

Skin hydration – washing away the hype

Cheryl Cole delves into the facts behind achieving healthy, glowing skin

Over the years, as a holistic beauty therapist, skin care trainer and lecturer, I have witnessed a lot of changes – including a recent surge in the number of therapists who are adding advanced therapies to their repertoire, such as chemical peels and dermabrasion.

Many of these therapists have not received the appropriate training or lack the necessary underpinning knowledge and experience to carry out these treatments, which can spell catastrophe.

With headlines also appearing in the national press this summer regarding an anti-ageing company being sued, perhaps it is high time to unite as therapists and do what we do best – work holistically with the skin, not against it!

A deeper look at the skin helps us to understand the importance of hydration and its link with beautification, and I would like to start by looking at the common myth: if you drink six to eight glasses of water each day your skin will be hydrated and plump.

Of course, drinking water is essential, however it won't target the skin specifically, nor will it come into contact with the skin's surface. It will benefit the body as a whole before it ultimately reaches the bladder and is expelled. So while many therapists avidly tell their clients to increase fluid intake, this is only part of the answer and by no means the solution to healthy skin.

To gain a further insight we have to look at the epidermis in more detail, in particular its role of protection. The skin is a highly effective barrier, being both tough and flexible – provided it is well hydrated. If its water content falls below 10 per cent within the stratum corneum, it becomes dry, less flexible and increasingly prone to damage, breakdown and infection.

Our bodies naturally lose water, which is referred to as trans-epidermal water loss (TEWL), through such things as temperature regulation, evaporation (sun, wind, central heating and so on) and the inappropriate use of skin preparations or salon treatments.

In balanced skin the TEWL does not fall below the 10 per cent barrier. In the normal epidermis the water content gets less the closer we get to the surface, with water making up 70 to 75 per cent of the weight of the basal layer, but only 10 to 15 per cent of the stratum corneum (or horny layer).

Therefore, preventing excessive water loss is exceptionally important to the skin's health and appearance.

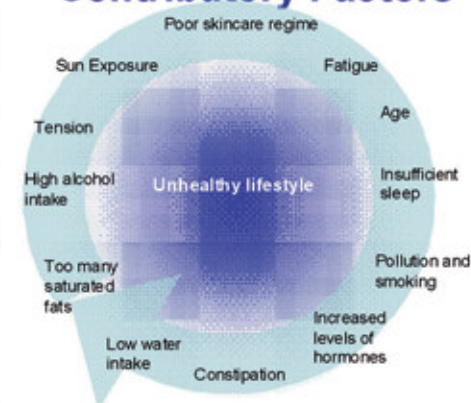
The stratum corneum is particularly important in the control of moisture loss. This is the skin's front line of defence and it strives to sustain a smooth, intact line, which is achieved through a combination of cellular renewal and the constant shedding of damaged cells.

The natural process of desquamation is brought about by an enzyme action that breaks down the desmosomes (protein links) formed within the stratum spinosum. These act as scaffolding to bond together the cells, maintaining an impervious barrier. Once the cells are ready to disengage, an enzyme is required to dissolve the desmosomal junctions. This is dependent upon hydration levels in the stratum corneum – too low and the cells remain intact. In addition, the enzyme is pH sensitive and is also reliant upon the lipid bi-layer surrounding the cells.

What can be done?

So how can we support this process? Firstly, it is important to increase fluids to the germinal cells and raise the percentage of water reaching the stratum corneum. This is achieved by enriching the papillary layer of the

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dermis and its capillary network. Fluid and nutrients are then passed by osmotic activity to the basal cells.

However, the therapist needs to be able to assess the vascularity of the skin. For example, a sensitive skin that reddens easily would need a gentle, decongestive approach because bringing fluid to a congested area will only make it worse if the 'backlog' is not cleared. Lymphatic drainage and indirect high frequency (or audio-sonic) massages are appropriate techniques to clear away stagnant fluid. Stimulation of the meridian energies through facial acupressure may also be beneficial.

Secondly, we need to rehydrate the stratum corneum. This layer has the ability to absorb fluid, thus enabling cells to desquamate. Reintroducing moisture back to the horny layer can be achieved through one of three simple procedures:

1 One of the quickest procedures is using a pulveriser. This steamer forms a cool, dewy mist, in which certain essential oils can be incorporated. Once the skin is saturated, stroking movements are applied until all of the fluid is absorbed, making the skin instantly soft and supple.

2 Phoresis (the penetration of substances through unbroken skin) can be achieved through a variety of means. Most therapists will be familiar with galvanic and iontophoresis (the penetration of ions) with the aid of a direct current. A micro-current will also achieve the same result. Intra-red and an oil or thermal mask will achieve phoresis by raising the

temperature in the dermis and inducing perspiration. This moisture then becomes trapped by the mask and is reabsorbed into the stratum corneum, together with any active ingredients applied underneath.

3 Massage mediums or moisturisers can also raise moisture within the horny layer of the epidermis. The type of moisturiser used is dependent upon epidermal thickness.

A thick skin needs a moisturiser that will increase the water-holding capacity within the upper layers. Humectants are substances that have the ability to draw moisture to the stratum corneum. However, this water is not manufactured out of thin air and needs to be drawn from somewhere.

Technically advanced cosmetic brands have developed the ability to penetrate their active ingredients, such as humectants, into the epidermal layers. This in turn draws fluid from the deeper layers, i.e. germinal layers of the epidermis, which in turn draws fluid from the papillary layer of the dermis.

Fine skin does not have a problem with cells remaining intact, unless there is an insufficient level of moisture enabling enzyme-induced desquamation.

The problems for fine skin stem from insufficient layers of protection. Cells turn over so quickly the barrier breaks down and antigens are able to penetrate, resulting in inflammatory reactions. This is compounded by increased TEWL. Therefore, an occlusive moisturiser is needed to reinforce the protective role. This is achieved via increased stimulation of mitotic activity in the germinal layer, strengthening cellular growth. Additionally, the moisturiser needs to enhance the natural acid mantle as a buffer to TEWL.

Whichever method is employed, the end result strives to balance and regulate efficient desquamation rates. The simple act of beautification of the epidermis can be transformed as the epidermis thickens.

Plumping and smoothing the skin, and, more importantly, reinforcing that natural protection, allows the dermis to concentrate on its functions rather than responding to allergic reactions brought about by epidermal breakdown. The skin becomes smoother, outbreaks lessen and it gains a calmer appearance. All without the risk of invasive or harsh treatments!



Cheryl Cole has more than 26 years experience as a holistic beauty therapist and is a frequent speaker for FHT. Her courses in Manual Lymphatic Drainage Body, Facial Lymphatic and Pressure Point, and Spa Wrap are accredited by FHT. For further information, phone her on 01487 830971, email Cheryl@CherylColeAcademy.co.uk or visit www.CherylColeAcademy.co.uk