### This Is Why Mosquitoes Love You—And How To Outsmart Them

prevention.com

# Prevention

- Health Slim Down in 8 Weeks
- Declutter Your Life

### By Barbara BrodyAugust 2, 2017



Prevent mosquito bites

TinkerJulie/Getty Images

A month or so ago, as the weather started heating up and I began ditching jeans in favor of dresses and shorts, I remember glancing down at my pale legs and wondering if it was worth bothering with self-tanner. But days later I had a different issue to contend with: Summer had barely started, yet my legs were already covered in red, itchy bumps. And because I felt powerless to avoid scratching, pretty soon those bumps turned into scabs that have continued to plague me throughout the

season.

While it's true that I'm not alone—the mosquitoes in my town are known for being particularly vicious, and neighbors often complain about them—I've noticed that not everyone is equally susceptible. My husband and daughter have been bitten maybe once or twice this summer; I currently have at least eight bumps on my right leg alone.

I'd heard that some people are just more attractive to mosquitoes, and I guess I'm one of them. What I wanted to know was why. Was it something I was eating? The shade of my complexion? An ingredient in my moisturizer? And, most importantly, what could I do so that mosquitoes would finally start swiping left when they saw me?

### Expert advice

To get to the bottom of this, I turned to Joseph Conlon, an entomologist (a scientist who focuses on insects) and technical adviser to the American Mosquito Control Association, a non-profit professional organization of people who study these critters. What I learned was a little depressing, because it turns out that the main reason mosquitoes love me is genetic—which means there's nothing I can do about it.

## **PREVENTION PREMIUM:** Could You Have A Mosquito- Or Tick-Borne Illness? Know The Symptoms

Conlon explained that how attractive we are to insects comes down to something called the histoplasmic (or cytoplasmic) complex, which has to do with how your body digests different foods, processes them, and emits odors from your skin. This is all super individualized—and complicated—and so far there's no reason to think that adding or subtracting specific foods from your diet will make any difference. Skin bacteria and the scents they give off can also play a role, but again this

has to do with your natural body chemistry, so changing soap brands won't help. (One caveat: If you're using floral-scented body wash or perfumes, ditch them; flower scents do in fact attract mosquitoes.)

Other factors that seem to be important include skin temperature, carbon dioxide production, and the amount of blood that's circulating in your body. All of these things increase when you're pregnant, which explains why I got chewed up even more than usual when I was carrying my daughter. (These are the five types of bug bites you shouldn't ignore.)

At least one study also suggests that your blood type might matter, but Conlon says that the top experts in his field don't believe that the research was done well enough to prove anything. (And since I can't change my blood type, I'm not sure I care either way.)

### How to protect yourself

So far this seemed like mostly bad news, but Conlon reassured me that I was not powerless. While you may have heard about tons of natural "remedies" to ward off mosquitoes, the only natural ingredient that's been scientifically proven to work well is oil of lemon eucalyptus, says Conlon. You'll find it in products like Repel (Buy it now: two for \$15, amazon.com), which I recently started using. Surprisingly, Conlon and Murray told me that I shouldn't use this on my daughter; apparently, this and other essential oils have not been proven safe for children. (These are the six times you should never use essential oils.)

For kids as well as adults, you can feel confident reaching for products that contain picaridin or DEET. Lots of people worry about DEET, but Conlon has examined the research and says it's only troublesome when people misuse it. "There have been some fatalities from people who drank it. And a few kids had seizures after literally being bathed in it." The main problem with DEET, he says, is not that it's dangerous but that it tends to smell and feel icky, though some newer formulations are pretty good. (Try Cutter Backwoods Dry. Buy it now: \$3, amazon.com.)

Picaridin is an other mosquito-shielding chemical, but it's derived from pepper plants, which makes some people feel like it's safer to use. And there are a number of picaridin-based products that have a dry feel and pleasant scent, like Off! FamilyCare Clean Feel (Buy it now: two for \$13, amazon.com.)

### MORE: 6 Ways To Stop Mosquito Bites—And 6 Common Tactics That Just Don't Work

A few other tips:

- Always choose an EPA-registered product, which means that it's been evaluated for safety and effectiveness when used according to the label instructions. (Look for the EPA registration number on the bottle or can.) Other products *might* work and *might* be safe, but do you want to risk it?
- Skip the clip-ons. They're not any safer than sprays, says Conlon. Ditto with repellent bracelets. They're safe but don't do much except stop mosquitoes from biting your wrist.
- Apply repellent thoroughly, and don't miss patches of exposed skin. "Mosquitoes will home in on that area!" says Conlon.
- A higher concentration of the active ingredient is only good up to a point. The ideal amounts (which will be listed on the bottle), according to Conlon: 25-30% DEET; about 20% picaridin; or about 40% oil of lemon eucalyptus

#### A final word of caution

While I've been mostly interested in stopping ugly, itchy bumps, Conlon reminded me that mosquito bites also have health implications. Think: Zika, West Nile, and malaria.

Fortunately, malaria isn't an issue unless you're traveling abroad, and even Zika isn't a major problem in most of the continental U.S., says Kristy Murray, DVM, PhD, an associate professor of pediatric tropical medicine at Baylor College of Medicine. West Nile, on the other hand, definitely is.

**MORE:** What's Your Actual Risk Of Getting A Mosquito-Borne Illness?

Murray says West Nile crops ups in every state, there's no cure, and 5% of people who get it will die. Incidence usually peaks in mid-August, but she saw several cases this July. "I would not be surprised if this turns out to be one of our worst years yet," she says. The upshot for me is that, according to Murray, people who are mosquito magnets tend to be less likely to contract West Nile virus—possibly because they're more vigilant about wearing repellent.

Upon learning this I couldn't decide if I should be happy that I might be at lower risk for West Nile or freaked out that I had something new to worry about. Either way, the takeaway is really the same: Don't leave home without insect repellent—especially if you're heading out at dusk or will be hanging out near the water.

Privacy Policy | About Us Copyright © 2018 Rodale Inc.