

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

ACNE

WHAT IS IT?

Acne is a common skin condition caused by overactive sebaceous (oil) glands in the skin. It affects 17-28 million Americans in varying degrees. Most commonly seen in teenagers and young adults, acne can persist into adulthood in some cases.

WHAT CAUSES IT?

A combination of genetics, hormonal factors, and the presence of bacteria leads to the development of acne. Stress, skin care products, and medications can contribute to outbreaks. The role certain foods may play in acne is controversial.

When an enlarged hair follicle becomes plugged with oil and bacteria, a comedone or pimple is created. A closed comedone or whitehead stays below the skin's surface. An open comedone or blackhead has a larger opening that exposes it to the surface of the skin; a chemical reaction with the air gives the material inside the comedone its black color. Some people go on to develop more severe inflammatory lesions, such as pustules, nodules, and cysts.

WHAT ARE THE SYMPTOMS?

Some people have mild symptoms such as an occasional whitehead or blackhead, while others have a combination of open and closed comedones, papules, and pustules. The most serious lesions are painful, tender cysts under the skin. The face, chest, and back are common sites for outbreaks.

WHAT IS THE TREATMENT?

Maintaining a balanced diet, getting enough sleep, and exercising regularly support overall immune function, which is beneficial in controlling acne.

SKIN CARE TIPS

- ❖ Consistent skin care with mild cleansers and moisturizers is helpful. Instead of oil-based creams and cosmetics, **look for water-based, non-comedogenic products**. Mild cleansers such as Cetaphil, Dove, Neutrogena, and Basis are good choices.
- ❖ **Avoid astringents and abrasive soaps and scrubs** as they can cause more irritation and dry skin. Also avoid moisturizers with glycolic acid, which can cause further skin irritation when used with acne treatments.
- ❖ Shampoo your hair regularly to control oil production.
- ❖ When shaving, use shaving cream and a light touch with a razor, or use an electric razor.
- ❖ Resist the temptation to pick at or squeeze pimples. This can lead to scarring and/or infections.
- ❖ **Don't forget to apply sunscreen every day!** Some acne treatments can make you more sensitive to the sun even if you do not usually sunburn.
 - Mild moisturizers such as Cetaphil, Neutrogena, Aveeno, and Oil of Olay have sunscreen added and should be used on a daily basis.
 - If you plan to be out in the sun for an extended period of time, choose a non-comedogenic sunscreen. Neutrogena, Aveeno, and Cetaphil make sunscreens specifically for the face. Choose a minimum coverage of SPF 30. Don't forget to also protect your neck, arms, chest, and back.
 - Broad-brimmed hats, sunglasses, and lip balm with sunscreen are additional ways to protect your face and neck from sun damage.

MEDICATIONS

The goal of acne treatment is to minimize the formation of new lesions, prevent scarring from pustules and cysts, and improve overall appearance. The treatment regimen recommended will depend on the type and severity of acne symptoms.

Patience and persistence are essential! Treatment results are not immediate. It will take several weeks to start noticing an improvement in your skin. You are on track if your acne is 50% improved after 2-3 months of treatment. If you get discouraged, talk with your healthcare provider before changing or discontinuing medications.

Topical Medications

Almost all patients will be advised to use some sort of topical treatment on their skin. In general, creams and lotions are better for dry skin, and solutions and gels are recommended for oily skin.

■ **Topical retinoids** (RetinA, Differin, Tazorac) are an important part of acne treatment because they unclog pores and reduce comedone formation. They are vitamin A derivatives that promote the turnover of skin cells.

- ❖ During the first month of use, dry, irritated, and/or flaking skin is common. Some patients notice an initial worsening of their acne during the first few weeks of use.
- ❖ Use these medications daily at **bedtime**. Sun exposure decreases their effectiveness, and any red or dry skin will be less bothersome while you are sleeping.
- ❖ After washing your face, pat it dry and use a **pea-sized amount** to cover your entire face. This amount may not feel like enough, but it is all you need. Using more will only cause further skin irritation. Apply a moisturizer on top to decrease dryness.
- ❖ If skin irritation or dryness does not improve with time, wait 30 minutes after washing your face to apply the medication. You can also decrease medication use to every other night or less. Once the initial skin irritation improves, gradually increase back to nightly use.
- ❖ Due to skin irritation, do not wax your face while you are using this treatment.
- ❖ Combination products with topical antibiotics are also available.
- ❖ You should not use these medications if you have any pregnancy risk. Tazorac specifically has been shown to cause birth defects. If you are sexually active, you should use 2 forms of birth control while on this treatment.

■ **Over-the-counter products** that contain **benzoyl peroxide** or salicylic acid reduce bacteria on the skin surface. They also have drying and anti-inflammatory effects. The use of benzoyl peroxide with antibiotic treatment is important to minimize the risk of developing antibiotic resistance.

- ❖ Benzoyl peroxide products range in concentration from 2.5% to 10%. Start with a medium strength product, like PanOxyl 4% creamy wash. Change to lower or higher concentrations depending on how well your acne is responding and the level of skin irritation. Higher concentrations (like 10%) should be avoided on the face.
- ❖ These products are not meant for spot treatment. They are most effective for preventing new acne lesions, and therefore should be used on the entire face (not just the problem areas).
- ❖ Benzoyl peroxide products will bleach clothing, towels, etc. (but not your skin).
- ❖ If you are advised to use both benzoyl peroxide and a topical retinoid, use the benzoyl peroxide product in the morning and the retinoid product at bedtime. Avoid using both at the same time, as benzoyl peroxide will increase oxidation of the retinoid medication.

■ **Sulfur-based creams/washes** are alternatives to benzoyl peroxide products if the latter are too drying. Be forewarned that sulfur creams carry an unpleasant odor. If you have a sulfonamide allergy, test the sulfur product on a small area of skin first. Most people with a sulfonamide allergy do not have problems using sulfur products.

■ **Topical antibiotic products** (clindamycin, erythromycin, dapsone) decrease the amount of bacteria on the skin. They are recommended for treatment of inflammatory acne. These medications are also available as combination products with benzoyl peroxide or topical retinoids.

Oral Medications

■ **Oral antibiotics** (tetracycline, doxycycline, minocycline, erythromycin, bactrim) help reduce bacteria associated with cystic or inflammatory acne. Taking the lowest effective dosage for the shortest period of time decreases the risk of developing antibiotic resistance.

■ **Birth control pills** may help with hormonal imbalances that cause sebaceous (oil) glands to become overactive and clog up pores. Ortho-tricyclen, Yaz, and Estrostep are FDA-approved for the treatment of acne. Improvement is not immediate, as these medications can take 6 months to work.

■ **Isotretinoin** is an oral Vitamin A derivative used to treat severe cystic acne. This medication can only be prescribed by a dermatologist and requires close monitoring and regular blood draws. Isotretinoin is known to cause birth defects, so 2 forms of birth control are required during treatment.

RECOMMENDED WEBSITES:

- www.aad.org
- www.nih.gov/niams