

# Dermatological Safety of Cosmetic Products Marketed to Children: Insights on the Sephora Kids Phenomenon

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## ABSTRACT

The "Sephora Kids" trend, where children, especially tweens and teens, are increasingly using makeup and skincare products marketed by beauty retailers, presents notable dermatological challenges. Although these products can facilitate self-expression and teach self-care, their safety and efficacy for young users are largely unverified. This review examines 4 key ingredients commonly found in these products, retinol, exfoliating acids (AHA and BHA), and vitamin C, to assess their implications for pediatric skincare. Current literature and FDA-approved guidelines indicate that these ingredients have not been thoroughly tested in children. Consequently, using these products without medical supervision can pose risks such as skin redness, irritation, heightened sun sensitivity, dermatitis, and other potential adverse effects. This review underscores the importance of cautious use and highlights the need for further research to ensure the safety of these ingredients in young populations. By informing healthcare providers and consumers of these risks, we aim to promote safer skincare practices among children.

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## INTRODUCTION

The "Sephora Kids" phenomenon denotes the increasing trend of children, particularly tweens and teens, using makeup and skincare products marketed by beauty retailers such as Sephora. Although the use of these products by children is not a recent development, the advent of social media influencers and the widespread availability of beauty products on online platforms like TikTok have markedly amplified children's interest and involvement with these products.<sup>1</sup>

From a dermatological perspective, the use of makeup and skincare products at a young age presents both potential benefits and risks. On the positive side, certain skincare products may encourage good hygiene practices and provide skin protection, particularly when they include ingredients like sunscreen or moisturizers. Additionally, experimenting with makeup can promote self-expression and creativity in children.<sup>1</sup> However, there are risks associated with the early and frequent use of cosmetics. Children's skin is more sensitive and susceptible to irritation compared to adult skin. Skincare products designed for adults often contain active ingredients, such as retinol, fragrances, and exfoliating acids, which are unsuitable for the more delicate skin of children and can result in adverse reactions, including rashes, irritation, and allergic responses.<sup>1</sup> The use of these products can also compromise the skin barrier, potentially exacerbating existing skin conditions. Furthermore, children's higher cell turnover rate renders potent ingredients like retinol and exfoliating acids unnecessary and potentially harmful.<sup>2</sup>

It is essential to consider the potential implications of this trend on children's health and well-being, particularly when they use products intended for adult skin. This review examines the common ingredients found in products marketed to tweens and teens on TikTok and assesses the potential side effects associated with their use.

### Products

#### Retinol

Vitamin A derivatives, such as retinol and tretinoin, have been studied in a limited number of pediatric patients with specific conditions like acne and ichthyosis; however, their effects on pediatric patients without these underlying conditions have not been thoroughly investigated.<sup>3</sup> Over-the-counter brands available at retailers like Sephora offer topical products containing up to 1% retinol, which can be hazardous if used improperly and without medical supervision. Due to their proliferative effects, vitamin A derivatives can cause skin irritation, manifesting as redness, scaling, and, in severe cases, retinoid-induced dermatitis.<sup>4</sup> This raises concerns regarding the integrity of the skin barrier and the heightened risk of sunburn and infection during periods of inflammation.

While vitamin A is crucial for various bodily functions, including vision, immune health, and skin maintenance, excessive amounts can pose significant risks.<sup>5</sup> Although systemic absorption of vitamin A from topical treatments like tretinoin and retinol is minimal in adults, research on pediatric populations is limited. Given the differences in surface area and metabolism

in pediatric patients, it cannot be assumed that these effects are consistent across all age groups. Studies in adults have shown that hypervitaminosis A can result in elevated vitamin A storage in the liver, potentially increasing the risk of complications such as hepatic fibrosis or oxidative stress.<sup>5,6</sup> While systemic toxicities are unlikely from topical retinol therapy, it is important to use these ingredients cautiously in children, under the guidance of a physician, to prevent potential health issues.

#### Exfoliating Acids

Alpha Hydroxy Acids (AHAs) and Beta Hydroxy Acids (BHAs) are commonly found in cosmetics designed to improve skin texture, even skin tone, and reduce signs of aging.<sup>7,8</sup> AHAs, such as glycolic acid and lactic acid, function by exfoliating the skin's surface, which results in smoother skin and unclogged pores; however, their use can increase the skin's sensitivity to UV light, thereby elevating the risk of sunburn.<sup>7</sup> Safe usage requires adherence to label instructions, applying sun protection, and avoiding exceeding recommended concentrations. It is advised that AHAs not be used on infants and children, with products containing concentrations of 10% or less being recommended.<sup>7</sup> Reported adverse reactions include burning, rash, swelling, and heightened sun sensitivity.<sup>7</sup>

Beta Hydroxy Acids (BHAs), primarily salicylic acid, are effective in reducing fine lines and improving skin texture with less irritation compared to AHAs.<sup>8</sup> They are commonly utilized in acne treatments due to their ability to penetrate oily skin and exfoliate within the pores. Safety evaluations conducted by the FDA and the Cosmetic Ingredient Review (CIR) Expert Panel indicate that BHAs are safe when formulated to minimize irritation and increased sun sensitivity.<sup>8</sup> Similar to AHAs, precautions are recommended, including patch testing on a small area of skin, following usage instructions, avoiding use on infants and children, and applying sun protection.<sup>8</sup> Ongoing studies continue to assess the long-term safety and effects of both AHAs and BHAs on skin sensitivity and UV damage, with limited research available on the safety of these products in children.

**TABLE 1.**

**Common Skincare Ingredients Found in Products Marketed to Children, Their Intended Use, Recommended Age of Use, and Associated Side Effects.**

Ingredient	Intended Use	Recommended Age	Common Side Effects
Retinol	Improve hyperpigmentation <sup>14</sup> Reduce fine lines and wrinkles <sup>14</sup>	Efficacy and safety has not been established under age 12 <sup>15</sup>	Redness, scaling, increased susceptibility to sunburn <sup>4</sup>
Alpha Hydroxy Acid	Exfoliating skin <sup>7</sup> Improving skin texture and tone <sup>7</sup>	Not recommended for infants and children <sup>7</sup>	Burning, rash swelling, increased sun sensitivity <sup>7</sup>
Beta Hydroxy Acid	Exfoliating skin <sup>8</sup> Improving skin texture <sup>8</sup> Reducing fine lines <sup>8</sup> Treating acne <sup>8</sup>	Not recommended for infants and children <sup>8</sup>	Irritation, rash, increased sun sensitivity <sup>8</sup>
Vitamin C	Improving skin texture Reducing fine lines <sup>9</sup> Treating acne <sup>10</sup> Reduce sun damage <sup>11</sup>	Not recommended for infants and children <sup>12</sup>	Redness, itching, burning, irritation, tingling <sup>12</sup>

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#### Vitamin C

Vitamin C is the most abundant antioxidant in the skin, combating oxidative stress induced by UV radiation, smoking, pollution, and other environmental factors. It is also essential for collagen formation and the prevention of collagen degradation. Due to these properties, Vitamin C exhibits both anti-aging and anti-inflammatory effects, having been shown to reduce the appearance of wrinkles and proving beneficial in the treatment of acne.<sup>9,10</sup> One study demonstrated that Vitamin C, when used in conjunction with percutaneous collagen induction (Vitamin C and Vitamin A dermal needling), improved burn scars in children with a median age of 8.3 years.<sup>11</sup> Although this study did not exclusively focus on Vitamin C, the results were positive, showing improvements in scar vascularity, pliability, and height in all participants. While Vitamin C has demonstrated promising effects on various skin pathologies, there is limited research on its impact on skin without such conditions.

Products containing 20% or more Vitamin C do not increase efficacy and have been shown to cause skin irritation.<sup>9</sup> Drunk Elephant, a popular brand among the "Sephora Kids," offers a product with a 15% Vitamin C concentration. Children, who may not fully understand proper dosing, risk overusing such products, potentially leading to skin irritation. In 2020, YouTo Inc. recalled its Grapefruit Vitamin C Glow Boosting Unicorn Paper Mask following customer complaints of burning, irritation, and redness; the majority of these complaints were from child consumers.<sup>12</sup> Both adults and children using these products must also be cautious of the other ingredients used to stabilize Vitamin C, such as exfoliating acids and perfumes, which have been shown to irritate the skin.

## DISCUSSION

The "Sephora Kids" phenomenon raises substantial concerns regarding the use of cosmetic products intended for adult skin on healthy young skin. Products formulated to address specific skin pathologies are often unsuitable for those without such conditions, particularly in children, whose skin is more sensitive and prone to irritation. The inclusion of potent ingredients in these products, such as fragrances, exfoliating acids, and retinoids, can disrupt the skin barrier, rendering their use both unnecessary and potentially harmful (Table 1).

In addition to dermatological issues, the psychological impact of early exposure to beauty standards warrants significant attention. The societal pressure to use these products at a young age, driven by the desire to emulate social media influencers, may contribute to unrealistic beauty standards and adversely affect children's self-esteem and mental health.<sup>1,13</sup> Exposure to these ideals can lead to unrealistic expectations about appearance, causing feelings of inadequacy if children cannot meet the standards promoted by media and advertising. This may result in a range of psychological issues, including low self-esteem and body image disturbances.

It is essential for the medical community to educate parents, caregivers, and pediatric patients about the safe and appropriate use of skincare products. This education should highlight the importance of patch-testing new products to identify potential allergic reactions and advocate for the use of products specifically formulated for children or those with sensitive skin. Additionally, fostering open discussions about beauty standards and individuality can help promote a healthy body image and self-esteem. Advising moderation in the use of makeup and skincare products can mitigate overexposure to potentially harmful ingredients and support the overall well-being of children.

## CONCLUSION

The "Sephora Kids" phenomenon, while indicative of shifting trends in consumer behavior and self-expression, necessitates careful consideration of its medical and psychological impacts on children. More research is required to adequately assess sensitivity reactions and the long-term effects of using these products on skin without underlying pathology. The role of the medical community in guiding parents, caregivers, and children toward safe practices is crucial for mitigating the potential adverse effects associated with early cosmetic use. Ultimately, fostering a balanced approach to beauty is essential for helping children develop a healthy self-image and protecting their sensitive skin from unnecessary harm. By promoting education, awareness, and responsible use of beauty products, we can better safeguard the health and well-being of young individuals in today's beauty-conscious society.

## DISCLOSURES

The authors have no conflicts to declare.

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