

Acne (Pimples)

What is acne (pimples)?

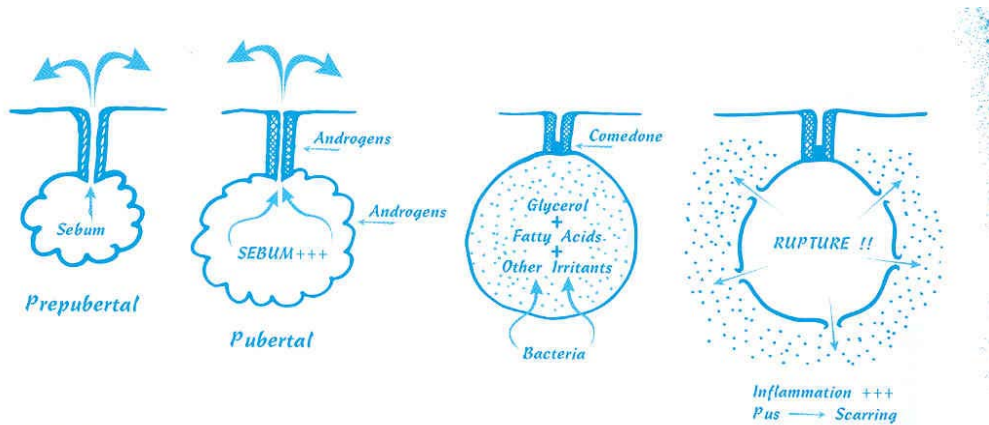
Acne (pimples) is a very common skin condition that affects most secondary school students at some stage. Because acne is so common, many people refer to it as a normal part of growing up. Even though acne is a common problem, it can have serious effects on the way a young person performs at school and acts socially.

A pimple begins as a blockage to a sebaceous (oil) gland duct. This usually starts at puberty when certain hormones are released. The hormones cause the sebaceous glands to overproduce sebum (oil). We normally have dead skin cells and bacteria on the surface of our skin, which can combine with the sebum to form a plug in the hair follicles. These plugs are known as closed comedones (white heads) or open comedones (blackheads).

What happens then all takes place under the skin. Even though the sebaceous gland duct is blocked, oil continues to be produced and the gland keeps getting bigger and bigger, a bit like a balloon. Bacteria grow in the blocked gland and produce fatty acids and other very irritating substances. Eventually the balloon bursts and releases the irritating material. This causes intense inflammation which is what we see as the pimple.

There are several different types of spots (pimples) including blackheads, white heads, papules, pustules, nodules and cysts. A person with acne will often have a mixture of different types of spots, although one type may be more common.

Acne usually occurs on the face, neck, chest, back and shoulders where there are large numbers of sebaceous glands.



What causes acne?

Although we do not know the exact cause of acne, there are many factors which can lead to acne and these can vary from person to person. Occasionally, there may be a history of members of a family, such as one parent and several of the children, with severe acne. But in general, the tendency to acne is not inherited.

Going through puberty

Acne does not usually develop until a person reaches puberty when the hormones which stimulate sebaceous glands are first produced. These hormones include testosterone. Acne usually appears earlier in females than males, because females tend to start puberty earlier. Males often have more severe acne than females, as they have much higher levels of testosterone.

Having a period (menstruation)

Many females experience a worsening of their acne in the few days before their menstrual period. This is associated with the changing levels of hormones. The changing hormone levels can also cause some females to feel anxious and irritable. Some find that they tend to pick and squeeze their spots more at this time, which can also make acne worse.

Applying makeup

Acne can be made worse by certain cosmetics. Some cosmetics contain oils which can increase the blockage in the sebaceous glands. Those with acne should avoid using oil-based cosmetics and try preparations that are water-based and less likely to cause problems.

Some sunscreens can also increase blockages in the sebaceous glands. This does not mean that someone with acne should avoid using a sunscreen. But it would be best to check the ingredients in the sunscreen and use a preparation that is not oil-based.

Stress

Stress can cause people to feel worried and anxious. Many say that their acne is worse in times of increased anxiety such as before going out for a special occasion. Nevertheless, there is little evidence that stress can cause acne in someone who has never been affected by it. Some people tend to make their acne worse by picking and squeezing spots more often when they are worried or anxious.

did you know?

When somebody has acne, it does not mean that they lack hygiene or cleanliness. A "blackhead" does not have a black appearance as a result of dirt being trapped in the skin. The black colour is due to a chemical reaction when the sebum or oil comes into contact with the air.

What about diet???

"I ate too much chocolate on the weekend and now I have a pimple!!" Most of us have heard statements like this or perhaps said it ourselves. But there is actually proof that chocolate, fatty or fried foods, dairy products, cakes or sweets can cause acne or make acne worse. This does not mean that a person can exist solely on a diet of chocolate and cake and expect no acne to develop! But for most people on a healthy balanced diet, eating the occasional chocolate or sweet does not seem to make any difference to acne.

Some advice on caring for the skin for people with acne...

Some people with acne can spend many years trying to work out a good method of caring for their skin. The best advice is to keep some basic principles in mind. Remember that even though a product is expensive, has an exclusive brand name and is in an attractive bottle, it does not mean that it is better than many of the products you can buy from the supermarket. Washing your face with a mild soap morning and night will help to keep your skin clean and remove the excess oil. Washing your face more frequently than this can cause excessive dryness of the skin. It is not really necessary to use an antibacterial face wash or a special soap, although some believe they may be useful in the prevention of minimal acne only. Application of toners or skin fresheners is unnecessary, and products of this type can be very expensive. It is also unnecessary to apply a moisturiser to skin affected by acne, and some products may add to the problem. Remember - many products available on the market are claimed to be essential for acne sufferers and can cost large sums of money. Much of their marketing targets those who are very concerned about their condition and will try anything, even if the claims made about the product are not entirely accurate.

Myths about Acne

Most people have been given advice on how to avoid acne or treat acne, such as "get plenty of sun", or "don't worry about it - everyone gets it and it's a normal part of growing up".

While those providing the advice are trying to help, there are many myths about acne that have been passed down through generations.

Some common myths are:

- * Eating chocolate causes acne*
- * Acne is related to a bad diet*
- * Acne is the result of a bacterial infection and can be spread from one person to another, or from one part of the face to another in the same person*
- * Acne is an allergic reaction to something*
- * All types of make-up cause acne*
- * Acne is due to poor personal hygiene*
- * Acne is caused by oily hair*
- * Blackheads are dirt trapped in the skin and are a result of poor personal hygiene*
- * Squeezing pimples will make them spread*
- * Lying in the sun or using a sun lamp will clear acne*

How can acne be managed and treated?

There are some very effective treatments for the management of acne. Virtually all of them are directed at preventing acne, rather than treating the spots that exist today.

Treatment for acne usually needs to be used for at least one to two years. The treatment used varies between individuals and depends on the type of acne. Some young people with minimal acne (a small number of blackheads and whiteheads) may not require any treatment at all.

Mild Acne

Topical preparations which may be in the form of creams, lotions and gels, are applied directly to the skin. They are designed to remove the comedones, i.e. the block in the gland, so that normal sebum flow can occur. They also reduce the bacterial content of skin and within the sebaceous gland.

The topical preparations most commonly used are available over the counter without a prescription. If the acne becomes more extensive or more active, a topical preparation available by prescription from a doctor may be required.

Topical preparations need to be used on all the areas where acne tends to occur, not just on the inflamed spots present today. In this way, they will prevent future spots appearing.

Moderate Acne

For more moderate acne, oral antibiotics may be required in addition to topical preparations. Oral antibiotics must be prescribed by a doctor. Once the acne is under control, oral antibiotics will no longer be necessary. However, the use of a topical preparation should be continued for some time.

Oral anti-androgen drugs which are also used as oral contraception may be used by females to treat moderate acne. They are available only on prescription by a doctor.

Severe Acne

The most severe forms of acne characterised by many nodules, cysts and deep scarring on the face, neck and/or back, require treatment to prevent further acne and to prevent scarring. Oral retinoids (isotretinoin) are used to treat severe acne and can only be prescribed by a skin specialist (dermatologist). Treatment with isotretinoin generally lasts 5-7 months. It requires careful follow-up by the dermatologist to make sure that no side effects occur with the medication.

to squeeze or not to squeeze??

It is important to note that acne cannot be spread by 'picking' or squeezing pimples. But, when a pimple is squeezed, the 'trapped' oils and bacteria can be exploded into the surrounding skin. This can damage the outer layer of skin and cause scarring.

The following table gives details of the various products available for the treatment of acne, whether they need a prescription, and the type of acne they may be used for.

Acne Treatment

Medication Type	Products	Source	Mechanism of Action	Type of Acne
Salicylic Acid Sulphur Teatree Oil	Acne-Aid Bar Acnederm Clean Skin Anti-Acne Clearasil Acne Treatment / Facewash Eskamel Johnson's Clean & Clear Salact	Over-the-counter	Remove comedones (blackheads & whiteheads) Antibacterial	Minimal
Benzoyl Peroxide	Benzac AC, W Brevoxyl Clearasil Ultra Medication Neutrogena Acne Mask Oxy 5, 10 PanOxyl 5, 10	Over-the-counter	Antibacterial Anti-inflammatory	Mild
Adapalene Topical Isotretinoin Retinoic Acid	Differin Isotrex Retin-A Re Trieve Stieva-A	Prescription only	Remove comedones (blackheads & whiteheads)	Mild, Moderate
Topical Antibiotics	Clindatech Clindamycin 1% Solution Eryacne 2%	Prescription only	Antibacterial	Mild, Moderate
Oral Anti-Androgen Hormone Therapy	Androcur Dianne	Prescription only	Reduce sebum secretion	Moderate in females only
Oral Antibiotics	Doxycycline Erythromycin Minocycline Sulphonamides Tetracycline	Prescription only	Antibacterial Anti-inflammatory	Moderate, Severe
Oral Retinoids (Isotretinoin)	Accure Roaccutane	Prescription from dermatologists only	Reduces sebum secretion by shrinking sebaceous gland	Severe

* These products may be used in combination over a period of time depending on acne severity.

* Over-the-counter refers to products which can be purchased without a prescription at a pharmacy (chemist) and sometimes from supermarkets.

* Prescription only refers to products which must be prescribed by a medical practitioner