

The Role of Oral Glutathione in Improvement of Health Outcomes among Persons with Late Effects of Poliomyelitis

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Non-Scientific Study Abstract

Many Americans, approximately 34% in 2004, use vitamin, mineral and non-mineral supplements for improving or maintaining their health. Antioxidants are substances that reduce oxidative damage or damage due to oxygen, such as “free radicals” and help to maintain balance. Their use is important in the prevention of cancer, cardiovascular diseases, and aging, although there is debate whether they really are effective in preventing chronic diseases. Well known antioxidants are vitamin C and E and beta carotene. Glutathione is another powerful antioxidant. This antioxidant has been studied in both animals and humans and higher levels in the blood have been associated with better overall health, longevity, resistance to infection and endurance. Oral glutathione supplements are available over the counter, but little is known about their effectiveness for improving health problems like fatigue, sleep, weakness and resistance to infection, such as the common cold. We are interested in studying whether glutathione supplements help to improve these problems in persons with the late effects of poliomyelitis. Our central hypothesis is that oral glutathione will significantly improve health outcomes and result in a significant increase in blood levels of glutathione.

One of the most important arguments for maintaining good health and well-being among those with physical disabilities is that the “margin of health” is narrower for those living with significant functional limitations and lifestyle restrictions due to physical disability. Testing the usefulness of glutathione to boost energy and immunity, reduce weakness and fatigue, resulting in better mood is highly relevant to persons with disabilities in general and those with late effects of poliomyelitis in particular. If this pilot study shows a positive effect that is repeated in a larger study, the use of oral glutathione has great potential for “widening” that margin of health in persons with the late effects of poliomyelitis and other disabilities to maximize the ability to meet the demands of daily life with disability to enhance independence and well being.