



Leading Free Radical Scientists Make Discovery

Addressing Problems with Traditional Multivitamin and Mineral Supplements

..... • *The minerals in multivitamin and mineral supplements generate free radicals that reduce the availability of the antioxidants within the same supplement.*

Reactive Minerals Destroy Antioxidants

Reactive forms of copper and iron act as free radical triggers in the digestive system—setting off a cascade of free radical activity. The antioxidants in the same supplement are then forced to neutralize these free radicals before they can be absorbed.

Melaleuca's Oligofructose Complex™ Reduces Free Radical Generation

Only Melaleuca's new *Vitality Pack*® with patent-pending *Oligofructose Complex* binds minerals to organic compounds to disarm the minerals and help protect the antioxidant power of your vitamins that are so important to your health. It's scientifically proven!

Multivitamin-Mineral Supplements Contain Reactive Minerals

The minerals in multivitamin-mineral supplements can trigger damaging free radicals inside your body. Melaleuca's *Oligofructose Complex* dramatically slows the release of free radicals allowing more antioxidants to remain available for absorption.



.....
To learn more, visit www.melaleuca.com/oligo

Leading Free Radical Scientists Discover Mineral Form Able to Reduce Free Radical Generation in Multivitamin-Mineral Supplements

The minerals in many multivitamins can lower the amount of antioxidants that are available for absorption. That's because minerals like iron and copper act as free radical triggers in the digestive system—setting off a cascade of free radical activity. The antioxidants within the same supplement are then forced to neutralize these free radicals.

Melaleuca is the first supplement manufacturer to introduce a formula designed to reduce free radical generation of minerals during digestion.

Building on the *Fructose Compounding* technology the company introduced nearly 20 years ago, Melaleuca scientists have now unveiled a unique mineral complex. Called *Oligofructose Complex*™, it was introduced to the public August 21, 2008 at the company's annual convention. The new complex is patent-pending.

Oligofructose Complex™ delivers minerals in a form that mirrors the way they are naturally found in fruits, vegetables, and other foods to help provide energy, vitality, and balanced nutrition. Before being mixed with other nutrients, including antioxidants, the minerals are complexed with amino acids and oligofructose fiber.

The complex shields the mineral by organically binding it, disarming the minerals' natural ability to generate free radicals. Research shows the complex delivers a free radical reduction rate of over 75 percent versus sulfate and oxide forms of copper.

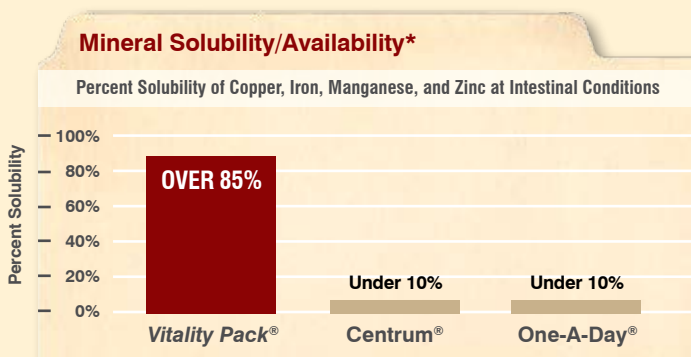
Melaleuca's Director of Research and Development Jeremy Ivie and Senior Scientist Alexander Rabovsky, PhD, developed the technology. Andrei Komarov, MD, PhD, of The George Washington University and Garry Buettner, PhD, professor of free radical science at The University of Iowa tested and verified the technology.

"For years, vitamin supplements have been formulated with the antioxidant vitamins and minerals together. As soon as you take them into the gut—and there are scientific papers demonstrating this—they begin fighting. The minerals always win. Antioxidants lose and are destroyed," said Dr. Garry Buettner. "Oligofructose with amino acids surround the metals [minerals] and keep them from interacting with vitamins and thus destroying them. Copper and iron, for example, and other metals readily react with vitamin C, resulting in its oxidation, its destruction. One of the goals

of *Oligofructose Complex* is to slow that process."

Using Electro Paramagnetic Resonance at his lab at The George Washington University in Washington, D.C., Dr. Komarov was able to verify the reduction of free radicals in the new complex versus other forms of minerals. "We started seeing that *Oligofructose Complex* reacted with free radicals differently than the minerals themselves. *Oligofructose Complex* was much more stable than minerals themselves," said Dr. Komarov.

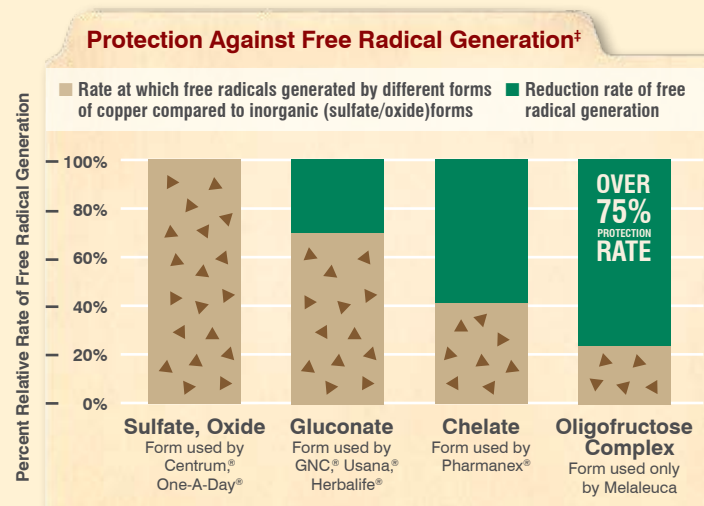
The ultimate benefit for those who take the new *Vitality* multivitamins and minerals from Melaleuca is a natural increase in the amount of readily available antioxidant vitamins. Antioxidants are critical to keeping the balance of free radicals in the body in check. This is incredibly important since free radicals damage cells on the molecular level and have been linked to poor health. Free radicals are also considered one of the principal reasons bodies degenerate with age.



Solubility is the key to absorption. With *Oligofructose Complex*, the minerals were shown to be over nine times more soluble than the forms used in One-A-Day® and Centrum®.*

* Solubility of copper, iron, manganese, and zinc at intestinal pH (7.0 - 7.2). Solubility for Melaleuca's form was determined as percent of ingredient remaining in solution at pH 7.0 after being at pH 1.0 (stomach conditions). Competitors' ingredients solubility data taken from Merck Index and Handbook of Chemistry and Physics.

Trademarks are property of their respective owners.



Binding minerals such as copper and iron using *Oligofructose Complex* provides a free radical reduction rate of over 75%—significantly higher than the competition.

† Inorganic forms of copper is defined as 100% rate of free radical generation (determined as a result of free radical oxidation of 2',7'-dichlorofluorescein catalyzed by different forms of copper).