



OXIDATIVE STRESS

Why Oxidative Stress important to Athletes4Life?

The process of Free Radicals or Oxidants damaging and killing cells is called Oxidative Stress.

- Muscles cells die in a spider web pattern and over time the spider web grows into mini scar tissue and eventually shows on an XRay where doctors call it arthritis. Muscles become shorter and less elastic decreasing performance and increasing injuries.
- Tendon cells die and the tendon weakens causing joint pain and eventually ruptures or tears.
- Mitochondria are the major source of Free Radical generation within the body, and UVR, air pollution, and smoking are the main environmental sources.
- Mitochondria, the organelles that produce energy for the muscles, produce free radicals that kill the mitochondria reducing energy production and performance.

National Institute of Health says: "The approach to neutralize free radicals with antioxidants should be changed into prevention of free radical formation in the first place."

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3236599/>

Solutions:

- First step is massage. Our cleaning techniques increase oxygen and stabilize mitochondrial energy production to reduce the production of free radicals and reduce Oxidative Stress.
- AntiOxidants like JuicePlus+ Vineyard blend neutralize the free radicals that are created to allow the body to heal itself.

<p>Free Radicals are missing an electron so they steal an electron from the neighboring atom. Many free radicals in an area, like tennis elbow, degrades the joint causing pain.</p>	
<p>Strategies for Reducing or Preventing the Generation of Oxidative Stress: The results of epidemiological studies where people were treated with synthetic antioxidants are inconclusive and contradictory. Recent evidence suggests that antioxidant supplements (although highly recommended by the pharmaceutical industry and taken by many individuals [\$30B worldwide]) do not offer sufficient protection against</p>	<p align="center">From the National Institute of Health</p> <p>The reduction of oxidative stress could be achieved in three levels: by lowering exposure to environmental pollutants with oxidizing properties, by increasing levels of endogenous and exogenous antioxidants, or by lowering the generation of oxidative stress by stabilizing mitochondrial energy production and efficiency.</p> <p>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3236599/</p>



<p>oxidative stress, oxidative damage or increase the lifespan.</p>	
<p>Antioxidants have extra electrons and give them to the free radical and neutralize / stabilize the atom STOPPING Oxidative Stress.</p> <p>Stopping Cancer, disease, and aging!</p>	

More:

Free Radicals, Antioxidants in Disease and Health

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3614697/>

Free radicals, antioxidants and functional foods: Impact on human health

from the National Institute of Health

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249911/>

Free-radical theory of aging

From Wikipedia

https://en.wikipedia.org/wiki/Free-radical_theory_of_aging