Scientific Studies:

Fragrances Can Be Phototoxic

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Many people suffer with skin rashes, eczema, and other skin disorders, yet never know why. Cortisone cream and other topical agents are often used for symptom control. Sometimes medication is required. Now research shows that it might be your fragrance.

Fragrances are widely used in many products, including perfume, cologne, lotion, shampoo, conditioner, soap, after shave, cosmetics, cleaning solutions, air fresheners, and even some tires! While these fragranced products may smell nice, they may not be good for your health.

Most fragrances contain synthetic chemicals and can cause photoallergic or phototoxic reactions. Phototoxic agents cause direct tissue injury after they are activated by UV-light in exposed individuals.

Researchers at the Department of Dermatology and Allerology, Ludwig-Maximilians-University München, Germany, conducted a study to determine if fragrances produce these phototoxic reactions.

The findings showed that common fragrance ingredients, including benzyl alcohol, bergamot oil, costus root oil, lime oil, orange oil, alpha-amyl cinnamic aldehyde and laurel leaf oil, hydroxy citronellal, cinnamic alcohol, cinnamic aldehyde, alpha-amyl cinnamic aldehyde and laurel leaf oil cause red blood cells to break open in a phototoxic reaction.

The phototoxic effects depended on the concentration of the ingredients and the UV doses administered. Some fragrances are therefore phototoxic. Others contain toxic synthetic chemicals that contribute to asthma and other respiratory disorders.

Fortunately, fragrances are not necessary for cleaning and personal care products to work effectively. Fragrances are merely added to stimulate pleasurable memories and develop loyal customers through product branding. Consumers may consciously choose fragrance-free products instead to maximize safety.

Reference

Placzek M, Frömel W, Eberlein B, Gilbertz KP, Przybilla B. Evaluation of phototoxic properties of fragrances. Acta Derm Venereol. 2007;87(4):312-6.