

LifeVantage Corp. Aims for a Sales Comeback With its Anti-Aging Pill, Protandim

Firm focused on increasing distribution and educating consumers about its scientifically complex product

Green tea. Cranberry juice. Red wine. Blueberries. Just say a food or drink has “antioxidants” in it and Baby Boomers are likely to gobble it up, eager to slow the ticking clock and defend against the age-related diseases that come with it. But in reality, according to the makers of the anti-aging supplement *Protandim*, you need a lot more than fruit juice to fend off Father Time. “The truth is, there is an antioxidant myth,” said David Brown, president and CEO of Englewood, Colorado-based **LifeVantage Corp.** “It is virtually impossible to consume enough antioxidants through food or juice to offset the amount of free radicals you produce in a day. Some scientists say it’s like trying to increase the volume of the ocean by pouring a glass of water in it.”

Brown joined publicly traded LifeVantage Corp. in January in hopes of turning around a two-year lull in sales that followed the company’s remarkably promising start. In 2005, LifeVantage Corp. unveiled its first and only product, an innovative supplement designed not to boost antioxidant consumption (like foods, juices and antioxidant supplements do) but rather to jump-start the body into making more of its own antioxidant enzymes and, thus, slow the cellular-aging process. *Protandim* hit the market in early 2005, and later that year was featured in a lengthy segment of the TV news show *ABC Primetime*, which heralded the product as a “potential breakthrough ... a way to erase years.”

By the end of summer 2005, roughly 20,000 viewers had tracked down LifeVantage to place an order for *Protandim*, and the small upstart company

posted a promising \$3 million in revenues for the quarter. “That one six-minute airing back in 2005 really put us on the map,” said Brown.

LifeVantage Corp.’s quick rise to fame was short-lived, however, and its success story instead became a cautionary tale of the pitfalls that can accompany launching a new, scientifically complex product without the right operations or marketing teams in place. Ill-prepared to capitalize on the wave of interest that followed the *ABC Primetime* show, LifeVantage Corp.’s management team had trouble filling orders and providing the right product information to retailers and consumers, Brown said. *Protandim* soon slipped back into obscurity, and sales headed downhill over the next three years. “Everyone always asks us: ‘What happened after that news program? Where did you go?’” said Brown, who headed up **Metabolife** and **Natural Balance** before joining LifeVantage Corp. in January.

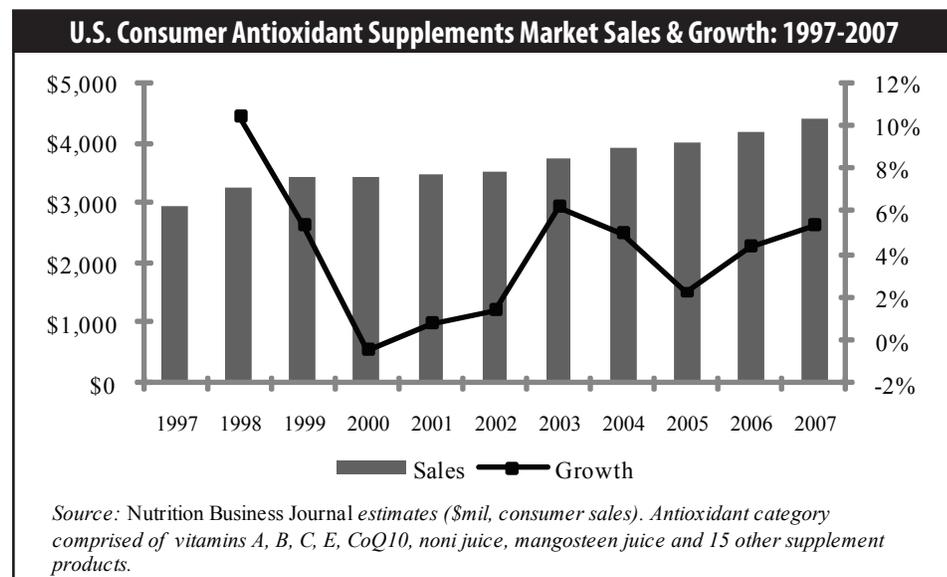
But now, with a new CEO, a revamped sales strategy, loads of new science behind *Protandim*, and an aggressive marketing and public relations strategy in the works, LifeVantage Corp. is hoping for a rebirth for what it believes is a breakthrough free-radical-busting supplement. “I think we are going to be viewed as a three-year overnight sensation,” Brown said. “People will be asking, ‘Who are those guys and where did they come from?’”

The War Against Free Radicals

As far back as the 1950s, researchers began to realize that, through the simple act of living, we sabotage our own cells. When we metabolize food, breathe air, exercise or step into the sun, our cells produce toxic byproducts called free radicals that circulate in the body and can, in turn, damage cell membranes. That process, called oxidative stress, has been linked to more than 200 health problems, from cardiovascular disease to Alzheimer’s to wrinkly skin. In other words, oxidative stress makes us age.

The good news, however, is that the body has a built-in defense system and produces its own antioxidant enzymes that sweep through the cells neutralizing free radicals. But the bad news is that the older we get, the more free radicals we produce and the weaker our defense system against them becomes. “There are a lot of levels of toxicity that cascade down in our cells, and, like a car, we have this remarkable array of catalytic converters to clean up that damage,” explained Joe McCord, PhD, a research and professor of biochemistry at the **University of Colorado Health Sciences Center**. “The trouble is, as the car gets older, it makes more toxic byproducts and the catalytic converters wear out.”

Considered a pioneer in antioxidant research, McCord in 1968 discovered one of those critical “catalytic converters,” a potent free-radical scavenger (or



antioxidant enzyme) called superoxide dismutase (SOD), which the body produces on its own. Within a decade of McCord's discovery, the field had exploded, with scientists working hard to discover whether other compounds found outside the body might also help to neutralize those harmful free radicals. Researchers discovered that compounds made in certain foods could battle free radicals—at least in a test tube. From this work, the seed for the current antioxidant craze was planted.

"For about 20 years, from the early '80s to 2000, that was the buzz: that you take vitamin E or vitamin C and it [would] go into your body and annihilate these free radicals," McCord said. "It led to a huge business [around] antioxidants." Indeed, according to *Nutrition Business Journal* research, sales of antioxidants—including vitamin C and E, green tea extracts, plant oils, and super-fruit juices—soared from roughly \$3 billion in 1997 to \$4.4 billion in 2007. Although the desire to knock out free radicals has helped to drive antioxidant sales over the years, these nutrients offer a host of other benefits that also motivate consumer purchases, including promoting immune function, boosting energy and quelling inflammation.

Regarding their ability to stem oxidative stress outside of the test-tube environment, food-derived antioxidants have turned out, unfortunately, to have less of an impact on free-radical damage than originally thought, McCord said. Like bees that sacrifice their lives when they sting, antioxidants from food are incinerated when they take out one free radical, making their ability to effect real change somewhat limited. (LifeVantage estimates you'd have to consume 375 oranges, 87 glasses of wine or 120 vitamin C tablets to neutralize the amount of free radicals you produce in a day.)

According to McCord, that's why animal and human research on food-derived antioxidants have yielded mixed results, with several high profile studies—including one published in the *Journal of the American Medical Association* in February 2007—questioning the real long-term impact of antioxidant supple-

mentation. "The bottom line is, we cannot eat our way out of this mess," said McCord.

That's where *Protandim* comes in, because unlike the antioxidants found in food, the antioxidant enzymes produced by our bodies live to fight another day—thus making it crucial to support our internal production of these enzymes, especially as we age.

"It is virtually impossible to consume enough antioxidants through food or juice to offset the amount of free radicals you produce in a day. Some scientists say it's like trying to increase the volume of the ocean by pouring a glass of water in it."

—David Brown, LifeVantage

A Promising Beginning ...

In 2005, LifeVantage Founders Bill Driscoll and Paul Myhill began to take an interest in the idea of turbo-boosting the body's own antioxidant defense system, and particularly in boosting production of SOD—the antioxidant enzyme discovered by Joe McCord almost 50 years earlier. Soon the two were knocking on McCord's door, asking him to research dozens of herbs said to increase the body's production of SOD. After weeding out those with associated health risks or shoddy scientific records, McCord narrowed the list down to five and created a patented blend that contains *Bacopa monniera*, *Silybum marianum* (milk thistle), *Withania somnifera* (Ashwagandha), *Camellia sinensis* (green tea) and *Curcuma longa* (turmeric).

McCord, now the company's scientific advisor, said the ingredients work "synergistically," activating the cells to produce more of roughly two dozen antioxidant enzymes, including SOD, catalase and glutathione. The result? Cells age more slowly, McCord said, and LifeVantage has research to prove it. In 2006, a

company-sponsored study published in the peer-reviewed journal *Free Radical Biology and Medicine* found that when 29 healthy men and women (ages 20 to 78) were given *Protandim*, their biochemical markers of oxidative stress (called TBARS) declined by an average of 40% after 30 days. By 120 days, their production of antioxidant enzymes SOD and catalase had increased by 30% and 54%, respectively. And, remarkably, after four months of taking the product, the age-related difference in oxidative stress (the older you are, the more you have) had disappeared. In essence, the 78 year olds looked just like the 20 year olds when it came to the amount of circulating free radicals in their bodies.

"People tried for decades to do this with conventional antioxidants and you just cannot get that kind of result," said McCord. "*Protandim*, by signaling your body to make more of those enzymes, puts you back into balance."

Both McCord and Brown steer clear of using the term "anti-aging" to describe *Protandim* and its benefits (although some company literature uses it), and both stress the fact that they cannot say with scientific certainty that *Protandim* will make you look younger or live longer. "You can't reverse the clock, but if we can reduce the rate at which our cells are aging and keep them vibrant and healthy, then we can remain stronger and healthier and possibly ward off serious conditions that seem to hit us harder as we age," said Brown.

This is a reasonable concept, when you think about it, but it's a hard one to convey in a catchy way on a label or product brochure. In fact, as McCord acknowledged, "It turns out that [*Protandim*] is a really difficult product to sell."

... Leads to Rough Years Later On

After *Protandim*'s initial splash in 2005, LifeVantage saw the product's sales—which occur mostly through direct-to-consumer channels and via some retail outlets—hit the wall. During the third quarter of 2008, LifeVantage (which still sells only the *Protandim* product) posted net revenues of \$800,000 and a loss of \$600,000. For the nine-month

period ending March 31, 2008, its revenues totaled \$2.4 million.

“The company was much like many others in the nutritional-supplement arena,” Brown said. “[It was] started by entrepreneurs with great ideas but no infrastructure or marketing know-how and experience. My initial goal was to stop the bleeding and stop the downturn in sales, and we have been able to do that.”

The next step for LiveVantage is to inform the public, specialty retailers, health practitioners and the scientific community about the scientific breakthrough in their midst. “It is an entirely breakthrough approach to antioxidant therapy, and we need to do a better job of telling that story in an understandable fashion,” Brown said.

Nutrition industry veteran Greg Horn, former CEO of **Garden of Life Inc.** and **GNC**, agrees. Horn said he was unfamiliar with *Protandim* specifically but is well aware of the emerging science suggesting that jump-starting the body’s own antioxidant production can slow cellular aging. He pointed out that several other companies have created products hinging on the same notion: Paris-based **IsoCell** produces an “antioxidant catalyst” called *GliSODin* (obtained from a melon called *Cucumis melo* and a wheat protein), sold as an ingredient in **Source Naturals** supplements, as well as in those made by other companies. Dr. Andrew Weil now has a product called *Juvenon* (a combo of alpha-lipoic acid and acetyl-l-carnetine), which also claims to “slow the cellular aging process.” In addition, other researchers around the country are investigating just how to jump-start the body’s antioxidant production.

“It is a really promising area of future research, and I am favorably inclined to think that these things are going to show real health benefits in the long run,” said Horn, who is now an operating partner with **Pegasus Capital Advisors** and a member of *NBJ*’s editorial advisory board. “But in the short run, you can’t say it makes you prettier. That’s the challenge.”

Unlike fish oil, which can anecdotally make your skin supple within days, or glucosamine, which has been shown to soothe the achy joints, products like *Protandim* don’t necessarily yield immediate, experiential results, so consumers need to be educated more about why they should invest in the product—which costs roughly \$50 per month, in the case of *Protandim*. Horn believes that, in order for such scientifically complex products to be commercially successful, companies must be careful to choose sales channels where there is plenty of time for explanation, such as the health-practitioner channel, the network-marketing channel or specialty retail stores. “It’s a sophisticated, cerebral sell with long-term benefits,” Horn said. “This clearly is a product that needs an avenue to tell the story.”

Eric Anderson, a brand manager with **PL Thomas**, the exclusive supplier of *GliSODin* in North America, said providing the right education and marketing throughout every level of the supply chain is crucial for a product such as *GliSODin*, which is also backed by numerous human studies demonstrating its ability to destroy free radicals. “It takes a lot of effort to educate manufacturers, retailers and consumers,” Anderson said. “The key is to have the right marketing partners and thought leaders in place [for the product].”

Protandim: Take Two

This year, LiveVantage has been working to revise its *Protandim* story via sophisticated five-minute, two-minute and one-minute television advertisements airing on national cable networks nationwide and radio ads in Denver. Right now, 75% of sales come through direct-to-consumer channels (mostly the Internet), but Brown said the company is working hard to expand its sales through health practitioners. It is also negotiating with a Japanese multi-level marketing company to initiate sales overseas. And, it is trying to grow its current retail availability (*Protandim* is now available in approximately 3,000 outlets nationwide, including **GNC** and **Natural Grocers by Vitamin Cottage**) and break into independent pharmacies, health clubs and spas.

The market to support a product like *Protandim* is there, Brown said. “Demographically, this is a product that will have great appeal to a huge population of Baby Boomers. It is a great time because of the increased understanding and interest in fighting free-radical damage.”

Now that LiveVantage has what it sees as concrete proof that *Protandim* can indeed “slow cellular aging,” it is taking the research a step further, collaborating with universities from coast to coast to determine just what that means in terms of preventing or quelling disease. More than 20 studies (most of them independently funded) are underway, investigating what impact *Protandim* might have on everything from cardiovascular disease to muscular dystrophy. Dermatologists in Denver also recently launched a study of a topical blend that includes *Protandim* to see if it may actually enhance the skin’s innate ability to rejuvenate itself.

“Somebody is going to be making a lot of money 10 or 15 years from now, and there may be many products that cash in on some aspects of this [research],” said McCord. His hope, of course, is that the company that discovered it survives long enough to see that day. 🌱

The *NBJ* Bottom Line

As the population ages, supplement companies aren’t the only ones interested in finding the key to fighting free-radical damage. In June, pharmaceutical giant **GlaxoSmithKline** purchased **Sirtris Pharmaceuticals**—a leader in researching the antioxidant resveratrol—for \$720 million. This represents big bucks, even for a pharmaceutical company. So, as the science behind battling oxidative stress improves, this is likely to become an even hotter area of product development. Still, as **LiveVantage Corp.** has learned, selling consumers on the benefits of a scientifically complex product that may not provide immediate, experiential benefits can be a Herculean task. LiveVantage has the science to back *Protandim*, but it must find an effective way to communicate its message to consumers. At the end of the day, their success will come down to marketing.