

# Acne



Acne is a long-term skin condition characterized by areas of blackheads, whiteheads, pimples, greasy skin, and possibly scarring. The resulting appearance may lead to anxiety, reduced self-esteem, and in extreme cases, depression or thoughts of suicide.

Genetics is estimated to be the cause of 80% of cases. The role of diet as a cause is unclear.

Neither cleanliness nor sunlight appear to be involved. However, cigarette smoking does increase the risk of developing acne and worsens its severity. Acne mostly affects skin with a greater number of oil glands including the face, upper part of the chest, and back. During puberty in both sexes, acne is often brought on by an increase in androgens such as testosterone. Excessive growth of the bacteria *Propionibacterium acnes*, which is normally present on the skin, is often involved.

Many treatment options are available to improve the appearance of acne including lifestyle changes, procedures, and medications. Eating fewer simple carbohydrates like sugar may help. Topical benzoyl peroxide, salicylic acid, and azelaic acid are commonly used treatments. Antibiotics and retinoids are available topically and by mouth to treat acne. However, resistance to antibiotics may develop. A number of birth control pills may be useful in women. Oral isotretinoin is usually reserved for severe acne due to greater potential side effects. Early and aggressive treatment is advocated by some to lessen the overall long-term impact to individuals.

## Causes of Acne

Acne typically appears on your face, neck, chest, back and shoulders. These areas of skin have the most oil (sebaceous) glands. Acne occurs when hair follicles become plugged with oil and dead skin cells.

Hair follicles are connected to oil glands. These glands secrete an oily substance (sebum) to lubricate your hair and skin. Sebum normally travels along the hair shafts and through the openings of the hair follicles onto the surface of your skin.

When your body produces an excess amount of sebum and dead skin cells, the two can build up in the hair follicles. They form a soft plug, creating an environment where bacteria can thrive. If the clogged pore becomes infected with bacteria, inflammation results.

The plugged pore may cause the follicle wall to bulge and produce a whitehead. Or the plug may be open to the surface and may darken, causing a blackhead. A blackhead may look like

dirt stuck in pores. But actually the pore is congested with bacteria and oil, which turns brown when it's exposed to the air.

Pimples are raised red spots with a white center that develop when blocked hair follicles become inflamed or infected. Blockages and inflammation that develop deep inside hair follicles produce cyst-like lumps beneath the surface of your skin. Other pores in your skin, which are the openings of the sweat glands, aren't usually involved in acne.

### **Factors that may worsen acne**

These factors can trigger or aggravate an existing case of acne:

- **Hormones:** Androgens are hormones that increase in boys and girls during puberty and cause the sebaceous glands to enlarge and make more sebum. Hormonal changes related to pregnancy and the use of oral contraceptives also can affect sebum production. And low amounts of androgens circulate in the blood of women and can worsen acne.
- **Certain medications:** Drugs containing corticosteroids, androgens or lithium can worsen acne.
- **Diet:** Studies indicate that certain dietary factors, including dairy products and carbohydrate-rich foods — such as bread, bagels and chips — may trigger acne. Chocolate has long been suspected of making acne worse. A recent study of 14 men with acne showed that eating chocolate was related to an increase in acne. Further study is needed to examine why this happens or whether acne patients need to follow specific dietary restrictions.
- **Stress:** Stress can make acne worse.

### **Symptoms of Acne**

Acne can cause more than blemishes. Studies show that people who have acne can have:

**Low self-esteem:** Many people who have acne say that their acne makes them feel bad about themselves. Because of their acne, they do not want to be with friends. They miss school and work. Grades can slide, and absenteeism can become a problem because of their acne.

**Depression:** Many people who have acne suffer from more than low self-esteem. Acne can lead to a medical condition called depression. The depression can be so bad that people think about what it would be like to commit suicide. Many studies have found that teens who believe that they have “bad” acne were likely to think about committing suicide.

**Dark spots on the skin:** These spots appear when the acne heals. It can take months or years for dark spots to disappear.

**Scars (permanent):** People who get acne cysts and nodules often see scars when the acne clears. You can prevent these scars. Be sure to see a dermatologist for treatment if you get acne early — between 8 and 12 years old. If someone in your family had acne cysts and nodules, you also should see a dermatologist if you get acne. Treating acne before cysts and nodules appear can prevent scars.

## Treatment of Acne

- Acne treatment depends on whether you have a mild, moderate, or severe type of acne. Sometimes your doctor will combine treatments to get the best results and to avoid developing drug-resistant bacteria. Treatment could include lotions or gels you put on blemishes or sometimes entire areas of skin, such as the chest or back (topical medicines). You might also take medicines by mouth (oral medicines). Mild acne

### Treatment for mild acne (whiteheads, blackheads, or pimples) may include:

- Gentle cleansing with warm water and a mild soap, such as Dove or Cetaphil
- Applying benzoyl peroxide (such as Brevoxyl or Triaz)
- Applying salicylic acid (such as Propa pH or Stridex)

If these treatments do not work, you may want to see your doctor. Your doctor can give you a prescription for stronger lotions or creams. You may try an antibiotic lotion. Or you may try a lotion with medicine that helps to unplug your pores.

### Moderate to severe acne

Sometimes acne needs treatment with stronger medicines or a combination of therapies. Deeper blemishes, such as nodules and cysts, are more likely to leave scars. As a result, your doctor may give you oral antibiotics sooner to start the healing process. This kind of acne may need a combination of several therapies. Treatment for moderate to severe acne may include: Applying, benzoyl peroxide.

- Draining of large pimples and cysts by a doctor.
- Applying prescription antibiotic gels, creams, or lotions.
- Applying prescription retinoids.
- Applying azelaic acid.
- Taking prescription oral antibiotics.
- Taking prescription oral retinoids (such as isotretinoin).

### Treatment for acne scars

There are many procedures to remove acne scars, such as laser resurfacing and dermabrasion. Some scars shrink and fade with time. But if your scars bother you, talk to your doctor. He or she may refer you to a dermatologist or a plastic surgeon.

### References:

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