



Dr Jean Ho

A student nurse who works in hospital wards complains of dry chapped hands. A hairdresser suffers from itchy and cracked hands. A housewife finds itchy bubbles on the sides of her fingers. Her nails are losing their lustre too.

What do these three different people have in common? They all have hand eczema and the culprit is sodium lauryl sulfate (SLS).

Before I go further, let us take a step back to marvel at our skin – the body's largest organ. A protective barrier, the skin keeps moisture locked in, even in the harshest of environments, so we do not shrivel up like dried dates. At the same time, it deflects and neutralises external elements such as germs and UV radiation.

Its outermost part (called the horny layer) is mostly the remains of dead skin cells that are compacted and bound together by a biological glue. This layer, at the same time both rigid and pliable, is the skin's true protective zone.

Yet, even this seemingly impenetrable fortress is gradually being eroded and destroyed by SLS in the humble bar of soap.

SLS is said to be both a boon and a bane. It belongs to a group of chemicals called surfactants. These have a remarkable ability to break up grease and oil films, which can then be rinsed off easily.

Nothing degreases and lathers quite like SLS which is found in solid and liquid soaps, shower foam and dishwashing detergents.

Now for the bane part. When it comes in contact with skin (especially your hands), it will remove more than surface grime.

This is because the skin's precious horny layer is mostly composed of a mixture of proteins and fats. This fatty-protein glue cements the skin cells together.

After every hand wash with soap, some of these natural skin fats are removed. Repeat this five to 10 times each day and you can see what happens to your skin.

Hand eczema, therefore, becomes an occupational hazard for people like nurses, hairdressers and housewives.

You must be thinking: That's nice to know, doc, but if SLS is so terrible how do I keep clean and save my skin too?

First, treat dishwashing liquid as high-octane stuff: do not wash your hands with it.

Dishwashing detergents are designed for dishes, not hands. Packed to the brim with grease busters, they are too harsh for the hands.

When washing dishes, avoid using the detergent straight from the bottle. Instead, dilute the detergent in a cup of water first. The financial savings are two-fold – from detergent and the medical bills.



Be
kind
to your
hands

Needless to say, donning a sturdy pair of vinyl gloves during washing is still the best protection against hand eczema from detergents.

As for hand soaps, some are harsher than others, like the liquid soaps in the sink-side dispensers of public toilets. These are generally low-cost and no frills, and often not gentle enough for frequent use.

In our obsession with hygiene and disinfection, we seem to equate the lather from soap as cleansing.

Yet, more lather almost always means more SLS, and this is of course bad for the skin.

However, there are soaps which may not lather as well, but are vastly kinder to our skin. These soaps, sometimes called syndets, contain non-SLS substitutes.

Syndets are also better because they are formulated with moisturising factors such as glycerol and oils that both cleanse and replenish the skin.

If you have dry, eczema-prone skin, you would be better off with products, which are labelled as gentle, moisturising, or even soap-free.

Unless hands are visibly soiled, use a sanitising hand rub instead of soap. Studies have shown that hand rubs are just as effective in cleansing, while leaving the skin largely unharmed.

If you think that moisturisers are only part of a beauty ritual, think again. Beyond vanity, medical science has produced a slew of ingredients which mimics the molecules of the skin so much that you might as well be putting on a second skin. Well, almost.

Their purpose is to restore the skin to its optimal and natural condition. Be they lotions, creams, or emollients, choose what suits your skin's needs. Use them on your hands and use them often. Use after and in-between washings.

For an extra boost, try this at night. Just before bedtime, slip on a pair of cotton gloves after applying moisturiser to your hands. You will be waking up to smoother, more supple skin in the morning.

Finally, if bubbles appear on the the skin of your hands and you are scratching like mad, a few days's supply of steroid cream from your doctor should give quick relief.

In the face of the H1N1 flu pandemic, hand hygiene is in the spotlight again.

Unfortunately, the incidence of hand eczema parallels the hand-washing campaigns. By choosing the right products and strategies, you can keep your hands clean and protected at the same time.

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