Special Report

A Great Discovery, a Great Disappointment, and a Promising Future

What If You Were Told There Is a Way to Live 125-Years in Good Health?

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Hyperbole is loosely applied in every field of endeavor, from sports to religion, and yes, even medicine. However, a truly historical discovery is unfolding, one that will surely alter the course of mankind. It is difficult to find, in just a few words, a way to convincingly tell you that it may become possible, in the very near future, for humans to live super long and healthy lives. This kind of language has been reserved for many unproven and disappointing approaches to health and longevity, ranging from human growth hormone, coral calcium, and apricot pits (laetrile). But this medical discovery is beyond being marginal.

Last year a group of 51 scientists penned a letter to the public stating all of the potions and elixirs widely advertised to prolong life are worthless except those involving calorie restriction and genetic manipulation.[1] And it is just these two factors that have now come into public view. In recent years, now that the human genome has been mapped and scientists have become aware that single genes may control the rate of human aging, researchers have mulled over the real possibility of an anti-aging pill. Calorie restriction universally increases the life span of living organisms, and if a molecule mimic could be found for this effect it would obviously be historic.

Red Wine Molecule Breakthrough

With the announcement by Dr. David Sinclair and his colleagues at Harvard Medical School, that a dietary component found in red wine may be a breakthrough for humankind, the world took notice. The New York Times, Discover Magazine, Reader's Digest, and other news outlets had reporters call Dr. Sinclair's laboratory for the story. What Dr. Sinclair found was that mimic.[2]

Dr. Sinclair's discovery doesn't sound too monumental at first glance. He found that resveratrol, a red wine molecule, duplicates the health benefits of calorie restriction and extends the life of yeast cells by 70 percent. Unfortunately, Baker's yeast cells don't drink wine. But the life cycle of Baker's yeast is considered a model for human aging.[3] More so, Dr. Sinclair found a gene, called a silent information regulator (SIR2) that is responsible for this unusual cellular longevity which elevates the activity of an antioxidant enzyme within living cells, giving cells more time to repair their DNA. Even more intriguing is that humans have homolgous genes, that is, a family of genes having the same relative position and function, in particular the human sirtuin gene (SIRT1).

Furthermore, Dr. Sinclair's laboratory is not the only group reporting on the remarkable possibility of an anti-aging pill. Another group lead by Leonard Guarente at Massachusetts Institute of Technology is leading the way also and corroborating Sinclair's discoveries.[4]

The Significance of Resveratrol

To understand the significance of this, readers need to recognize that DNA repair is crucial in all diseases. A master DNA repair agent would virtually wipe out most age-related diseases. Resveratrol appears to fit that description since it has been shown, though admittedly in lab dish and animal studies only, to quell diabetes and heart disease, raise *"good"* HDL cholesterol, inhibit blood clots, stop viral replication, rejuvenate organs like the kidneys and liver, block cancer at every stage of development, cleanse brain tissues of amyloid plaques believed to be responsible for Alzheimer's disease, and prevent damage caused by a lack of

oxygenation to brain and heart tissues (strokes and heart attacks).[5] All of these effects are achieved at very low doses, and without toxicity. There is considerable enthusiasm for resveratrol among researchers around the world.

While human studies to prove that resveratrol can extend the human life span by 30-50 years can be contemplated, such studies are frankly unfeasible (it would not be practical to study humans for 125 years). However, there is considerable corroborative data that would back the idea of mass fortification of the human diet with resveratrol beginning now.

Corroborating Data

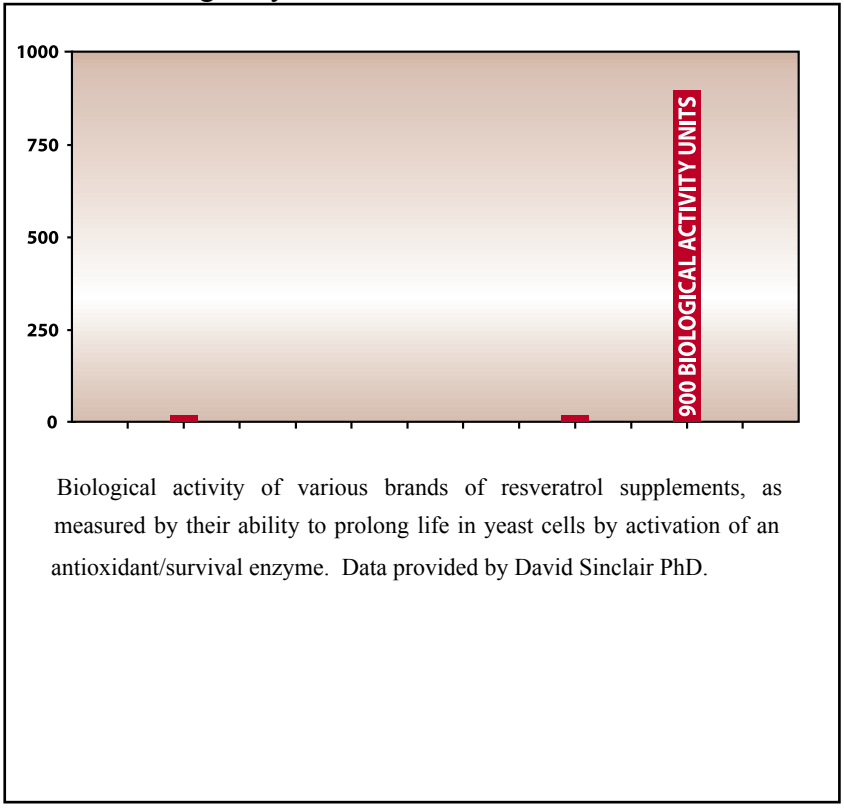
First, Dr. Sinclair's discovery helps explain the *"French Paradox,"* the fact that the French experience far fewer heart attacks than North Americans while eating a high-fat diet and exhibiting high cholesterol levels. The French are known to drink red wine with their meals.[6, 7] A group of Italian immigrants who lived in Roseto, Pennsylvania in the 1950s and 1960s, who were virtually immune from heart attacks for decades, also come to mind. These Italians drank 3 to 5 glasses of red wine a day.[8]

Resveratrol Works in Real Life

Second, there are pockets around the globe of people living beyond their 100th birthday in good health, and they are wine-drinking areas, like the Burgundy and Toulouse regions of France, and the Nuoro region of the isle of Sardinia. More interesting is the fact that the oldest humans in recorded history, Antonio Todde of Sardinia (115 years) and Jeanne Calment of France (122 years) both consumed red wine on a daily basis, as did Queen Mother who died last year at age 101 and outlived one of her daughters by 30 years. The oldest couple on the planet, both over 100 years of age, live in China and drink home-made wine every evening. It appears that resveratrol is living up to its billing in the laboratory of real life. So much so, that even skeptical scientists are calling to ask when they can get a supply of resveratrol for themselves.

Resveratrol Pills Disappoint

I'm sure, by now, every purveyor of resveratrol on the globe is downloading this copyrighted report and posting it without permission on their websites to help promote the sale of resveratrol supplements. Inquiries have already been made by uninformed entrepreneurs as to how to launch a TV infomercial. After all, the prospect of achieving better health and longevity without having to consume alcohol or experience sulfite-preservative headaches is quite appealing. The problem is that resveratrol pills are not equivalent to a bottle of wine. The fermentation process extracts resveratrol from the grape skin, and then the air-tight bottle preserves the resveratrol from oxidation and destruction by light. Dietary supplements don't do this. So, in the process of writing a book about all this, I sent various brands of resveratrol pills to Dr. Sinclair's laboratory to determine if they were still biologically active. Here are the results of the tests.



Biological activity of various brands of resveratrol supplements, as measured by their ability to prolong life in yeast cells by activation of an antioxidant/survival enzyme. Data provided by David Sinclair PhD.

Surprisingly, none of the brands of resveratrol pills displayed any significant biological activity except one new brand specifically designed to preserve resveratrol in an air-tight capsule. Furthermore, when resveratrol manufacturers are made aware of this fact, they react with denial, not even aware of the biological activity

test developed by Dr. Sinclair. Some years ago Dr. Leroy Creasy, a professor of food and vegetable science at Cornell University, reported that dietary supplements provide little if any resveratrol, but his report was unobserved by the industry. While there are numerous studies which show that resveratrol works in wine and in the laboratory, there is not one study to demonstrate that resveratrol pills are beneficial. The dietary supplement industry has been developing a shady reputation lately, ever since so many manufacturers embraced the bogus health claims of Coral Calcium and Sea Silver. And the industry is living up to its sometimes sleazy reputation again here. Will the natural products industry continue to promote useless resveratrol pills as it did Coral Calcium, a product that was recalled for making false health and longevity claims by the Federal Trade Commission?

Another important point is that resveratrol appears to work in concert with quercetin, another component in red wine that is not provided in most resveratrol supplements.[9]

Stabilized Resveratrol

At this point I was disappointed, but challenged. The public needs resveratrol. The next step was to find a technology that could preserve resveratrol like a bottle of wine does. That technology was provided by Capsugel®, a division of Pfizer, which produces air-tight capsules for liquid dietary supplements called Licaps®. The rest is history. The world's first stabilized resveratrol dietary supplement is soon to hit the marketplace. It is a combination pill featuring resveratrol with quercetin and a natural preservative found in rice bran (patent pending). To find out more about this breakthrough, go to www.longevinex.com.

Remember, health benefits from resveratrol dietary supplements still remain to be proven, but there is the possibility that humans will be able to acquire and consume biologically active resveratrol from a reliable source for the first time in history. Up till now humanity has relied upon wine whose resveratrol content varies widely, by a factor of 25 times.[10]

Resveratrol and the FDA

Another problem looms ahead if resveratrol is to ever become available to the masses. The FDA obviously wants manufacturers of dietary supplements to validate health claims. A claim for healthy longevity with resveratrol is beyond measurable reach. But there is no question that resveratrol is worthy, evidenced by at least four pharmaceutical companies that have already begun testing synthetic forms of resveratrol to treat herpes infections and other disorders.

But resveratrol deserves to be a dietary supplement, widely available and affordable to the public at large to promote health, not necessarily to treat disease. In the past the FDA mistakenly classified resveratrol as a drug, stating it was not in common use before 1994 when existing dietary supplement rules became law. How the FDA missed the fact that wine has been bottled and labeled as a liquid dietary supplement for thousands of years is beyond comprehension. Furthermore, the Environmental Protection Agency has already conducted studies on resveratrol and determined it is safe. But the FDA could, in a misdirected way, limit resveratrol to prescription drug status only. This is why this author is getting the word out, so the availability of resveratrol becomes a topic of public discussion rather than governmental control.

In summary, there is a survival mechanism in all living cells, that can promote health and extend life, that is more powerful than any drug, or any vitamin, or any vaccine. And it's just about ready to be unveiled to the world. You can learn more about this in my book THE WINE PILL, available at www.NaturalHealthLibrarian.com

Bill Sardi has a commercial interest in Longevinex.

Here is an Abridged Abstract of Dr. Sinclair's Discovery

Small molecule activators of sirtuins extend Saccharomyces cerevisiae life span.

(Nature. 2003 Sep 11; 425 (6954):191-6.)

Howitz KT, Bitterman KJ, Cohen HY, Lamming DW, Lavu S, Wood JG, Zipkin RE, Chung P, Kisielewski A, Zhang LL, Scherer B, Sinclair DA.

In diverse organisms, calorie restriction slows the pace of ageing and increases maximum lifespan. In the budding yeast cell (*Saccharomyces cerevisiae*, or Baker's yeast), calorie restriction extends lifespan by increasing the activity of Sir2, a member of the conserved sirtuin family of niacin-dependent enzymes (protein deacetylases). Included in this family are SIR-2.1, an enzyme that regulates lifespan in worms (Caenorhabditis elegans), and SIRT1, a human deacetylase enzyme that promotes cell survival by negatively regulating the p53 tumour suppressor gene. Here we report the discovery of three classes of small molecules that activate these life-extending sirtuins. We show that the potent activator resveratrol, found in red wine, increases cell survival by stimulating the protein deacetyalase enzyme. In yeast cells, resveratrol mimics calorie restriction, increasing DNA stability and extending lifespan by 70%.

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