

AcnePSP Question and Answer

What's the difference between sensitive skin and skin hypersensitivity (allergy) and how does skin sensitivity affect tolerance of topical acne treatments?

Lots of you asked us about which topical products for acne you can safely use if you have sensitive skin. In fact, all of us have sensitive skin. Skin has to be sensitive to insults from the outside world in order to protect us from harm. It can become more sensitive than usual if it is damaged.

The top layer of skin is called the epidermis. The outermost part of the epidermis is the stratum corneum and this is the skin's main protective barrier. It is made up of many layers of dead skin cells which are embedded in a matrix of lipids (fats) that holds the cells together. The stratum corneum keeps bad things out of the skin but allows the passage of water, oxygen and some chemicals. If the stratum corneum is too thin, too dry or too wet, it doesn't work properly.

People who have acne often put lots of different products on their skin. For example, it is common to use an acne cream morning and night and most women also wear make-up during the day. Things like toners and astringents can be bad for skin as they often contain alcohol or other chemicals that dissolve the lipids. This makes skin lose water faster than normal so that it becomes dry and flaky. The flakiness is caused by the layers of dead skin cells being shed too quickly.

Too much washing is also bad for skin. It isn't necessary to wash your skin more often if you have spots and you don't need to use harsh chemicals either. In fact, you can just use warm water. You will never wash off all the acne bacteria because they live deep inside the skin. Skin makes lots of substances to protect itself from harm and you will remove these if you wash too often or cleanse too vigorously.

Another type of product which people with acne often use is scrubs, exfoliators and microdermabrasion kits. These are all designed to remove some of the dead skin layers and so make the skin appear smoother. If they are over-used the stratum corneum becomes very thin and can't do its protective job properly. There is no evidence that any of these products stop pores becoming blocked. This is because the cells which cause the blockages come from within the tiny hair follicles in which spots form and not from the skin surface.

The take home message is that skin is healthier if we use fewer harsh chemicals and buy only gentle products for washing, skin care and for keeping the skin smooth. Overuse leads to abnormally sensitive skin which doesn't tolerate the same range of chemicals or products that normal skin does.

If the skin barrier is badly damaged, it can become red, itchy and sore. If this happens, you will need to go and see your doctor.

Skin hypersensitivity, also known as contact sensitivity or contact eczema, is something quite different. This occurs due to an immune reaction to chemicals that come into contact with the skin. It isn't caused by overusing skin care or anti-acne products but can develop when a product has been used for a while and becomes recognised by the immune cells. It only affects a small number of people and is triggered when chemicals cross the stratum corneum and then interact with white cells in the blood and living layers of skin. One of the best known skin sensitisers is nickel which used to be present in many less expensive jewellery items. Contact hypersensitivity to chemicals in products for acne is rare.

Many of you have noticed that some topical acne medications make your skin dry and flaky. There are several reasons why this might happen:

- *The active ingredient is naturally irritating.*
- *Some of the chemicals in the cream or gel which are used to help deliver the active ingredient into the skin might be irritating. A well-known example is alcohol (ethanol).*
- *You might be using too much product.*
- *You might be applying it too often or using too many other things at the same time.*

Benzoyl peroxide and salicylic acid, common ingredients of topical treatments for acne are irritant. However, the likelihood of them making your skin dry and uncomfortable will depend on the concentration in the product and on other ingredients in the formulation which can make irritation less likely. Also remember that part of the way these agents work is by loosening dead skin cells which are blocking pores so they will loosen the cells on the skin surface too.

In summary

To avoid skin becoming overly sensitive:

- *Don't wash too often and only use gentle cleansing products.*
- *Don't exfoliate more often than once a week.*
- *Don't use toner and astringents as they have no anti-acne activity and many will dry out your skin.*
- *Do moisturise regularly using a non-greasy product. This is especially important if you are using topical acne medications.*
- *Don't over-use your acne products. Always apply them sparingly to the whole area affected by the acne and never use more than twice a day.*
- *Choose make-up products carefully and ask for advice if you are unsure what to buy.*

Once your skin becomes super sensitive, it may over-react to things it used to tolerate. If this happens, it is best to seek professional advice.