

Redditors Swear By Baking Soda For Natural Hair Growth

Trichologist Dr. Dominic Burg weighs in.

Natural remedies for our hair and skin are trending these days thanks to YouTubers, threads on natural hair forums, and the demand for non-toxic product options. And when it comes to a natural remedy to combat dryness, gently remove build-up, and *grow* hair, there's one ingredient that pops up over and over on curly girl hair threads: Baking soda. Redditors and curly girl communities alike swear by using baking soda (followed by apple cider vinegar) to help reset your scalp's pH—which purportedly promotes hair growth, removes product buildup, and even softens hair strands.

To get separate fact from fiction, we tapped trichologist (a doctor who specializes in hair and the scalp) Dr. Dominic Burg who's here to break down the science behind baking soda and apple cider vinegar mixtures, the effects it has on your hair, and the ingredients you *should* be looking for when it comes to hair and scalp health.



MEET THE EXPERT



Dr. Dominic Burg is the chief scientist, hair biologist, microbiologist, and trichologist for évolis Professional. He has an expertise in hair and scalp biology, more specifically in hair cycle signaling.

What Are the Purported Benefits?

Using a baking soda and vinegar-based hair regimen is rumored to help reset your scalp to its natural pH, which could be made more acidic or more basic depending on the products you use. According to Dr. Burg, your natural pH tends to be slightly more on the acidic side, but a pH that's too high (i.e. more basic than normal) causes brittleness, while a pH that's too low (more acidic than normal) damages color. Subsequently, resetting your hair and scalp's pH balance back to its normal baseline can help remedy a number of issues, including dandruff, scalp irritation, dryness, and more.

How to Tell If Your Scalp's pH Is Off-Balance

"Your scalp and hair pH are slightly acidic with the pH of the scalp being 5.5 and the hair shaft sitting at about 3.7," and .adding an access of acid or alkali can push these too far beyond their capacity to rebalance themselves." Poor pH means poor hair quality with higher pH opening cuticles and causing brittleness, and low too pH damaging color. On the scalp, imbalances of pH can disrupt the balance of good and bad bacteria, which can lead to other problems, such as scalp irritation and dandruff."

However, there are ways to keep our hair and scalp pH in check. "The main thing we should be thinking about is the follicles: the small organs that grow your hair. The follicles live in the scalp and are quite sensitive to changes in their environment, so maintaining a healthy scalp environment is important for hair health. The follicles produce hair in a special pattern known as the hair cycle, with specific times of growth, rest, fall, and regrowth that repeat many times in your life. This cycle can be disrupted quite easily and get out of balance, generally resulting in a short growth period and too much shedding," which adding a homemade remedy could do.

I tend to leave it to the beauty chemists for any products I use on my hair, but with the right ratios, the baking soda shampoo could work, but based on Dr. Burg's expertise you'd need to get the measurements just right. If you've got an at-home baking soda remedy that is working for you, there is nothing wrong with continuing to use it. But, if you find your scalp or hair not feeling like itself, Dr. Burg's tips will come in handy.

The Science

"Baking soda and vinegar (regardless of its source) are essentially two reactive chemicals: sodium bicarbonate (NaHCO_3)—which is a weak base so is alkaline—and acetic acid CH_3COOH , which is a weak acid. When you mix these together in equal proportions you get left with water (H_2O) carbon dioxide Gas (CO_2) and Sodium acetate (CH_3COONa), Dr. Burg informed me. "This is a simple reaction that can be effective in simple household cleaning jobs as the fizzing can help lift dirt. The acid in vinegar or the alkaline soda can also be effective cleaners on their own."

But Is It Effective (and Safe) For Hair?

"While you may see some short-term cleaning effects, there will be a negative impact on your hair and scalp over time. Unless you are mixing the products together in the exact right proportions, you will end up with one or the other in excess," Dr. Burg explains. "Having an excess of high pH alkaline material or low pH acidic material on hair will actually be damaging to the hair fibers, lead to brittleness and may alter and reduce the life of your color." He adds that "On the scalp, adding acid or base will be damaging to the pH balance and can have a drying effect. Excess vinegar can also cause irritation. Adding alkaline substances to your hair such as baking soda will actually open up your cuticles, resulting in reduced shine, increased frizz and fly-aways, and cause damage over time."

As a general rule of thumb, Dr. Burg has one piece of advice we should all take note of: "Many natural things can be harmful, for example, some quite common essential oils contain allergens that can make some people react. Acids regardless of whether they were fermented or synthesized, can still cause chemical burns. All-natural remedies are still chemical in their composition and can do damage if used incorrectly."

Baking Soda and Vinegar Alternatives



évolis Promote Shampoo (\$28)

SHOP

According to Dr. Burg, look for ingredients like green tea, rosemary, mangosteen and lavender to soothe and promote overall scalp health.

For hair health, Dr. Burg notes flaxseed oil, vitamin E, ylang-ylang oil, and baobab oil as power ingredients. Try conditioning with this formula from OGX that's loaded with Vitamin E.