**Dry Lips & Angular Cheilitis**

**Our Lips and Skin**
Our skin is comprised of three layers. The outer protective layer, or epidermis, is covered by the stratum corneum, which guards against infection, moisture loss, and injury. Our skin also contains melanin, which are pigment (color) cells that protect us from UV light exposure.

Our lips are more vulnerable to injury because they do not contain the stratum corneum or melanin. They also lack the 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 often have control over the environmental and personal factors that can lead to this problem. 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?**
- **Actinic Cheilitis** is caused by prolonged exposure to UV light, usually from the sun or tanning beds. Actinic cheilitis can lead to pre-cancerous changes of the lips. Protect your lips by using lip products that contain sunscreen, and avoid tanning booths.
- **Angular Cheilitis** is inflammation of the corner(s) of the lips that can lead to painful red cracks in the skin.
  - 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.
    - Poor oral hygiene.
  - Less common causes include:
    - Irritant or allergic reactions to oral devices, oral hygiene products, or skin care products.
    - Food residue.
    - Nutritional deficiencies.
    - Immune deficiency.
  - 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.
- **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 spices, artificial flavors, harsh soaps, toothpaste, moisturizers, lip balms, cosmetics, etc. 25% of people with skin rashes near the lips have an allergy to ingredients commonly found in toothpaste, lip products, and other cosmetics.
  - Do not assume that “natural” or “organic” skin care products are gentle on the skin.
  - 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.
- **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. Use of lip balms may cause this.
  - Mouth breathing. This can dry the mouth and lead to bad breath, both of which increase saliva production that can further irritate the lips.
- **Exfoliative or Factitious Cheilitis** is caused by stress that leads to excessive biting or picking of the lips.
Plasma Cell Cheilitis is due to normal aging and can start as early as age 30. It often occurs with angular cheilitis. The cause is unknown, and there are no tests to aid in diagnosis.

WHAT CAUSES BUMPS ON THE LIPS?
Small bumps, called milia, can develop from blocked pores along the outer 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 at 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, periodically exfoliate your lips to remove dry, flaky skin. Use exfoliating skin cleansers that contain phenol, beta hydroxy acids (eg. salicylic acid), or alpha hydroxy acids.
  - 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 guaiazulene (a color additive), which are used in some toothpastes, shampoos, and moisturizers.
  - Avoid peryl 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. This can lead to irreversible changes in skin color.
  - 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.