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Put up your barrier

With constant hand-washing and sanitizing, your skin is going to need some help.

The global pandemic has made us hyper-aware of our personal hygiene and health. New daily preventive measures, such as rigorous hand hygiene and the use of masks, has given our skin a lot to adjust to. Repeated handwashing and the use of sanitizers can damage proteins in the upper layer of our skin (epidermis), and cause changes in the lipids that naturally preserve and protect the skin.

It's no surprise, then, that dermatologists are seeing a resurgence of hand eczema. There has also been an uptick in cases of skin irritation and the worsening of existing primary skin diseases, related to mask-wearing.

To maintain the health of our skin, our living barrier, we should combine our preventive actions with protective and care actions.

The role of skin in our health

Skin is the interface between the body and the external environment. The primary role of the skin is to serve as a barrier, protecting our body from potential assaults. These assaults come from micro-organisms, toxic substances, and other external factors such as UVR, pollution and climate. Think of it this way: your skin is your body's biological armor, and if the barrier is compromised, your skin will be more sensitive to pollutant molecules, UV rays and infections.

Skin health is even more important as we age, since the skin-aging process disrupts the epidermal barrier function.

Our skin also hosts a delicate balance of complex microbial communities, including bacteria, fungi and viruses, called the microbiome. As unpleasant as this may sound, mounting evidence suggests that a diverse microbiome has a positive influence on metabolic processes, contributes to immunity, and helps to prevent pathogens

from growing on the skin. In fact, the skin microbiome has recently been described as a crucial component of the epidermal barrier, playing an essential role in protecting the body and modulating overall health, in addition to benefiting skin health.

Studies on hand skin show frequent washing and the use of sanitizers disturb the skin barrier, resulting in skin irritation and changes in the microbiome. Moreover, many of our "daily use products", such as cosmetics, hygiene products and moisturizers, contain harsh preservatives and synthetic ingredients that can result in detrimental modification of the microbiome. Lately, the potential of topical formulations with prebiotics and probiotics to support a healthy skin microbiome has gained increased attention and research.

Maintaining skin health while staying protected

Adequate skin hydration is essential for preserving the skin's elasticity and resistance properties. Moisturizing with lipid-replenishing creams is thus one of the most important things you can do to safeguard your skin's barrier and prevent irritation (from masks, for example). Ideally, you should moisturize your face morning and evening, and switch to gentle cleansers to offset the impact of mask-wearing. Recent novel formulations for our skin barrier include ingredients such as mineral-enriched thermal water. This has been shown to strengthen the skin's natural defenses, restoring the skin barrier, enhancing immunity, in addition to having prebiotic and probiotic benefits.

In coming years, in a post-COVID world, we can expect skincare increasingly to enhance not only the aesthetic properties of skin, but also the functional – as it should.