

Natural News shares with us the importance of Resveratrol in our diet

(NaturalNews) A wealth of new research findings continue to underscore the wonders of resveratrol, the compound discovered only a few years ago that has already achieved superstar status. Found predominately in red wine, grapes and peanuts, resveratrol is now showing to significantly impact the aging process, regulate for positive cardiovascular function, and protect against and reverse cancer.

Newest research finding

Researchers at Zhejiang University in China investigated the effect of injections of resveratrol on the central regulation of blood pressure, heart rate, and renal sympathetic nerve activity in animals. Their results suggest that resveratrol powerfully inhibits blood pressure, heart rate, and renal sympathetic nerve activity. This study has tremendous implications for anti-aging therapies.

In the July 26, 2008 Journal of Agriculture and Food Chemistry, researchers addressed the question of the potential chemo-preventative activity of resveratrol against human cancers and its effect on normal cells. They examined the differential effect of resveratrol at physiologically relevant concentrations on nonmalignant and malignant cell lines and compared the underlying mechanisms via cell cycle modulation, induction of cell death, and potential toxicity. They found that 24 hours of exposure to resveratrol was toxic to both nonmalignant and malignant cells in a dose dependent manner. However, nonmalignant cells re-grew 5 times more than malignant cells after 120 hours. Significant alterations in cell cycle kinetics were induced by resveratrol in the malignant cells, but to a lesser extent for the nonmalignant cells. The proportion of cell death was 3 times higher in malignant cells compared to nonmalignant cells.

This research confirms that resveratrol produces a selective action that is able to target malignant cells for destruction while allowing nonmalignant cells to modulate its effect. It is just this type of malignant cell action that chemotherapy aims to achieve. However, the effects of chemotherapy are also toxic to healthy cells.

Apoptosis, July 26, 2008 reports a search for compounds capable of protecting cells against deoxycholate, a bile salt that harms cells and causes disease. In colon epithelial cells, deoxycholate increased generation of reactive oxygen species and caused DNA damage and cell death. Resveratrol and also quercetin were each able to largely prevent the occurrence of cell death in cells exposed to deoxycholate. These findings suggest that resveratrol may be able to undo cellular damage that leads to colon cancer.

The July 9, 2008 Experimental Gerontology reports researchers finding that resveratrol is able to mimic the effects of rigorous calorie restriction in several cytoskeletal maintenance and multiple stress response pathways. This effect is achieved by control of mitochondrial biogenesis and turnover, critical factors in the maintenance of energy production, the prevention of endogenous oxidative stress, and the promotion of healthy aging. Previous research has revealed the healthy benefits associated with daily caloric restriction of between 30 and 50 percent below what is considered today as average. These benefits also occur as the result of fasting. Such diets have been linked to reduction in the risk of age associated diseases and stress, along with a slowing of age related functional decline. In a previous study, this research team found that consuming resveratrol improved the health and survival of obese mice, even while they continued to consume a high calorie diet. Resveratrol showed to have the same positive effect on the livers, muscles, hearts and bones as calorie restriction. Resveratrol has also been shown to extend the lives of yeast, worms, flies and fish.

In another study at Zhejiang University in China researchers investigated the effects of resveratrol on adenosine diphosphate (ADP)-induced platelet aggregation. Compared with the control group, resveratrol inhibited ADP-induced platelet aggregation and fibrinogen in a dose dependent manner. The accumulation of

platelets can form clots which may result in heart attack by lodging in an artery and restricting blood flow to the heart or brain.

About resveratrol

Resveratrol's most abundant source is the grapes used to make red wine, with the highest concentrations being found in the skins. Red wine contains approximately 160 micrograms per fluid ounce. Significant amounts of resveratrol are also found in peanut kernels, with one ounce of peanuts containing about 73 micrograms, the amount also contained in 6 cups of red grapes. It is a component of Ko-jo-kon, an oriental medicine used to treat diseases of the circulatory system, heart and liver. Since wine is the most notable dietary source, it is the primary object of speculation and research on resveratrol, although wine contains many other compounds with biologic effects.

Resveratrol's properties as an antioxidant and anti-cancer agent are rapidly becoming documented, and it is sometimes referred to as an explanation for the "French Paradox", the low incidence of heart disease in the French population who eat a relatively high fat diet. In grape and peanuts plants, resveratrol's role is antibiotic and part of the defense system.

Other documented effects

Results from various research studies have shown resveratrol to be protective against the oxidation of LDL cholesterol in the blood. It is this oxidation of LDL that initiates the deposition of cholesterol in the walls of the arteries that can lead to heart attack. Its hydrophilic and lipophilic properties can provide more effective protection than other well-known antioxidants, such as vitamins C and E.

Research at the University of Illinois in Chicago using resveratrol extracted from grapes found that the threat of cancer was reduced in animals when the compound was used to stop the growth of damaged cells. Had these damaged cells been left to grow, they would have become out of control, resulting in cancer.

The Peanut Institute has concluded that the finding of resveratrol in peanuts may support epidemiological studies from Loma Linda University, Harvard School of Public Health and University of Minnesota that show peanuts may reduce the risk of heart disease by more than half when eaten frequently in small amounts.

Should you supplement with resveratrol?

Research on resveratrol is just beginning to reveal its array of health benefits, and many extracts of resveratrol are appearing on the market that make adding it to your diet very easy. Probably the best choice is to add a glass of red wine or peanuts to your diet. Both red wine and peanuts have been proven to provide very significant overall health benefits. The consumption of red wine is an integral part of the Mediterranean diet, found to be extraordinarily health promoting. It is in red wine and peanuts that resveratrol is found in nature, suggesting that this is how nature intended for us to consume it. When any compound is part of a whole food, it is a part of a complex of balanced compounds that give it an integrity not found when it appears as an isolated extract.

Additional reference:

Melissa Q.B.McElderry, M.S., R.D., "Grape Expectations: The Resveratrol Story".