2007;32(1):6-11.
2. Militello G, Jacob SE, Crawford GH. Allergic contact dermatitis in children. *Curr Opin Pediatr.* 2006;18(4):385-390.
3. Goon AT, Goh CL. Patch testing of Singapore children and adolescents: our experience over 18 years. *Pediatr Dermatol.* 2006;23(2):117-120.
4. Clayton TH, Wilkinson SM, Rawcliffe C, Pollock B, Clark SM. Allergic contact dermatitis in children: should pattern of dermatitis determine referral? A retrospective study of 500 children tested between 1995 and 2004 in one U.K. centre. *Br J Dermatol.* 2006;154(1):114-117.
5. Wöhrl S, Hemmer W, Focke M, Götz M, Jarisch R. Patch testing in children, adults, and the elderly: influence of age and sex on sensitization patterns. *Pediatr Dermatol.* 2000;20(2):119-123.
6. Food and Drugs. Food and Drug Administration Department of Health and Human Services. Code of Federal Regulations. Available at: <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=700&showFR=1>. Accessed January 11, 2008.
7. EHNC, FDA Petition 99P 1340. 1999, Environmental Health Network of California.
8. Scheinman PL. The foul side of fragrance-free products: what every clinician should know about managing patients with fragrance allergy. *J Am Acad Dermatol.* 1999;41(6):1020-1024.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.