



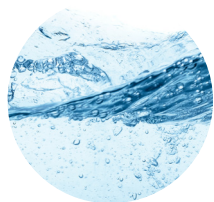
Oxidative Stress

What Is It? And, What Can We Do About It?

We often hear claims about various strategies to reduce and reverse the effects of oxidative stress, that continues to dominate the world of health interventions. Due to this fact, I thought it would be useful to review the basics and discuss the best ways to impact our challenges with oxidative stress.

OXIDATION CAN BE DESCRIBED as the rusting of our cells, which generally results in a breakdown of molecules. Oxidation is actually a normal part of a cell's life cycle. Cells have repair mechanisms, which they activate when damage from oxidation occurs. It is when the damage is excessive or the repair mechanisms are weak that trouble begins to occur for the cells. Due to this excessive damage, the cells can quit doing their jobs (early aging), they may die off and have to replace themselves (apoptosis), or worse, they simply die without any replacement (necrosis/scaring).

Recently there has been a great deal of research performed on what can be done to stop the rapid rusting of our cells. Normal health practices serve to diminish rust; such as proper rest, efficient sleep, aerobic exercise/weight training, diets rich in plant nutrients as well as low in animal fats, activities that challenge us, experiences that bring us joy, serving others as well as social interactions with our families. A huge shift has been made in the health of human kind over the past thirty years. This shift is in part due to our complex society, which produces busy lives leaving us less and less time to implement daily health practices. We are experiencing an epidemic of degenerative diseases which have no vaccine.



What Can We Do to Battle Oxidative Stress

If major lifestyle changes are a bit beyond our reach and we desire to better our health, what are our options?

1) SUPPLEMENTS Nutritional supplements can fill in gaps and provide superficial resources for our oxidative stress. Greening up our diets, by adding green supplements such as sprouts, alfalfa, and algae is a great practice. The impact of a green diet, however, requires functionally active endogenous antioxidants like Glutathione (GPX) and Superoxide Dismutase (SOD). Green foods increase certain transcription factors to activate the production of the antioxidant GPX. However, oxidative stress often

renders GPX incapable of "activating" its capacity to neutralize the oxidative stress from things like free radicals, due to a diminished presence of REDOX molecules. Simply stated, *greens are great, but REDOX molecules are necessary in bringing it all together.*

Supplementing REDOX molecules is critical in creating improved dietary results on our journey to reducing oxidative stress.

What Can We Do to Battle Oxidative Stress? (cont'd)

2) EXERCISE. The greatest obstacle to exercise is often recovery from the work out itself. The following day we are often too sore or too tired to continue our exercise habits that week. Muscle fatigue is a perfect example of oxidative stress. We stress the muscle cells and fatigue them in order to demand the recruitment of stronger fiber and more production of cellular energy (ATP). The down side of this process is



the excessive creation of cellular waste (oxidative waste-lactic acid) from aerobic metabolism. Elimination of such waste is essential and is regulated by REDOX biochemistry.

3) SLEEP EFFICIENCY. When we are under stress, our body activates defense mechanisms to prevent deep sleep, an adaptive strategy to help with survival.



Under stress, hormones and neuropeptides in our brain and body, exert influence on our daily and nightly activities. For example, anxiety can keep a parent alert and stay up at night to protect their children. Our subconscious mind has no sense of humor, meaning, we believe what our chemistry is telling us. All of this leads to conditions of light interrupted sleep and oxidative stress in multiple areas of the body.

Adrenal insufficiency, male and female hormone deficiencies, and imbalances, digestion trouble, fear, and fatigue can also occur. Sleep aids only sedate the stressed body and brain, no healing process is involved. Their long-term effects can be profound and even deadly.

Thankfully, a cellular solution exists in the form of supplementing REDOX molecules. These REDOX molecules signal inter-messages warning of a restored balance which was missing, then triggering a reset, which results in a deeper and more restful sleep.

We Do Not Need to be Victims of Oxidative Stress

We Have Options AND Can Obtain Results!

Making a plan and adhering to it are key parts of achieving cellular health. Leveraging both lifestyle changes and a REDOX molecular supplement are pivotal.

Please take a moment to review information on our website www.theredoxdoc.com. If you are interested, we invite you to join the many others who are finding value in the REDOX Core Curriculum which is also found on our website.



Find Out More, At:
www.theRedoxDoc.com