

How Does Acne Start

Acne is a result of an imbalance of two or more factors in skin physiology relating to the sebaceous gland and duct system. When our body physiology is working properly, small amounts of oil (called sebum) are produced in the sebaceous glands in the dermis or deeper part of the skin. These sebaceous glands share a duct or tubule that goes to the skin with a small hair. When either too much oil is produced or blockage of the tubule preventing the escape of oil occurs, the net result is acne. The most common causes of acne are an increased production of sebaceous material due to hormone imbalance or side effects of stress that cause an overproduction of sebaceous material.

However, almost always with the occurrence of acne, there is also a related phenomenon called retention keratosis. These two big words actually refer to the lining cells of the sebaceous duct not shedding properly and staying in place for a longer period of time. This builds up like rust in a pipe until the duct is closed or blocked. When this happens, it sets events occurring that proceed to inflammation or an irritation underneath the surface of the skin. If one imagines that the sebaceous duct were a small stream that got plugged up, it causes a backup of everything upstream from the direction of flow.

Another factor is the presence of several different types of skin bacteria that normally don't cause acne. However, when trapped beneath the skin, the bacteria begin to react chemically with the sebaceous material causing it to break down into free fatty acids. Free fatty acids are quite irritating to the deeper structure of the skin and result in inflammation and causes acne breakouts.

The first signs are redness, firmness, swelling, tenderness, and heat. On about the second or third day of inflammation, white blood cells increase in the area attempting to digest the bacteria and rid the body of them. This results in the formation of pustules and even more irritation extending sideways beneath the surface of the skin.