Science Has Uncovered Why Your Skin Feels Tight After A Day At The Beach

Finally, research we can use.

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Bobbing around in the ocean is the perfect way to unwind on a hot day, but that tight feeling your skin gets after a briny soak isn't exactly pleasant.

While most people have come to just accept this is a thing, researchers decided to dive in to find out what's behind it: A new study published in the Journal of the Mechanical Behavior of Biomedical Materials breaks down exactly how and why your skin feels completely dried out after a dip in salt water.

It was inspired by the study co-authors' realization that the question had never been answered before. "In scientific exploration, one occasionally finds a question that's never been figured out," says the paper's co-author Guy K. German, PhD, associate professor in the department of biomedical engineering at Binghamton University, State University of New York. German quickly discovered that answering the questions was "a lot more involved" than he anticipated.

Meet the experts: Gary Goldenberg, MD, assistant clinical professor of dermatology at Icahn School of Medicine at Mount Sinai Hospital; Ife J. Rodney, MD, founding director of Eternal Dermatology + Aesthetics; Guy K. German, PhD, is a study co-author and associate professor in the Department of Biomedical Engineering at Binghamton University, State University of New York

Here's what he uncovered—and what dermatologists suggest to take care of your skin after a day at your favorite beach.

What's behind that tight feeling?

For the study, German and his co-author conducted lab tests on skin samples to see how regular water and salt water impacted the skin. The researchers discovered that salt water significantly increased skin "stiffness" and what they called "drying stress." "Both are caused by salt, which draws water out of your skin's top layer—called the stratum corneum—resulting in drier tissue and a tighter feel," Dr. German explains.

Why does salt water dry you out?

Salt water is a natural dehydrator, explains Gary Goldenberg, MD, assistant clinical professor of dermatology at Icahn School of Medicine at Mount Sinai Hospital. "Exposure to it leaves microscopic salt crystals on the skin, drawing water from within the skin to its surface," he says.

But there's more than just osmosis happening here. "This process disrupts the proteins in the top layer of your skin, making it feel more flaky, and compromises your skin's outer protective barrier," adds Ife J. Rodney, MD, founding director of Eternal Dermatology + Aesthetics.

With repeat exposure, you skin can feel irritated, inflamed, and dried out, Dr. Goldenberg says.

How to keep salt water from drying out your skin.

There are a few different things you can do to prevent this from happening. Dr. Rodney recommends focusing on using a good lotion before you even set foot on the sand. "The key is to reinforce the protective skin barrier," she says. "Put on a creamy water-based moisturizer." Dr. Rodney suggests slathering lotion on before you add SPF. "You want sunscreen to be the last thing you put on," she adds.

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Dr. Goldenberg also stresses the importance of being well hydrated to support your skin's moisture from within. "Also, avoid using harsh cleansers that can strip your skin of natural oils and humectants," he says.

After you've gone for a dip in the ocean, Dr. German recommends taking a shower in fresh water, if it's available. "That is why many popular beaches have a shower on them," he says. "Rinse off and enjoy the rest of your beach time." When you get home, you can do a full shower with mild soap and apply more moisturizer while your skin is still damp, Dr. Goldenberg says. This helps to seal in moisture—and lowers the odds your skin will feel as dry at the beach in the future.

SOURCE: https://www.womenshealthmag.com/beauty/a65192006/why-skin-feels-tight-beach/