

The focus of new research into "good bacteria" is moving from your stomach to your skin—and the total-body benefits keep adding up.

Tatiana Boncompagni Hoover takes a closer look

n the pursuit of increased immunity, clearer skin, and better digestion, I've turned my kitchen into a treasure trove of probiotics, those good-for-you bacteria that any health nut worth her Himalayan salt knows are key to keeping your intestinal flora balanced. A happy gut, some studies have found, increases our ability to absorb the nutrients in our food, fight off viruses, and manage our weight, and can even improve our mental well-being, which is precisely why I have kombucha and kefir fermenting on my countertops, small-batch kimchi and Greek yogurt lining my

refrigerator door, and supplements in pill and powder form tumbling out of my kitchen cabinets.

The microbe party doesn't stop there. As the line between beauty and wellness becomes increasingly blurred, skincare companies have jumped on the trend, rolling out topical products infused with probiotics or, in many cases, prebiotics, the ingredients that serve as food for the body's existing good bacteria. Their promise? To keep my skin's microbiome-a unique set of ever-present bacteria, fungi, and viruses-in balance, making it less prone to breakouts, blotchiness, dryness, and premature aging. Clinique, Fresh, La Roche-Posay, and others have already debuted these types of products, and brands like Mother Dirt, Aurelia, and Tula have built their entire lines around the idea that bacteria is the key to better skin.

"People have started to understand that probiotics are essential to overall wellness; what's new is making the connection that they can really improve your skin as well," says Dr. Roshini Rajapaksa, a gastroenterologist and the founder of Tula, a probioticbased skincare line named after the Sanskrit word for balance. She noticed that many of her patients' skin started to look better once she helped balance the microorganisms in their gut, so she began wondering if the topical application of bacteria-and ingredients that support the growth of healthy bacteria-could have the same impact. Tula's Kefir Moisture Repair Pressed Serum, for example, soothes and hydrates sensitive skin and contains probiotics sourced from kefir, the fermented milk drink, and bifida ferment lysate, a type of yeast.

FROM THE INSIDE OUT

Because this field of research is so new, scientists are just beginning to identify which bacterial strains (of millions) can help with which skin conditions. But it's already clear that the way we've traditionally been combating certain skin issues—with targeted drugs and cosmetics applied directly to the problem areas—doesn't always work. "Just treating the skin topically doesn't get to the root or the source of the problem," says Dr. Whitney Bowe, a New York—based dermatologist and author of the forthcoming inside-out skincare guide, *The Beauty of Dirty Skin*. Good skin, she believes, begins in the gut.



In a nutshell, when we are depressed or stressed, or we eat foods that aren't good for us (highly processed or sugary snacks, for example) or take antibiotics, our gut's ecosystem can shift enough to allow harmful bacteria to flourish and break down the lining of the intestinal walls. Another, often overlooked, culprit is heavy drinking, which can strip away the mucus that lines and protects the gut, also making it more vulnerable to this leaky-gut syndrome, explains Gail Cresci, Ph.D., a researcher and clinical nutritionist with the Cleveland Clinic. When molecules that aren't meant to be in our bloodstream "leak" through the intestinal lining, they can trigger systemic inflammation, which exacerbates many skin conditions. "Whatever you are genetically predisposed to-acne, brown spots, eczema-may show up on skin," says Bowe.

Eating a diet rich in probiotics from fermented foods can help keep the gut's mucous membrane intact, while prebiotic foods, such as fiber-rich Jerusalem artichokes, asparagus, and beans, allow the good bacteria already in your gut to thrive, explains Cresci. Supplements can also help, say physicians Dr. Erica Walters and Dr. Josh Trutt, the husbandand-wife duo who recently opened Tribeca Wellness Collective, a concierge medical practice focused on longevity and disease prevention. Walters has had success weaning acne-prone patients off traditional treatments-like topical and oral antibiotics designed to fight Propionibacterium acnes (P. acnes), the bacterial strain that causes the skin condition-by adjusting their diets and putting them on probiotic supplements, which often need to be refrigerated to keep the bacteria alive. Walters posits that part of the boost her patients get might even be, in large measure, inspirational. "If you open the fridge and take a pill, you're motivated to stick to your skin-healthy diet all day," she says.

Holistic physician Dr. Frank Lipman, founder of Be Well health products and the Eleven Eleven Wellness Center in New York City, prefers his patients get probiotics in food form—"It's more of a crapshoot with supplements," he says. (In his forthcoming book *How to Be Well*, he also recommends eating the stalks and stems you might otherwise throw away when making your favorite kale salad or cauliflower rice.)

FROM THE OUTSIDE IN

When it comes to balancing the microbiota on the skin, experts say more work needs to

be done to identify the most beneficial bacterial strains and figure out how to use them effectively. Mother Dirt's AO+ Mist, for example, uses Nitrosomonas eutropha, a probiotic that balances skin pH and creates by-products that keep other skin microorganisms in balance. The brand's parent company, AOBiome, is currently running clinical trials on the bacterium and has already found it helps improve acne and psoriasis. La Roche-Posay makes a Lipikar line of body moisturizers that relies on prebiotics, including a French thermal spring water shown to rebalance skin's microbiome and improve dry, rough patches and inflammatory conditions like eczema.

There's also GlowBiotics MD, a skincare line that combines traditional active ingredients, such as retinol and alpha hydroxy acids, with skin-soothing postbiotics. These aren't the food for bacteria or the bacteria themselves, but the by-products bacteria give off as they do their thing. Postbiotics may make traditional cosmetic formulas work more quickly and effectively, because they have anti-inflammatory properties. "You get the benefits of traditional medical-grade skincare without any of the dryness, redness, or irritation," explains Dr. Dara Liotta, a facial plastic surgeon in New York City who offers the GlowBiotic products and treatments in her office. "That's a win-win."

Not only are these new bacteria-centric ingredients safe, but they are also healthier for your skin than the aggressive antibacterial products of the past. "Researchers may still be at the hypothetical stage with some of these probiotics, but they can't hurt you," says Marie-Veronique Nadeau, a Berkeley, California-based chemist and aesthetician whose eponymous skincare line puts proand prebiotics to work in an exfoliating mask and facial mist. And many of these skincare products are formulated for sensitive skin and contain volatile cultures that can't coexist with heavy preservatives, so their formulations tend to be cleaner than most, ensuring that they won't further damage the skin's ecosystem.

Even if you're not ready to get on board the bacteria bandwagon yet, you should at least "throw away your hand sanitizers, harsh soaps, body puffs, and brushes—anything that could physically disrupt the microbiome," says Bowe. "That's an easy change you can make right away." As for me, I've already done that—and now I'm doubling down on the kombucha. **mc**

CULTURE CLUB

New skincare and supplements are microbiome-friendly: They help balance the good bacteria living on—and in—you

Mother Dirt AO+ Mist (\$49) contains bacteria that can improve skin clarity.





Tula Daily Probiotic Complex (\$39) nourishes skin from the inside out with gut-friendly bacteria.

Clinique Redness Solutions Cleanser (\$23) calms irritation and restores moisture using Lactobacillus extract.





Payot Crème No2 Nuage (\$51) calms stressed complexions with a blend of probiotics, sugarbased prebiotics, and botanical extracts.

La Roche-Posay
Lipikar Balm AP+
Intense Repair
Moisturizing Cream
(\$20) stabilizes skin's
microbiome with
prebiotic thermal
water and an extract
of Vitreoscilla
filiformis.





Fresh Black Tea Kombucha Facial Treatment Essence (\$68) boosts skin elasticity and fights oxidative damage caused by environmental toxins.

For information on where to buy, see Shopping Directory.