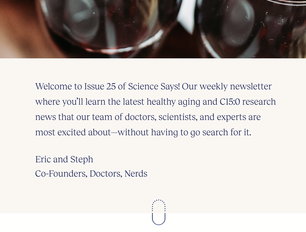
The latest on wine & your health

November 13, 2022



Welcome to Issue 25 of Science Says! Our weekly newsletter where you'll learn the latest healthy aging and C15.0 research news that our team of doctors, scientists, and experts are most excited about—without having to go search for it.

Eric and Steph
Co-Founders, Doctors, Nerds

What Dr. Stephanie Venn-Watson, our co-founder and author of over 80 peer-reviewed scientific publications, is reading.

HEALTHY AGING

Putting resveratrol to rest?

There have been many advances in science around aging - and ideas on how to slow it. While anti-aging used to be an area limited to anti-wrinkle creams, some of the smartest researchers at the most prestigious institutions are pursuing the fountain of youth. Well, at least a drinking fountain that will keep us healthier longer.

This series of Science Says, inspired by a feature in *GEN Biotechnology*, is dedicated to the most promising advances in longevity research - and popular concepts that have recently fallen. This week, let's talk about one of the most popular anti-aging candidates: resveratrol from wine.

What is resveratrol?

Glad you asked. Resveratrol, which was discovered in 1939, is a polyphenol primarily found in wine - especially red wine. In smaller amounts, resveratrol can also be found in blueberries, raspberries, and peanuts. As a polyphenol, it had long been believed that resveratrol had health benefits due its role as an antioxidant that decreased one's risk of heart disease.

Once resveratrol gained popularity, due no doubt to its presence in wine (please give us a reason for that glass of cab), it gained even more notoriety as part of the French Paradox. Namely, how do the French eat so much saturated fat and have less heart disease than Americans? It must be resveratrol in red wine...

So, how is the science on resveratrol holding up?

Haunschild and Marx published a thorough review on the health effects of resveratrol in wine, which highlighted some of the following conclusions:

1. **Resveratrol is great at doing all sorts of good things - but it's mostly in the lab.** From antioxidant effects, especially on LDL cholesterol, to anti-clotting and anti-cancer effects, resveratrol appears to be a miracle compound. While studies on receptors and cells in the lab have repeatedly demonstrated encouraging results, there are a couple of key problems once we get to drinking wine at the table.
2. **Resveratrol has poor absorption and bioavailability.** Of the studies done to date, it appears that we are not great at absorbing resveratrol. And another thing...
3. **In general, polyphenols are metabolized too rapidly to exert their antioxidant effects.** Once absorbed, our bodies quickly metabolize and change polyphenols, including resveratrol, which prevents these molecules from doing all the great things they were doing in the lab. Our son showed us a video clip this week of an excited raccoon given cotton candy. When the raccoon went to wash it in the water before eating his treat, it mysteriously disappeared. Kind of like what happens to polyphenols once they are in our bodies.
4. **Resveratrol did not prolong lifespan.** In the mentioned *GEN Biotechnology* article on the fountain of youth, there was a rather blistering review of resveratrol, which did not prolong lifespan in mice and has had mixed results among the limited human studies conducted to date.

To drink, or not to drink

The topic of the health benefits versus health risks of red wine consumption is too big of a topic for this week. What we can share, is that resveratrol is most promising in the glass and less so, once down the hatch. Stay tuned for next week, when we'll cover a compound that is showing more promise on the longevity front - rapamycin.

The French Paradox, Paradoxed

Okay, stay with us here. The original French Paradox believed that French people have less heart disease than Americans, despite eating lots of butter, because they drink lots of red wine. Knowing now that the resveratrol part of red wine benefits are falling, what if French people have less heart disease than us *because* they eat lots of butter?

High fat dairy products have been on our naughty list for a long time, and there are still reasons to be cautious. High fat dairy products have high levels of pro-inflammatory even-chain saturated fatty acids (like C16:0), which continue to be associated with higher risks of developing type 2 diabetes and heart disease. They also have a good number of calories, and many folks can't tolerate the sugars in milk fat (aka lactose).

While high fat dairy products contain C16:0, they also contain trace amounts of a good fat, C15:0. This is likely why health studies on dairy fats have had mixed results: they contain both bad and good fats. In fact, when studies specifically focus on C15:0 body levels, they consistently show that people with higher C15:0 levels have better metabolic, heart, liver and immune health. This is a big reason why we worked hard to develop a pure C15:0 powder ingredient, absent the bad fats.

One last important note: Unlike the resveratrol story, our pure and stable C15:0 powder was made to work in your body. Extensive studies have shown that our free fatty acid form of C15:0 at 100 mg/day is perfectly made to be absorbed by your cells and support your long-term health.

One last, last note: To totally nerd out on all the fabulous science on C15:0, including our peer-reviewed science, we are super excited to announce the launch of DiscoverC15.com.

Check out our new (dare we say awesome) C15:0 education site, and have a wonderful week, everyone!

Dive deeper into the science

READ THESE STUDIES

- Blueberries and blood: Aging research goes from great science to snake oil
- On health effects of resveratrol in wine
- C15:0 benefits to cell membranes, mitochondria, and cell receptors
- C15:0 studies related to metabolic, heart, liver and immune health