

Chlorophyll water can't clear your skin or detox your liver, but this TikTok trend got one thing right

November 30 2022, by Emma Beckett



Credit: AI-generated image ([disclaimer](#))

If you follow health trends online, you might have heard about "chlorophyll water." Claims range from [clearing your skin](#), stopping [body odor](#), increasing [energy and oxygen](#), to [detoxing your liver](#) and [preventing cancer](#).

Chlorophyll [water](#) is sold as a liquid concentrate or already mixed with water. Numerous TikTok videos claim its health benefits.

Then there are celebrity endorsements for chlorophyll water, including from [Kourtney Kardashian](#) on her [lifestyle channel](#).

So, what is chlorophyll water? And is it really a healthy choice?

Remind me again, what's chlorophyll?

What you might remember about chlorophyll from high-school science might sound pretty healthy.

[Chlorophyll](#) is the pigment that gives plants (and some algae and bacteria) their green color. It is vital for [photosynthesis](#), the process that uses sunlight to produce oxygen and [chemical energy](#) stored in the sugar glucose.

At the heart of most chlorophyll is [magnesium](#)—an essential nutrient for humans—needed for healthy nerves and muscles, regulating [blood sugar](#) and blood pressure, and building bones, proteins and DNA.

The chemical structure of chlorophyll looks a bit like [protoheme](#). That's the red part of our hemoglobin, the part of red blood cells that carries oxygen in our blood.

So what is chlorophyll water then?

Water plus pigments that keep plants healthy, and that contain nutrients humans need, sounds great. Unfortunately, it's not so simple.

First, chlorophyll doesn't dissolve in water. So, what you get in these

products isn't "natural from plants." It's the molecule [chlorophyllin](#). Chlorophyllin is made from chlorophyll by a process called [saponification](#).

Essentially, this involves reacting it with [sodium hydroxide](#) and making a smaller molecule that is water-friendly. Then, to help it stay bright green, another reaction replaces the magnesium with copper, [which is much more stable](#).

A more accurate name for these products would be "sodium copper chlorophyllin water." But that's not quite so marketable.

But is it healthy?

Just because it's been converted from its natural form, doesn't make it automatically unhealthy. So how do the [health claims](#) stack up?

There is lots of evidence about diets high in chlorophyll being healthy. But, since evidence is mostly diets [high in green plant foods](#), this can't be directly translated into water containing a processed derivative of one little part of green plants.

There is [some evidence](#) that comes from the extracted, processed form (chlorophyllin). But that's mostly from animal or [lab studies](#). These involve very high concentrations that would need you to drink dramatic levels of chlorophyll water to match the doses, or to inject it deep into your cells. To be clear, please don't do either.

There are also some (mostly very small) studies about its impacts on [skin](#) and its use as a [deodorant](#), but most of these are about applying chlorophylls and chlorophyllins directly to the skin. You don't need to be a scientist to know that's not the same as drinking it in water.

How about boosting your energy and oxygen? It might make sense on simple logic because this is what it does in plants, and the pigment's similarities to hemoglobin.

But there is no data to support these claims. We do have a small pilot [study](#) of wheatgrass and the blood disorder thalassemia. But wheatgrass is much more complex than just chlorophyll and what helps someone with a disorder doesn't necessarily make the rest of us healthier.

So why do so many people say they feel better?

First, who's making the testimonials on social media? Do you trust them? Could it be [advertising](#) rather than someone's own personal experience?

Second, it could be the "[placebo effect](#)", where just taking something that feels like a treatment makes you feel better.

But most importantly, the main ingredient in chlorophyll water is water.

This is definitely [an essential nutrient](#), and definitely something we want to encourage people to drink more of.

By turning to chlorophyll water, people may be simply increasing their water intake, and decreasing their intake of sugary drinks or alcohol. [Improving hydration](#) alone could explain their reports.

Are there any risks?

Excessive consumption (multiple doses a day) [could cause some side effects](#) such as nausea, stomach upsets, discoloring your poo and staining your teeth.

Like all [supplements](#), there is a risk chlorophyll water may interact with [medications](#). And there haven't been big safety studies in at-risk groups, such as people who are pregnant or breastfeeding. So caution is advised.

But, stop and think about the potential indirect downsides of drinking chlorophyll water. It's expensive. Chlorophyll concentrate, which you'd dilute with water, costs about [A\\$16](#) for a 500mL bottle. So it could be an expensive way of increasing your water intake if you think you're not drinking enough, given tap water is safe and cheap.

Even if there are any benefits, you could get these benefits from eating actual plant foods. So the money and time you spend buying chlorophyll water could be taking money and time away from other food and drink choices that could have much bigger [health benefits](#).

The bottom line

If you like it, can afford it, and don't have any medication risks, the choice is yours.

You could also try other ways to increase your [chlorophyll](#) intake, such as eating more green veggies. You could add cheaper things to water to make it appealing, such as mint, fruit or teas.

These options could be cheaper and have even better health impacts, but probably won't get as many views on TikTok.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Chlorophyll water can't clear your skin or detox your liver, but this TikTok trend got one thing right (2022, November 30) retrieved 25 April 2024 from <https://medicalxpress.com/news/2022-11-chlorophyll-skin-detox-liver-tiktok.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.