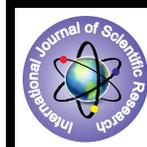


## Harmful effects of cosmetics (Review)



### CHEMISTRY

**KEYWORDS:** cosmetics, allergy, health, fragrance

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### ABSTRACT

*Cosmetics are being used regularly by all people in every region of this world. People spend a lot monthly on these and range of variety is available for different seasons and climates as well. The makers claim to have their own research cell which they claim to be the best. But all the claims about their products are based on their own studies. Top celebrities are booked for advertisements of these products, most of the times quality is compromised and generally a common man is unaware about this. In some cheap products, many times it happens that the ingredients mentioned are not true and that has effects on health. In general it can be said that cosmetics do work but they have associated harmful effects.*

It is believed that cosmetics help to look beautiful, but these products are often full of harmful synthetic chemicals which could prove to be terribly harsh on skin and numerous studies show that these chemicals are carcinogenic. Moreover, cosmetics and makeup can inhibit skin from breathing and can harbour bacteria and help external impurities causing skin problems.

shampoos, lotions, bath products, cleaning sprays, air fresheners contains ingredients which react with ozone in the indoor air, generate many potentially harmful secondary air pollutants such as formaldehyde and ultrafine particles (Nazaroff 2004). The fragrance products contain secret chemicals which are not listed on the label. Among them are chemicals associated with hormone disruption, allergic reactions and with a propensity to accumulate in human tissues. A study found, two synthetic musks Galaxolide and Tonalide in the cord blood of newborn babies (EWG 2009).

The harmful chemical diethyl phthalate was found in 97 percent of Americans (Silva 2004) it was linked to sperm damage in human epidemiological studies (Swan 2008), and musk ketone, a synthetic fragrance ingredient that concentrates in human fat tissue and breast milk (Hutter 2009; Reiner 2007).

Some harmful effects of cosmetics include;

**Effect on skin:** Skin can be affected by the use of fairness creams, sunscreens and sunblocks. There may be a permanent discoloration of skin or severe damage to skin. Sometimes few chemicals may be carcinogenic for certain people.

**Allergy:** different types of allergies such as skin, breathing, hair can be the result of excessive use of cosmetics. Skin allergies may be allergy to certain kind of lotions or creams. Breathing allergies are damages to nose and nasal passage due to intake of cosmetics during their use. Hair allergies are due to usage of shampoos or conditioners or intolerance of scalp to certain oil.

**Carcinogenic:** Some Lipstick contains aluminum which may cause long term anemia and even glucose intolerance. Many products contain chemicals like zinc oxide, BHA, barium sulphate etc. are very harmful for body and may result in many organ failures like that of kidney and liver. While taking food lip cares, lip balms and lipsticks also enters the alimentary canal and can lead to many respiratory diseases. It has also been reported that cosmetics like body moisturizers can cause trouble to endocrine system as well and disturb the thyroid content of body.

**Effect on eyes:** chemicals used for eye makeup such as eye shadow, mascara, kajal have harmful effects on the eyes. Chemicals also affect the contact lens material and can result in something very damaging like thinning of eyelashes and eye infections. Mascara can cause blindness as it contains pseudomonas aer-

uginosa which is a very harmful.

**Effects on nails:** Nail paints, Nail polish, manicures and pedicures damage nails. If used regularly or frequently, the quality of nails decreases and they become fragile, thin, lose their natural color and become pale in color. Keeping long nails becomes a big issue and extra care has to be taken.

**Effects on hair:** Use of shampoos, conditioners, hair colors, gels and serums may affect the scalp, also it causes thinning of hair, hair fall or even excessive dandruff. The use of hair sprays is even more dangerous with sources suggesting that long term usage may result in scalp skin damage and permanent discoloration of hair color.

**Effect on reproductive organs:** cosmetics may affect reproductive organs if in direct contact. In some cases they can even lead to infertility. It has been found that any cosmetic containing asbestos like talcum powder when in direct contact with reproductive organs can even affect the menstrual cycle leading to other imbalances of hormones. Shower gels and shower creams during bath may also prove to be harmful. There can be vaginal infections or even danger of prostate and ovarian cancer if the cosmetics are flawed and low on quality.

**Ageing:** All the makeup and moisturizers cause damage to skin and with prolonged use wrinkles and other signs of ageing may be visible. In the first place ageing of skin is result of excessive use of chemicals on face then anti-ageing creams and lotions are being used which claims to fight the signs of ageing, but these too may have harmful effects.

**Headache:** make up for long periods of time may result in headache, dizziness, tiredness and nausea. It has been found that cosmetics contain certain ingredients which on exposure to humans directly in large amount may lead to a state of unconsciousness.

**CONCLUSION:** Most of the cosmetics contain a range of ingredients which are associated with health concerns, such as allergic sensitization, and potential effects on the endocrine system or reproductive toxicity. It is important to be informed about these dangerous chemicals in cosmetics. Fragrance chemicals present in perfumes, personal care products, air fresheners and many other products contribute to health and environmental problems.

Unbranded cosmetics contain more harmful chemicals as compared to the branded products. If the use of cosmetic is considered to be inevitable then only branded products of reputed concerns must be used and moreover the use may be up to limited levels.

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