

# Acne

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## Acne basics:

Acne is a disease of the pilosebaceous units, which consist of a sebaceous glands connected to follicles. The sebaceous glands make an oily substance called sebum that normally empties onto the skin surface through the opening of the follicle, commonly called a pore. Cells called keratinocytes line the follicle. The hair, sebum, and keratinocytes that fill the narrow follicle may produce a plug, which is an early sign of acne. The plug prevents sebum from reaching the surface of the skin. This mixture of oil and cells allows bacteria that normally live on the skin to grow in the plugged follicles. These bacteria produce chemicals and enzymes and attract white blood cells that cause inflammation. (Inflammation is a characteristic reaction of tissues to disease or injury and is marked by four signs: swelling, redness, heat, and pain). **When the wall of the plugged follicle breaks down, it spills everything into the nearby skin-sebum, skin cells and bacteria-leading to pimples.**

- Acne is thought to be secondary to a combination of an increased production of androgens (male sex hormones) and genetic factors.
- Whether diet plays a role in acne is still debated. One well thought out reference is *The Clear Skin Diet* by Val Treloar and Alan Logan.
- Acne is **not caused by dirty skin**. Blackheads are not black due to dirt; the black you see is oxidized sebum (sebum exposed to air).

## Treatment:

- Treatment of acne involves addressing the problem areas discussed above – “unplugging” the follicles, reducing the inflammatory reaction, reducing sebum (oil) production and eradicating *P. acnes*. Medication used to treat acne work on one or several of these problems.
- Medications used to treat acne include topical retinoids (Tretinoin, Tazorac, Differin), benzoyl peroxide (Clearasil cream, Glytone BP Acne products, etc.), topical antibiotics such as erythromycin and clindamycin, oral antibiotics such as doxycycline and minocycline, Aldactone (an oral anti-androgen agent), birth control pills, and isotretinoin (Accutane), which is generally reserved for more severe acne.
- Treatments by an aesthetician can improve acne: these include salicylic acid peels, microdermabrasion and HydraFacials. These treatments are not covered by insurance, but some patients prefer them; a consult with our aesthetician, Carol, is **free**.
- Mild acne often responds to topical medications alone.
- Moderate to severe acne generally requires oral medication for adequate control.
- Acne medications are often combined, due to their varied mechanisms of action.
- The more severe the acne, the more imperative treatment is, because severe acne commonly leads to permanent scarring.
- **No matter what treatment is utilized, it usually takes 6–8 weeks to see improvement; don’t give up on your medication in two weeks!**
- **You cannot scrub away your acne! Use a mild cleanser such as Cetaphil, Dove or Avene AC and avoid alcohol based cleansers (toners and astringents).**
- **Mild salicylic cleansers can be helpful; we carry Glytone and Avene cleansers for this.**

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