

SCIENCE AND RESEARCH

In 1969, a Duke University biochemistry graduate student named Joe McCord discovered a protein named superoxide dismutase (SOD) that neutralized superoxide, an unstable and dangerous oxygen molecule called a free radical.

That was the dawn of research into antioxidants and free radicals and since then, scientists have searched for ways to fight free radicals to improve and extend life. For years, scientists thought the solution to reducing the number of free radicals and preventing age-related diseases, such as cancer and heart disease, might lie in antioxidant vitamins. But in 2004, The American Heart Association released an advisory stating that research on vitamin C, vitamin E, and beta-carotene (a form of vitamin A) supplements failed to justify their use to prevent or treat cardiovascular disease.

Science is now finding that direct antioxidants that come from vitamins cannot significantly reduce the oxidative stress caused by free radicals. Current scientific studies show that the body can't ingest enough antioxidants through food, juices, or vitamins to equal the number of free radicals the body makes every day. In fact, the latest research suggests the some antioxidants may actually create more oxidative stress! Coming to light through LifeVantage Corporation is the discovery that the most effective way to fight free radicals is to trigger the human body to produce more of its own free radical-fighting enzymes--so powerful they can completely reduce the age-dependent increase in oxidative stress.

Protandim, the LifeVantage centerpiece product, does just that; it signals the body to produce antioxidant enzymes which can eliminate free radicals exponentially better than traditional antioxidants. Protandim, the first Nrf2 activator on the market, also up-regulates the survival genes that help the human body fight stress and down-regulates pro-fibrotic and pro-inflammatory genes that help us fight infection.

Each ingredient in Protandim is claimed to have health properties. But one clinical study showed that together, the ingredients of Protandim provide a synergistic increase in the production of the body's antioxidant enzymes.

To date, there have been four peer-reviewed studies using Protandim:

- * One study showed Protandim increased levels of the antioxidant superoxide dismutase (SOD) by 30% and Catalase (CAT) by 54% while reducing oxidative stress levels by an average of 40% in 30 days.
- * Another study showed Protandim produced a 300% increase in Glutathione while demonstrating an 18-fold increase in the effect of the five ingredients of Protandim combined than in the simple addition of the individual ingredients.

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* An independent study completed at Louisiana State University (LSU) and sponsored by the Skin Cancer Foundation investigated whether Protandim could suppress tumor formation in mice through a dietary approach. At the end of a two-stage skin carcinogenesis, the mice on the Protandim-containing diet showed a reduction in both skin tumor incidence of 33% and multiplicity of 57% compared to those on a basal diet. The study concluded that an “induction of antioxidant enzymes by Protandim may serve as a practical and potent approach for cancer prevention.

* A study by Virginia Commonwealth University was independently sponsored and published in the American Heart Association Journal, Circulation. This study investigated the ability of Protandim to protect the heart in a laboratory model of pulmonary hypertension in rats. Finding that, “Protandim also prevented the death of heart cells and significantly lowered osteopontin (OPN-1) levels by more than 50%,” the researchers described the ability of Protandim “to effectively activate the transcription factor Nrf2, a signal to the cell’s DNA to increase expression of a network of antioxidants, anti-inflammatory, and anti-fibrotic genes.”

A number of universities have funded their own trials investigating the antioxidant and health-promoting capabilities of Protandim. These include University of Colorado; Denver Health Medical Center; Children’s Hospital, Denver; University of Florida; University of Kentucky; University of Michigan; Louisiana State University; Ohio State University; Vanderbilt University; Glamorgan University, Wales; Sahlgrenska University Hospital, Goteborg, Sweden; University of Toronto/St. Michelle’s Hospital, Canada; University Hospital, Brno, Czech Republic; and the Mexican Institute of Social Security, Mexico City.

Topics under investigation or in planning stages deal with the alleviation of oxidative stress under the following conditions: altitude sickness, skin cancer, photoaging of the skin, renal failure, osteoarthritis, HIV/AIDS-associated lipodystrophy, pulmonary hypertension, periodontal disease, heart disease, coronary artery bypass graft failure, asthma, Duchenne muscular dystrophy, metabolic syndrome, non-alcoholic fatty liver disease, and optic neuropathy.