

Over the past three decades, great strides have been made in anti-aging research. The end of the Human Genome project has enabled anti-aging



g scientists to begin to understand the genetics of aging. We have more than 20,000 genes, and within this large group, scientists have isolated a group of genes that control aging. The basic fact that there are genes that control aging is one of the most influential discoveries of the 21st century. However, the discovery of longevity genes is merely a forerunner to decoding the genetic of aging. Scientists are now uncovering what these genes do and how they do it. What we do know about these genes is that, once activated, they can extend lifespan and delay the beginning of age-related disease like diabetes, heart disease and cancer.

As scientists continue to interpret the genetics of aging, they have discovered that resveratrol, a compound in the skin of wine grapes and red wine, can switch on these longevity genes. Much of the research on these longevity genes and the effect of resveratrol can be attributed to Dr. David Sinclair, a world-renowned geneticist. Sirtuins, a group of cellular enzymes, are at the core of Dr. Sinclair's research. We now know that sirtuins (pronounced sir-TOO-ins), are universal regulators of aging found in most living organisms from bacteria and yeast to humans.

According to Dr. Sinclair, sirtuins serve as guardians of the cell. They allow cells to survive damage and delay cell death. Every cell in your body has the specific genetic code to reproduce itself. Sirtuins, like a silent sentry, watch the cellular duplication and spring into action to repair any misinterpretation of the genetic code. However, over time, environmental pollution, dietary factors, and lifestyle issues add more genetic damage and soon natural repair-mechanisms are overwhelmed. The result is damage to DNA that will have a ripple effect in subsequent cell duplication.

Think of it as making a photocopy. If the photocopy machine is working well, a pristine original document will yield a clean copy. However, if the photocopy machine is not maintained it will eventually produce poor reproductions. If you continue to make copies of poor-quality copies, subsequent duplications will become degraded with each successive copy cycle.

Dr. Sinclair and his associates knew that sirtuins could repair DNA damage to aging cells, but the question now was how to activate the sirtuins pathway. Dr. Sinclair tested tens of

thousands of compounds and the first sirtuin activator he isolated was resveratrol. In conjunction with the National Institutes of Health, he began testing his theory that resveratrol could activate the longevity genes in laboratory animals.

In his landmark study, he used three groups of laboratory mice. One group of year-old lab mice was fed a high-calorie, high-fat diet, and supplemented with resveratrol. A second group was fed the same high-fat, high-calorie diet but was not given a resveratrol supplement. The Third group got an ordinary diet and no resveratrol.

Mice on the high-fat diet without resveratrol soon became obese and began to die at an accelerated rate from heart disease and cancer. However, the animals fed a high-fat diet and supplemented with resveratrol fared better. Blood tests revealed glucose and insulin levels in their blood, were significantly lower than in the high-fat no resveratrol mice, and the resveratrol mice suffered significantly less diabetes, heart disease and cancer.

The animals supplemented with resveratrol had more energy, ran faster and had more endurance than the high-fat group not given supplemental resveratrol. More importantly, more than a year after the experiment began the death rate of the resveratrol group was about the same as for the animals on an ordinary diet. According to Dr. Sinclair, the resveratrol had effectively modified most known genetic-pathways of aging. He commented at the conclusion of the study; "I try not to over promise, but the data do look pretty spectacular, they surprised me."

In fact, the results surprised the scientific community. Imagine a natural substance that can activate a genetic defense mechanism that can offset the health consequences of a poor diet and moderate common diseases of aging like diabetes, heart disease and cancer.

Based on the success of the first studies of resveratrol, Dr. Sinclair partnered with entrepreneur Christoph Westphal, another Harvard Ph. D., and together they raised tens of millions of dollars to create Sirtris Pharmaceuticals, a bio-tech company based in Cambridge Massachusetts. Sirtris immediately put their version of resveratrol to the test in a FDA approved study.

In the initial study, diabetics received daily doses of resveratrol or a placebo. After 28 days, patients taking resveratrol showed improved scores on an oral glucose-tolerance test, which

measures the body's ability to break down and use blood sugar. Patients taking the placebo showed no improvement. The study also found that resveratrol appeared to lower baseline levels of glucose in the blood of diabetic patients.

It may be too soon to call [resveratrol](#) the fountain of youth, but pharmaceutical-giant Glaxo Smith Kline recently purchased Sirtris Pharmaceuticals and all rights to resveratrol-based drugs for a reported \$ 750 million. Time will tell if resveratrol can slow the aging process. However, subsequent research continues to convey the promise that someday there will be a pill to effectively treat diseases of aging like diabetes, heart disease, cancer and Alzheimer's disease.

The latest research into resveratrol is confirming what Dr. Sinclair has uncovered. In a recent study conducted at the College of Life Science, Chinese researchers examined the effects of resveratrol on Atherosclerosis, the progressive circulatory disease characterized by the clogging or hardening of blood vessels caused by an accumulation of plaque. Results of their study showed that resveratrol slowed the progression of the disease and improved blood vessel function by regulating dilation and constriction.

Scientists observed that resveratrol had a strong anti-inflammatory effect on blood vessels, which many experts believe to be the primary catalyst for heart disease. In this study, resveratrol had a positive influence on blood pressure levels and reduced overall oxidative stress through its potent antioxidant properties. Additionally, resveratrol inhibited modification of LDL cholesterol and improved overall circulation. Research results on resveratrol indicate it has a decidedly positive effect on cardiac health.

Study after study shows resveratrol has the potential to prevent cardiovascular and reduce inflammation throughout the cardiovascular system. Some studies showed that resveratrol is effective in maintaining bone health and delaying the onset of osteoporosis. Many of these studies prove that laboratory animals supplemented with resveratrol has increased muscle strength and endurance, improved coordination and mobility and reduced fat cells.

New studies are uncovering evidence that resveratrol could be your brain's best friend. Researchers examined the action of resveratrol as a possible adjuvant therapy in the treatment of Alzheimer's disease. Several epidemiological studies indicate that moderate consumption of wine is associated with a lower incidence of Alzheimer's disease. However, the exact molecular mechanisms involved remained to be clearly defined until researchers examined the action of

resveratrol on amyloid B, a bio marker for Alzheimer's disease.

They found that resveratrol does not inhibit production of Amyloid B. Resveratrol has no effect on the amyloid B producing enzymes, instead, resveratrol's neuro-protective influence comes from its ability to promote rapid degradation of amyloid B (1).

Resveratrol is a molecule produced by plants in response to stress. By producing resveratrol, the plant is able to cope with many negative factors in the environment. Resveratrol may be one of the greatest discoveries of our time. Numerous studies confirm that resveratrol can improve cardiovascular function and offset the health consequences of poor diet and lifestyle choices. Overall, the age-defying health benefits of resveratrol closely mimicked those previously associated with rigorous calorie-restricted diets -- raising hopes for simpler and easier means by which to help fight off age-related decline.

Add resveratrol to your nutrition routine. I recommend 2 capsules daily of Doctor's Best Resveratrol, a high-quality resveratrol extract in a base of mixed plant-derived polyphenols, a synergy that have been shown to improve the action of resveratrol. To order Doctor's Best resveratrol, call (866)-866-3320.

[sex toys](#) | [vibrators](#) | [classic vibrators](#) | [mens straps](#) | [adult gifts](#)