

THE SKIN'S MICROBIOME: WHY BUGS ARE YOUR BEST FRIENDS

Part I: Get to know your healthy bugs

Hi guys, it's Dr. Whitney Bowe. I'm covering one of my favorite topics today – your body's good bugs – the mighty warriors that keep us healthy on the outside and the inside!

But first, let's get past the creep out factor. Bugs tend to creep people out—I get it. But I've found the best way to diffuse critter anxiety is to highlight all the *good* bugs can do. Take, spiders: They're fast and furry and crazy-eyed, sure—*BUT* did you know...they catch mosquitoes, sparing us itchy welts? They help organic farmers control pests to yield delicious crops. Even their bite holds promise, as the venom of certain species has medicinal value. If all that fails to calm your fears, I go to the hive: Bees. Bees make honey! And who doesn't love honey?

It works like a charm, right?

This is why I'm taking a similar tack now when introducing you to your skin's microbiome- the family of bugs – the rainforest of diverse organisms - (more specifically, bacteria, fungi, and viruses) scurrying about your skin's various layers, from its deep-down fat cushion to its epidermal cells on high. There are more than one trillion bacteria in the skin, originating from roughly one thousand different species. They vary by body part, based on the amount of light in the area, precise pH levels, and other conditions, like climate (moist or dry) and topography (hairy or smooth). When they're happy and harmonious, your complexion is, too. But when disrupted—by harsh cleansers or dietary missteps—their discontent can surface as breakouts, rosacea flares, psoriasis, eczema, even random bouts of sensitivity.

BUT—here it comes—did you know...a healthy microbiome can stave off skin infections? Through their sheer strength in numbers, these friendly microbes

can stop the advance of bad bugs, preventing an invasion. They also help create and maintain an acidic skin environment with a pH of about 5—that's the sweet spot for a robust moisture barrier—and this, too, keeps away nasty pathogens, which crave a higher, more alkaline pH.

Your microbiome can also team up with your skin's immune system to control inflammation via a neat, little system of checks and balances. When the skin's ratio of bacteria is off, the immune system will release antimicrobial peptides like little missiles to set things right and kill the bad invading bugs. And, amazingly, those good bugs can sway immune cells the other way, preventing them from firing and triggering unwarranted inflammation when there is no actual threat – like in cases of rosacea or acne inflammation. The skin's miraculous bug battalion also aids in wound healing, curbs sun damage, keeps your skin plump and firm, and much more. That's a whole lot of honey.

So, how do we take care of these precious bugs? That's such a key subject, it gets its own video! The microbiome is a subject is so near and dear to my heart that you will find a wealth of information about it on my website. So, check it out at www.drwhitneybowe.com. And, stay tuned for Parts 2 and 3 in this series)! Until next time!