

When educating patients about the use of cosmetics on their face and their potential impact on the eyes, it is important to focus on key points related to safety, hygiene, and the prevention of eye-related issues:

1. Hygiene and Safety

- **Avoid Sharing Makeup:** Sharing eye makeup can spread infections.
 - **Regular Cleaning of Tools:** Brushes, sponges, and applicators should be cleaned regularly to prevent bacterial buildup.
 - **Check Expiration Dates:** Expired cosmetics can harbor bacteria and should be discarded.
 - **Mascara:** Replace tubes every 3 months.*
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2. Product Selection

- **Choose Hypoallergenic Products:** Opt for cosmetics labeled as hypoallergenic or non-toxic, especially for sensitive skin or eyes.
- **Avoid Harmful Products and Ingredients:** Educate patients to avoid products with harsh chemicals, preservatives, or fragrances that can irritate the skin and eyes.
 - **Mascara:** Avoid waterproof mascara as the wax causes meibomian gland blockage
 - **Eyeshadow:** Avoid loose eyeshadow or any containing glitter and sparkles as the particles can migrate into the meibomian glands and embed in the conjunctiva
 - **Eyeliner Tattoo:** The process of tattooing can puncture the meibomian gland directly and allow tattoo ink to enter the glands, causing immediate damage and eventual gland atrophy
 - **Lash and Brow Growth Serums:** these serums aim to trigger the growth phase of the follicle. Look for natural ingredients and healthy oils like argon, castor, and coconut oil. Avoid prostaglandin analogs (including prescription versions) that can be pro-inflammatory, change the structure of the follicle to cause unnaturally straight lashes, and eventual periorbital fat loss, affecting the ability for the eye to blink so that tears are equally distributed. This can also be observed in patients on long term prostaglandins for glaucoma treatment.
 - **Eyelash extensions:** natural lashes prevent direct airflow and debris from contacting the ocular surface, false lashes create turbulent airflow and debris

accumulation in tears. Chemicals in dyes and adhesives are toxic, causing allergy, inflammation, infection and are a breeding ground for bacteria and demodex. Lash extensions can cause chronic meibomitis, folliculitis, and lash loss.

- **Retinoids (retinol, tretinoin):** Do not use these products around the periorbital area within the orbital bone as they cause permanent damage to the meibomian glands. Always wash hands after use before applying a healthy lid serum.
- **Accutane:** Treatment for acne that reduces oil production in the skin of the face and lids. Permanent destruction of meibomian glands can result from even short term usage.
- **Sunscreen:** Avoid chemical sunscreens, choose a mineral sunscreen for the best protection and anti-aging
- **Ingredients to avoid in Skin Care: *David Suzuki Foundation**
 - BHA (butylated hydroxyanisole) and BHT (butylated hydroxytoluene)
 - Coal tar dyes: p-phenylenediamine and colors listed as "CI" followed by a five digit number
 - DEA- related ingredients: (diethanolamine)
 - Dibutyl phthalate
 - Formaldehyde-releasing preservatives
 - Parabens
 - Parfum (a.k.a. fragrance)
 - PEG compounds
 - Petrolatum
 - Siloxanes
 - Sodium laureth sulfate
 - Triclosan and triclocarban
- **Ingredients to avoid in Eye Care: *Eyes are the Story**
 - Argireline (Acetylhexapeptide -3 & -8)
 - Benzalkonium (BAK)
 - Formaldehyde releasing compounds
 - Fragrance
 - Isopropyl cloprostenate (analog of prostaglandins such as bimatoprost)
 - Parabens
 - Phenoxyethanol
 - Retinols
 - Salicylic acid
 - Tea-tree oil (terpinen-4-ol)
- **Contact Lens Wearers:** Patients wearing contact lenses should use products specifically formulated to be safe for contact lenses.

- **GPs:** Avoid contamination and skin absorption of products containing alcohols, creams, oils, fragrances for GP lens wearers.
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3. Application and Removal

- **Apply Carefully:** All cosmetics should be applied away from the inner lash line.
 - **Eyeliner:** Never apply to the inner lid margin known as 'tight-lining' or 'water-lining' - this causes meibomian gland blockage and eventual damage
- **Remove Thoroughly:** Makeup should be removed completely before sleeping using gentle, non-irritating cleansers.
 - **Facial Cleansing:** Avoid harsh ingredients that strip away healthy oils around lids and face

Avoid Overuse of Products: Over-layering of products can cause migration onto the ocular surface leading to irritation, epiphora, and allergic conjunctivitis