Glutathione: The Body's Most Protective Antioxidant And Best Kept Secret

by Danielle Citrolo, Pharm.D, R.Ph.

(NAPSA)—Ask anyone to name an antioxidant and even those with lowest awareness on the subject could mention one or twoperhaps, vitamin C, vitamin E or beta-carotene? Yet, one of the body's most important protective antioxidants-glutathione (pronounced gloo-tah-thigh-ohne)-is never mentioned, even though it is naturally found in nearly all the cells, tissues and organs in the body. Glutathione is critical in protecting our cells from damaging effects of oxidative stress and toxins, both contributing factors to many fatal diseases. In fact, glutathione's function in our bodies is so impactful that scientists refer to it as the "master antioxidant." So, why is no one talking about this powerful nutrient, or encouraging the public to take vitamins with glutathione as an ingredient?

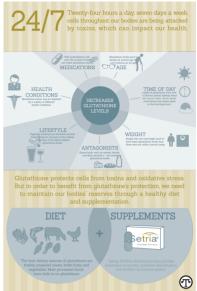
Science has provided several reasons why glutathione has yet to take hold in our everyday vernacular. First, the body is supposed to produce glutathione in sufficient quantities on its own. Second, there are small amounts of this nutrient in fresh (average of 6.2 mg/100 g) or frozen (average of 8.3 mg/100 g) vegetables—like avocadoes, asparagus, squash, potatoes and okra; fresh fruits such as oranges, grapefruit, melon, strawberries and peaches; and smaller amounts in meats-(average of 5.4 mg/100 g) like pork chops, veal cutlet and beef steak; so the assumption has been that people can eat to replenish their body stores. And third, it has long been thought that supplementing glutathione orally through vitamin-type intake was ineffective at increasing body stores.

But, new science and circumstances have challenged these long-held beliefs about glutathione. First, we now know that even the healthiest individuals

face increased environmental factors and toxins that can combat the positive effects of the body's natural antioxidants. Things like prescription and over-the-counter medication intake, health conditions, lifestyle, weight gain, increasing age and even time of day can all sap a body's glutathione stores. Second, it is critical to eat an abundance of fresh fruits and vegetables to assist your body in replenishing and maintaining adequate levels of glutathione. A healthy diet of fresh fruits and vegetables can be challenging by itself, not to mention that increased prevalence of pesticides, and genetically modified foods, can actually decrease glutathione levels when ingested, versus providing the natural increase that is intended. Finally, a milestone study, published in the European Journal of Nutrition by Dr. John P. Richie, Jr., proves that oral supplementation of glutathione is possible and effective.

Dr. Richie, professor of Public Health Sciences and Pharmacology at Penn State University School of Medicine, gathered the first-ever, long-term, human clinical trial data measuring the efficacy of glutathione supplementation. Combating long-held contrary beliefs, Dr. Richie's research results showed that glutathione supplementation did indeed increase body stores and may be an effective intervention strategy to both enhance body stores and boost immune function. Richie's trial studied 54 healthy adults, ranging from 28-72 years of age. Giving each participant glutathione supplements of 250 mg/day or 1000 mg/day, he measured the supplements' effect on glutathione levels in the blood (measured by plasma, red, and white blood cell content) and exfoliated cells from inside the cheek.

Results of the study showed glu-



tathione levels in the blood increased after one, three and six months, at both doses. After six months, Richie's subjects saw a 30 to 35 percent increase of glutathione in the blood, and a remarkable increase of 260 percent in glutathione within cheek cells in the 1000 mg/day group. Richie also saw a reduction in oxidative stress in both glutathione dose groups after six months.

Even those in the best of health may be in short supply of glutathione—and thereby missing a critical piece of the body's natural mechanism for warding off disease. The time has come to bring glutathione into our everyday health conversations. Considering the challenging levels available through the diet alone, it is more important than ever to encourage the public to make this master antioxidant part of their daily health regimens.

Richie, J. et al. Randomized controlled trial of oral glutathione supplementation on body stores of glutathione. Eur J Nutr. 2014 May 5.

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