Whether it is acne or eczema, most skin disorders have one thing in common: inflammation. The microbes found on the skin are just as valuable to the immune system as those lining the walls of the digestive tract.

Inflammation can be triggered in one area of the body and show up somewhere else. So far, research tells us that this phenomenon has to do with two factors.

- The immune system
- The microorganisms living throughout the body

As it turns out, the microorganisms on the skin play a more important role in the body’s inflammatory signaling than we ever expected.

**Microorganisms Help to Create the Skin-Gut Axis**

The skin and the digestive tract have a cross-directional relationship that will affect one another through the health of the immune system. In layman’s terms, treating your skin with beneficial bacteria can boost your inner ecology just as much as improving your gut health!

The bacteria in the body outnumber human cells 10 to 1. [1] And many of these microbes are found in the gastrointestinal tract.

Because gut bacteria have evolved with us through time, they play a prominent role in our health and wellbeing. Some researchers have even referred to the entire microbial community as a “forgotten organ.” [2] Many bacteria protect and nourish the body, while at the same time the human body protects and nourishes bacteria.

When it comes to skin disorders, gut ecology matters! This is because bacteria and yeast can grow unchecked, dominating their habitat. This can irritate the gut and lead to a permeable gut lining, or what is known as leaky gut. Once the lining of the gut becomes permeable, toxins from bacteria or large food particles can ignite a systemic inflammatory response.

A systemic inflammatory response can contribute to various forms of acne and other inflammatory skin disorders, such as eczema and rosacea. [3, 4, 5]

This is what is known as the skin-gut axis. [6]

**Cross-Talk Between the Skin and the Gut**

In the early 1930s, two dermatologists named John H. Stokes and Donald M. Pillsbury put forth the idea that poor gut ecology may cause things like anxiety, depression, and acne.

In their research, Stokes and Pillsbury found a direct relationship between the health of the gut and the health of the skin. They developed a protocol that involved the administration of lactobacillus-rich milk and saw much success. [7]

Almost one hundred years later, scientists have found that the work of Stokes and Pillsbury is worth resurrecting. [8]
According to the gut-skin axis, the digestive tract and the skin have a cross-directional relationship that allows one to affect the other. This happens by way of the immune system.

As it turns out, there is more cross-talk between the gut and the skin than previously thought. In fact, researchers recently found that skin bacteria can influence the immune system to the same degree as gut bacteria.

This means the ecology of skin and the microorganisms residing there can trigger a systemic immune response in the body as much as the microbes living in the gastrointestinal tract! [9]

**Optimize Gut and Skin Ecology**

The best way to support your overall wellbeing and your immune system is to focus on a healthy inner ecology. This means choosing a diet that is full of fermented foods.

It is essential to eat fermented foods each and every day. This is because these foods are full of beneficial bacteria, or probiotics, that go straight to the gut. The beneficial bacteria available in these foods have been found to support the body beyond digestion. This means that multiple systems benefit, including the skin.

Because the microbes found on the skin are just as valuable to the immune system as those lining the walls of the digestive tract, it is important to also nourish a healthy microbial community on the skin itself.

This means throwing out antibacterial soaps and creams that strip the skin of its protective microbial inhabitants.

In fact, several studies have shown that topical probiotics reduce the number of lesions and the amount of inflammation associated with severe acne. [10, 11] Beneficial bacteria applied to the skin effectively addresses dandruff, otherwise known as seborrheic dermatitis or cradle cap in infants. [12, 13]

A few ounces a day of coconut water kefir, fermented coconut meat, or a probiotic beverage will help restore the balance of your inner ecosystem. Many of our Body Ecology community members incorporate these into their favorite face mask or face wash.

Remember, if you suffer from a skin disorder, in addition to harmonizing gut ecology, it is essential to nourish skin ecology. Your immune system will thank you!

**References:**


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