Glutathione the free radical scavenger

The benefits of Glutathione as a super oxide scavenger was discovered many years ago, in fact it was discovered in 1888, it is only in more recent years that this amazing and very powerful antioxidant has come to the fore being used not only through dietary intake but also as a supplement. There are various types of Glutathione supplements on the market, this can be very confusing. Glutathione or GSH is not necessarily readily absorbed by the body, whilst it is an amino acid it is actually a Tri-peptide amino acid that consists of cysteine, glutamic acid and glycine. Glutathione is produced by the body; it is the most important and the most abundant antioxidant substance produced by the body.

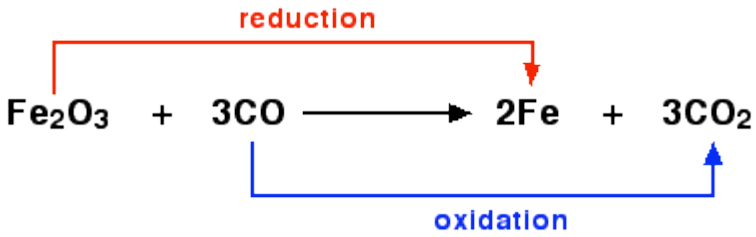
Glutathione is an extremely powerful antioxidant and is our body's built in defence against harmful free radicals. Glutathione plays an important role by removing metabolic waste and toxins from the body, even heavy metals and other environmental poisons. It also assists in maintaining strong cell membranes and transporting vital amino acids to cells.

If your body is healthy, your body's metabolic processes maintain normal redox, which means
OXIDATION AND REDUCTION (REDOX)

Oxidation and reduction in terms of oxygen transfer

- Oxidation is gain of oxygen.
- Reduction is loss of oxygen.

For example, in the extraction of iron from its ore:



Because both ***red***uction and ***ox***idation are going on side-by-side, this is known as a ***redox*** reaction.

The body is continually quenching free radicals with antioxidants; however no matter how healthy you may be this balance can be disrupted very easily and very quickly. Whenever you body is under stress, suffering illness, infection, inflammation or coming in contact with cigarette smoke, air pollution, food additives etc. there may not be sufficient defence and therefore the body becomes compromised.

Your body requires superoxide dismutase to recycle the oxygen in the super oxide radical. Most of all your body requires Glutathione because it effectively rounds up all types of free radicals, before

they attack cell membranes. Known as lipid peroxidation, this free radical destruction of important fatty acids that form the cell membrane rapidly leads to the destruction of the cell.

Glutathione exists in two forms within the body the reduced form GSH and the oxidised form GSSG. Several other enzymes are required for Glutathione to function efficiently, the most important being Glutathione peroxidise, which works with glutathione as a catalyst.

Glutathione, being a Tri-peptide amino acid and is made up of linked molecules of three non essential amino acids, cysteine, glutamic acid and glycerine, your body receives some glutathione from food however it manufactures most of the glutathione from these three building blocks. In order for your body to maintain the correct level of glutathione, your body must have an optimal level of amino acid raw materials, it is also essential to maintain the optimal levels of the co-factors that assist glutathione to do the job it is required to do, these include selenium, zinc, lipoic acid and vitamin B2. Selenium is very important as it is an essential part of the enzyme glutathione peroxidise.

To achieve absorption of Glutathione it is necessary to supplement with cofactors and precursors apart from the glutathione itself. Please contact us for further advice on taking glutathione supplements, there is no doubt glutathione is an essential part of our daily diet and long term health.

In the months to come ProSports will have its own range of supplements for specific individuals? So keep checking the website for details.