

Health Tip Of The Week

Energy In A Bottle--And More?

Susan Yara, 03.30.06, 12:30 AM ET

Who needs coffee when a new energy drink claims to be more than just a morning pick-me-up? It depends who you believe.

FRS Plus--the FRS stands for Free Radical Scavenger--is a new antioxidant beverage distributed by a company called New Sun Nutrition, based in Santa Barbara, Calif. The company claims FRS Plus improves athletic performance and recovery, fights fatigue caused by stress or disease, and improves cognitive functions without causing shakiness, anxiety or sudden dips in energy levels. New Sun President Dick Lamb, who is also co-founder of the Balance Bar Company, says the drink gets its benefits from three main sources: green tea extract, vitamins and minerals (with emphasis on vitamins B and C) and the most potent ingredient, quercetin.

Quercetin is a bioflavonoid (plant pigment) extracted from the skins of fruits and vegetables. It has been touted as a powerful antioxidant, anti-inflammatory, anti-allergen and antihistamine. "It has amazing benefits for humans," says Lamb. Several studies, including some conducted at the Mayo Clinic in Rochester, Minn., suggest that quercetin helps ward off a host of disorders, such as asthma, cancer and heart disease, because it combats the "free radical" molecules that are thought to contribute to many of these problems, but researchers caution that more studies must be done.

While that sounds great, David Robbins, M.D., a director in the division of digestive diseases in the department of medicine at New York City's Beth Israel Medical Center, cautions against using supplements for their healthful claims.

"All the data on the benefits of quercetin are coming from researchers who are funded by the companies that distribute the product," he says. "There is no data showing that it is in fact safe or whether it is really good or bad for you. The concern is that when it's metabolized in the body, it could have the opposite effect of an antioxidant and cause damage to DNA as a pro-oxidant."

Lamb says he strongly believes in the benefits of quercetin and says FRS is a breakthrough in nutrition and health that will markedly improve people's lives. "I loved the way it made me feel, personally, and loved how it helped a close friend who has ovarian cancer."

Though FRS is marketed as an antioxidant energy drink, Lamb says it shouldn't be confused with other energy drinks in the industry, since his product contains healthful benefits. Products like Red Bull's popular energy drink get their kick from ingredients such as caffeine, sugar, taurine and guarana. FRS does contain caffeine, but in a dose that is the equivalent of about a quarter-cup of coffee. The drink comes in two versions: regular and low calorie.

FRS can be used once a day or several times per day--Lamb suggests at breakfast and an hour before a workout. It can be purchased as a concentrated formula, a powdered drink mix, a ready-made drink or flavored chews.

For more information, visit www.frshealth.com

Additional comments from New Sun Nutrition and independent researchers:

Dr. Robbins statement, that "all the data on the benefits of quercetin are coming from researchers who are funded by the companies that distribute the product" is, in fact, not the case. The National Institutes of Health (NIH) is doing a Phase III trial on quercetin and obesity, and both NIH and DARPA as well as Natick Soldier Center and Tufts University have conducted and are conducting Government funded human clinical trials on quercetin and other flavonoids. A government entity is funding a double-blind, placebo-controlled trial at UC Irvine on the benefits of FRS on brain function, and initial results are positive and appear to be highly significant. Many universities have done their own research on quercetin and many other flavonoids with no corporate funding, as can be seen from the attached summary of studies published in recent years.

The fact that NIH is doing a human Phase III trial on quercetin (at long-term usage levels of quercetin at more than 1 gram per day, over three times that which is in a serving of FRS) means that they are not concerned about the toxicity of quercetin. New Sun Nutrition currently uses only GRAS (Generally Recognized as Safe by the FDA) QU985 which is quercetin at minimum purity of at least 98.5%, which in practice reaches well over 99% purity.

Dr. Robbins's statement that "There is no data showing that it is in fact safe or whether it is really good or bad for you" is refuted by the GRAS status enjoyed by New Sun Nutrition's QU985 as well as a large number of studies showing quercetin's impact as a powerful antioxidant, anti-inflammatory, anti-allergen, and it's efficacy in helping prevent a number of diseases including cancer and heart disease. It also boosts energy and is thermogenic, making it beneficial for dieters.

Review of the total body of available data on quercetin as presented in several published reviews indicates that quercetin, although displaying mutagenic activity in vitro, is not carcinogenic in the body. In a number of studies (Das et al. 1994; Stavric, 1994; Formica and Regelson, 1995; Lamson et al., 2000; Erlund, 2004) and most recently Okamoto (2005), a review of quercetin safety based on past animal toxicity studies, concluded that orally administered quercetin is unlikely to cause any adverse effects although specific dose levels were not indicated.

According to Marcus Elliott, MD: "Nearly every antioxidant we've studied can, in certain environments and concentrations, have pro-oxidant effects. Although there are a few studies demonstrating this pro-oxidant effect from quercetin, they haven't been significant to date. Our common antioxidant vitamins, particularly Vitamin E, appear to have pro-oxidant properties in a much wider range of environments and acting on more biologically important molecules. I don't have much concern about this effect for quercetin."