



What causes acne? Your face contains hundreds of small hairs, each of which grows from a follicle. The hair comes out of the skin's surface through a hole called a pore. The oil glands in your skin produce a substance called sebum, which is a natural moisturizer. As your body matures, sex hormones cause these oil glands to produce larger quantities of sebum. Sebum, combined with a build-up of debris and dead skin cells, can form a plug in your hair follicles. The plug is called a comedone, more commonly known as a blackhead or whitehead.

Acne develops when comedones form and a bacteria called *P. acnes* becomes trapped inside the follicle. This causes inflammation and pus formation, resulting in the typical lesions of acne. The inflammation may be superficial or very deep. This is why the severity of acne may differ from person to person.

Does acne occur only during the teen years? Definitely not. Although it usually begins during adolescence, it can persist well into adulthood. It can also appear for the first time in the third and fourth decades of life.

Why does acne tend to get worse at times? There are several reasons why the severity of acne can fluctuate:

- Changes in hormone levels often affect acne. Many girls and women will notice a slight flare-up of acne before or during a menstrual period. Birth control pills or pregnancy also influence the degree of severity. Male hormones, present in both men and women, can play a significant role.
- It is thought by many that stress and tension can cause breakouts of acne. Some people react to stress by picking or rubbing their skin, and this can make their acne worse.
- Certain medications may either cause acne or make existing acne worse. If you are taking any medication on a regular basis, please tell your doctor.

Does diet affect acne? Traditionally, it has been thought that diet plays no role in the development of acne. The exception is food that contains iodine (shellfish), which may aggravate acne. There is no evidence that chocolate, soda pop, or fatty foods make acne worse. However, if certain foods seem to worsen your acne, avoid them. Some new research has shown that foods with a high glycemic index (foods that cause high levels of glucose in the blood) seem to exacerbate acne. However, more data and studies are needed before this becomes widely accepted.

How is acne treated? Unfortunately, there is no cure for acne. The goal of treatment is to control your acne until you outgrow it. Therapy is aimed at preventing new acne from forming and needs to be used until your skin no longer breaks out. This will take time; therefore, therapy may continue for months or years, and medications may need to be changed periodically depending on your response. Spot treating acne once it has already broken out is a common error

patients make. Another mistake is stopping treatment before the medications have a chance to work. Even the most effective medications take 6-8 weeks to begin working and sometimes even longer – so be patient. Do not stop therapy when the acne clears up unless your doctor instructs you to do so. The therapy your dermatologist will recommend will vary according to the severity of your acne.

Basic treatment for all acne

- Wash your face with a mild soap (e.g. Neutrogena, Purpose gentle cleanser, Cetaphil gentle skin cleanser) twice a day and after exercise. Scrubbing and washing your face repeatedly will not help unclog your pores. In fact, it can irritate the skin and make acne worse. Special astringents are probably a waste of money.
- Make sure anything you put on your face is good for acne-prone skin. Use water-based and oil-free products that are labeled "non-comedogenic" (Cetaphil, Neutrogena, Eucerin, and Aveeno are examples of non-comedogenic products). Cosmetics should be removed at night with soap and water. An oil-free powder-based makeup is ideal.
- Do not use drying agents such as toothpaste on your acne.
- Do not pick, squeeze, or scratch your pimples. Try to keep your hands and objects such as cell phones from touching your face. Pressure on the skin can clog your pores and cause more acne to develop.
- Avoid hair conditioners and greasy hair products that can spread to the face and worsen acne, especially on the forehead and along the hairline. Shampoo your hair daily, avoiding 2-in-1 shampoos with conditioner. Shield your face when applying hairsprays and gels.

Topical therapy Mild acne is often controlled with topical therapy. Remember that treatment of acne prevents new lesions. Therefore, topical medications must be applied to the areas of your skin where you tend to break out, not just to the pimples themselves.

- Benzoyl peroxide (BP) gel helps to unplug blackheads and kill bacteria. It is available without a prescription. Apply the gel once a day. If your skin becomes red or scaly, you are using too much of the medicine or applying it too often. Try using less of it or applying it less frequently. If needed, you can apply a non-comedogenic moisturizer after the BP dries. Remember that BP can bleach clothing and other fabrics.
- Topical retinoids (Avita, Retin-A, Differin, Tazorac) are prescription medications that are applied daily at night. These are vitamin A-derived creams that help prevent plugging of the follicle and blackhead formation. Retinoids can be irritating when first used, but your skin will become more tolerant over time. It can be used less often if the irritation is significant. The best results occur after three months, but you will start seeing an improvement after a few weeks.
- Topical antibiotics (Cleocin, clindagel) may be prescribed if you have red bumps and pus bumps.

Oral medications

- Oral antibiotics including tetracycline, doxycycline, minocycline, erythromycin, and Bactrim may be needed if you have a lot of inflamed lesions.
- Oral isotretinoin (Accutane, Sotret, Amnesteem) is used only for severe, scarring, cystic acne because it has many potential side effects. Prevention of pregnancy is an absolute requirement since the drug can cause severe birth defects if taken during pregnancy.
- For more information on isotretinoin, click the following: Oral Isotretinoin (Accutane, Sotret): The iPLedge Program.

Remember: each person is different, and your provider will recommend therapy for you and the type of acne you have.

For more information about acne go to:
www.skincarephysicians.com/acnet