

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

DRY LIPS & ANGULAR CHEILITIS

OUR LIPS AND SKIN

The epidermis, or the outer protective layer of skin, is covered by the stratum corneum, which guards against infection, moisture loss, and injury. Most skin also contains melanin, which is the pigment that protects against UV light exposure. Our lips are more vulnerable to injury because they lack both the stratum corneum and melanin. They also lack fat cells which naturally moisturize other parts of our skin.

WHAT CAUSES DRY CRACKED LIPS?

Cheilitis, or inflammation of the lips, is characterized by red, dry, flaky skin, which can progress to painful cracks in the lips. We have control over many of the environmental and personal factors that can lead to cheilitis. Causes include:

- Toothpastes, moisturizers, etc.
- Food residue
- Sun and UV light exposure
- Dehydration
- Mouth breathing
- Excessive lip licking
- Exfoliating (peeling) skin products
- Piercings, braces, or dentures
- Vitamin or mineral deficiencies
- Stress
- Normal aging
- Some medications
- Certain medical illnesses (usually in the presence of other symptoms)

WHAT ARE COMMON TYPES OF CHEILITIS?

- ❖ **Angular cheilitis, also known as angular stomatitis**, is inflammation of the corner(s) of the lips that can lead to painful red cracks in the skin. It is caused by excessive moisture a skin maceration from saliva.
 - Common causes include:
 - Oral devices (ie. braces, dentures) and piercings that can irritate the lips, trap bacteria, increase salivation, or lead to licking of the lips.
 - Dry mouth (which can increase saliva production, further irritating the lips).
 - Poor oral hygiene.
 - Smoking.
 - Less common causes include:
 - Irritant or allergic reactions to oral devices or oral hygiene products.
 - Medications or diseases causing dry mouth.
 - Nutritional deficiencies, such as low iron or low vitamin B levels, including riboflavin (B2), niacin (B3), and pyridoxine (B6).
 - Immune deficiency, diabetes, anemia.
 - Yeast (*Candida albicans*) from the skin can grow in the cracks, causing more irritation and redness. Less commonly, bacteria from the skin can cause an infection.
- ❖ **Irritant contact cheilitis** is caused by exposure to irritating chemicals, which can be found in food and skin care products. For some people, soap of any kind may be too harsh for the face and lips.
 - Irritants include harsh soaps, toothpaste, moisturizers, lip balms, cosmetics, etc. Do not assume that "natural" or "organic" skin care products are gentle on the skin.
 - Food irritants include spices and artificial flavors. Lime residue left on the skin from food and drinks can lead to cheilitis when exposed to the sun.
 - Even the enzymes in saliva that break down food for digestion can be irritating to the lips.
- ❖ **Allergic contact cheilitis** is due to an allergic reaction from substances that come in contact with the lips. Allergy patch testing is commonly used for diagnosis.
 - Common allergens include ingredients in toothpaste, mouthwashes, lip products, makeup, and sunscreen. Fragrances and nickel are the most common cosmetic allergens.
 - Ingredients unique to lipsticks can be allergens: castor oil, resins, dyes, propolis, and copolymers.
 - Examples of food allergens include mango, citrus fruit, and cinnamon.
- ❖ **Atopic cheilitis** is common in individuals with eczema or a history of eczema.
- ❖ **Dehydration cheilitis** is caused by anything that robs the lips of moisture. Examples include:
 - Dry, cold, and/or windy weather.
 - Indoor heating.
 - Caffeinated drinks, alcohol.
 - Excessive lip licking. Lip balms can sometimes cause this.
 - Mouth breathing.
- ❖ **Actinic cheilitis** is caused by chronic exposure to UV light and can lead to pre-cancerous of the lips. Protect your lips from the sun with lip products containing sunscreen, and avoid tanning booths.

WHAT CAUSES BUMPS ON THE LIPS?

Small bumps, called milia, can develop from blocked pores around the edges of the lips. Blockage can be caused by:

- The accumulation of lip balm or other skin care products on the skin.
- The accelerated turnover of skin cells due to chemical or laser exfoliation. Common exfoliating agents found in skin care products include retinol, alpha hydroxy acids, and beta hydroxy acids (eg. salicylic acid).
- Excessive sun or UV light exposure.
- Biting or picking of the lips. This can thicken and dry the outer layer of skin, which traps skin cells that would normally slough off.

DOES DIET MATTER?

All of the B vitamins contribute to healthy skin. Niacin (vitamin B3) and Riboflavin (vitamin B2) help the skin retain its moisture.

Eating a balanced diet with plenty of fresh fruits and vegetables is the best way to obtain B vitamins. A multivitamin may also be helpful.

WHAT CAN I DO FOR DRY LIPS?

❖ General Lip Care

- Maintain good oral hygiene. Rinse your face and mouth with plain water after eating and brushing your teeth. Keep piercings and braces clean by giving them an extra rinse.
- Apply a thin layer of moisturizing lip balm on a regular basis.
 - Choose lip balms that are unscented, color-free, and contain sunscreen with a minimum SPF of 15.
 - Avoid waxy lip balms that can accumulate on the skin and trap skin cells.
 - Petroleum, bees wax, shea butter, cocoa butter, and oils (such as almond and jojoba) help moisturize, soften, and protect the lips.
- If needed, gently exfoliate your lips once or twice a week to remove dry, flaky skin.
- Avoid licking your lips.
- Drink plenty of water, which is essential for healthy skin.
- Eat a well-balanced diet that includes fresh fruits and vegetables.

❖ Avoid Irritating Substances

- Avoid skin care products that are drying or irritating. These include all "deodorant" soaps, perfumed soaps, liquid soaps, and body washes because they are more concentrated.
- Use unscented moisturizing bar soaps (eg. Dove) or gentle cleansers (eg. Cetaphil).
- Avoid whitening toothpaste.
- Avoid sodium lauryl sulfate and guaiaculene (a color additive), which are used in some toothpastes, shampoos, and moisturizers.
- Avoid penyl salicylate (salol) and propyl gallate, which are found in some lip products.
- If you have eczema or allergies to wool, you may also have an allergy to lanolin, an ingredient used in some moisturizers (eg. Aquaphor Healing Ointment).
- Avoid tea tree oil, which can worsen eczema or cause allergic reactions, especially when used in higher concentrations.
- Lime juice on the skin combined with sun exposure can lead to an irritating skin reaction. Rinse your mouth and lips well after consuming foods or drinks made with fresh lime.
- Avoid chewing gums, candies, tobacco, and snuff because they increase saliva production and may contain potentially irritating flavors.
- Some spices (eg. cinnamon, mint, menthol) can trigger rashes or dry lips.
- Avoid piercings that contain nickel, which is a common cause of allergic skin reactions.

❖ Angular Cheilitis

- If no infection is present, barrier creams (eg. zinc oxide paste) or bland lubricants (eg. petroleum jelly) applied twice daily can be helpful.
- If yeast is present, antifungal ointments, like miconazole and clotrimazole (Lotrimin), may be applied to the cracked areas 2 times a day for 1 to 3 weeks.
- If a bacterial staphylococcal infection is present, mupirocin ointment may be used 2 times a day for 7 to 14 days.