

Avoiding Formaldehyde Allergic Reactions In Children



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Formaldehyde is a well-known sensitizer in children, and allergy to this substance is a more widely recognized problem in recent years.¹⁻³ In some children, even small amounts of formaldehyde can trigger and maintain an eczematoid-type

dermatitis, headache, or symptoms of asthma.⁴⁻⁷ Allergy to formaldehyde is not surprising, given the large number of products containing formaldehyde and formaldehyde-releasing preservatives (FRPs).

As with the more immediate allergic

reactions that occur to peanuts and latex, for example, it is known that an allergic reaction doesn't occur at the first exposure to the allergen. Rather, with each exposure to the allergen, the person is more likely to reach the threshold/dose at which they express the allergic reaction. Through metabolism, aspartame is converted metabolically in the liver to methanol, which is in turn metabolized to formaldehyde.⁸

Most people with formaldehyde allergy don't recount a specific exposure that made them sensitive. Following patch

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TABLE.

Examples of Products Containing Formaldehyde or FRPs

Product Type	With Formaldehyde/FRPs	Without Formaldehyde/FRPs
Shampoo	Avon Kids 2-in-1 Super Gentle Shampoo for Normal Hair, Avon; Dove Shampoo, Extra Volume, Unilever; Johnson's Baby Shampoo/Softwash Baby Shampoo, Kissably Baby Soft, Johnson & Johnson	Dhs Regular Shampoo, Person & Covey; Free & Clear Shampoo, Pharmaceutical Specialties; Head & Shoulders Anti-Dandruff 2-in-1 Shampoo, Smooth & Silky, Procter & Gamble
Conditioner	Avon Kids Super Gentle Conditioner/Detangler, Avon; Dove conditioner, Intense Moisture, Unilever; Nizoral A-D Non-Medicated Daily Conditioner, Janssen Pharmaceutica	Advance Techniques Daily Results Conditioner, Avon; Dhs Conditioning Rinse, Person & Covey; Free & Clear Conditioner, Pharmaceutical Specialties
Hair Gel	Avon Kids Super Gentle 2-in-1 Soft Styling Gel, all hair types, Avon; Dove Shape & Lift Volumizing Gel, Unilever; Iso Multiplicity Discipline Smoothing Gel, Innovative Styling Options	Advance Techniques for Men Styling Gel, Avon; Clinique Light Control Styling Gel, Estee Lauder; Free & Clear Hair Spray, Firm Hold, Pharmaceutical Specialties
Baby Wipes	Huggies Natural Care Baby Wipes, Unscented, Kimberly-Clark; Huggies Newborn Baby Wipes, Fragrance Free, Kimberly-Clark; Pampers One-Ups! Baby Wipes, with Aloe, Alcohol Free, Procter & Gamble	Seventh Generation Unscented Baby Wipes with Aloe Vera & Vitamin E, Seventh Generation; Tushies Baby Wipes with Aloe Vera; Lansinoh Clean & Condition Cloths
Vitamins	Flintstones Children's Complete Multivitamin, Chewable Tablets, Bayer; Centrum Kids Complete Vitamins, Chewable Tablets, Wyeth; One-A-Day Kids Scooby-Doo! Multivitamin plus Calcium, Chewable Tablets, Bayer	L'il Critters Gummy Vites Kids Multivitamin, Northwest General Products; GNC Multiples Multibite Plus Minerals & Calcium Multivitamin For Kids, Chewable Orange Tablets; Poly-Vi-Sol Multivitamin Supplement Drops for Infants and Children, 0 to 3 Years, Mead Johnson

testing, the gold standard to diagnose contact dermatitis and with subsequent allergen education, patients are

often able to identify the products in their daily routine that contain formaldehyde.

It is generally recommended that exposure to products containing formaldehyde, FRPs, and aspartame (Nutrasweet) be avoided in children. Formaldehyde allergy in children is a problem that is potentially avoidable by substituting products free of this sensitizing chemical.

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SIDEBAR.

Names of Formaldehyde-Releasing Preservatives (FRPs) in Personal Hygiene Products and Cosmetics⁹

2-bromo-2-nitropropane-1,3 diol (Bronopol)

Diazolidinyl urea (Germall II)

DMDM hydantoin (Glydant)

Imidazolidinyl urea (Germall)

Tris (hydroxymethyl) nitromethane (Tris Nitro)

Quaternium-15 (Dowicil 75, Dowicil 100, Dowicil 200)