

SELENIUM – Fundamental to Human Health and Longevity

“It is hard to overestimate the importance of selenium to biological systems. Its crucial role is underlined by the fact that it is the only trace element to be specified in the genetic code.”

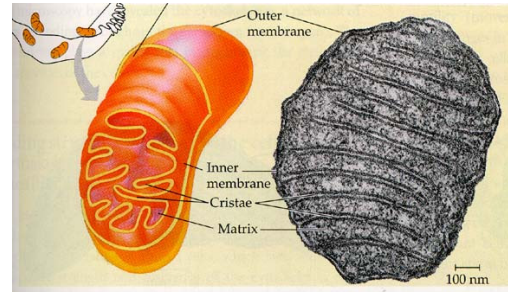
Dr Margaret Rayman, School of Biomedical & Life Sciences, University of Surrey, Guildford, UK.

The Mitochondrion: - The key to “Life, the Universe, and Everything”.

This is our cell’s “energy factory”, and each cell may have thousands of them.

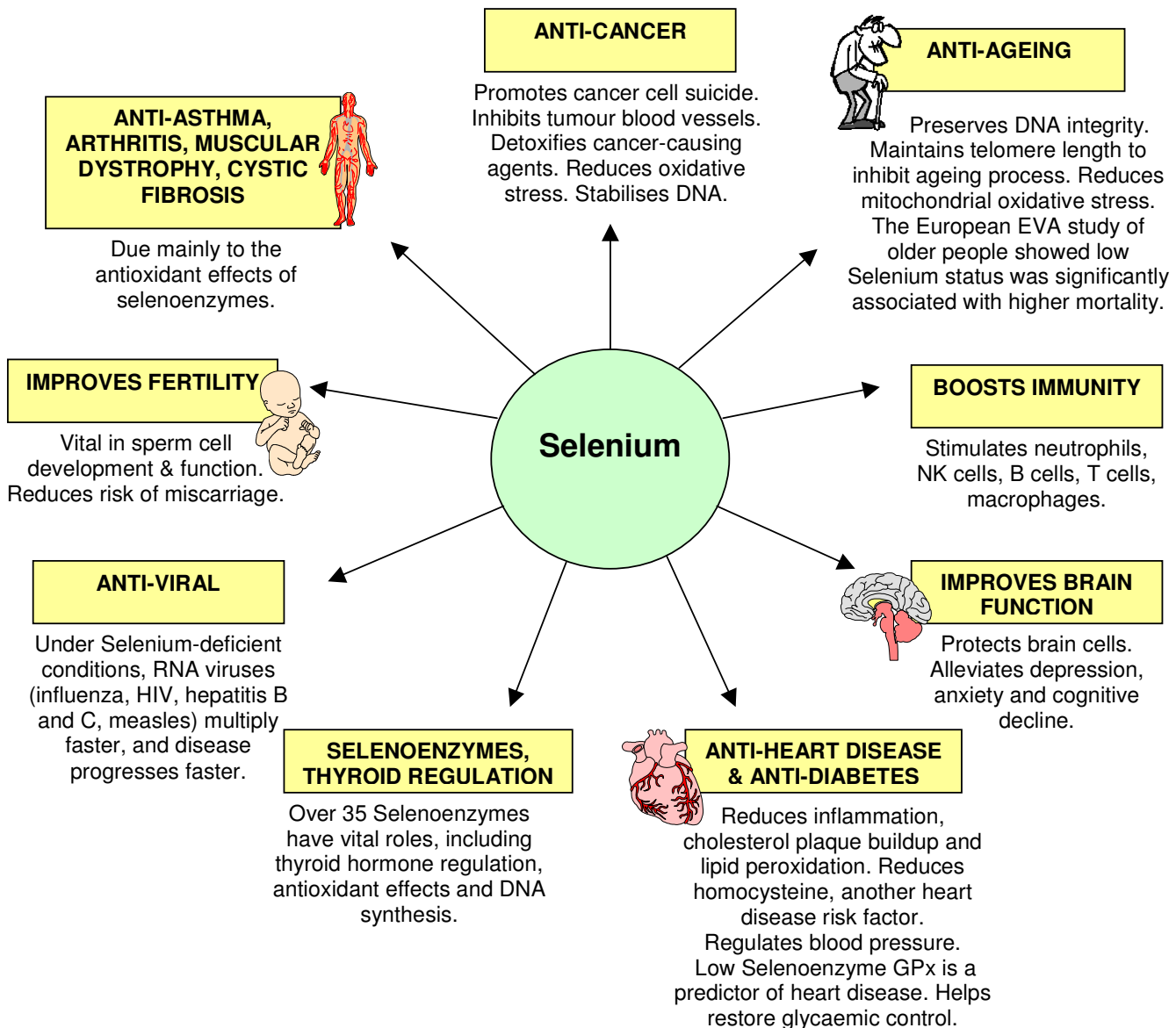
Selenium is vital to the proper function of mitochondria and is essential in preserving mitochondrial DNA integrity. High levels of damaging free radicals are produced here, and this is where Selenium-containing enzymes exert their most important, protective antioxidative effects.

If destructive free radicals are allowed to exceed the cell’s antioxidant capacity, “oxidative stress” will occur. Associated with aging, this is an early risk factor for cancer, heart disease and other chronic conditions.



<http://www.ualr.edu/~botany/mitochondrion.jpg>

The Health Benefits of Selenium.



SELENIUM'S ANTI-CANCER EFFECT

“There is no more extensive body of evidence for the cancer preventive potential of a normal dietary component than there is for Selenium”.

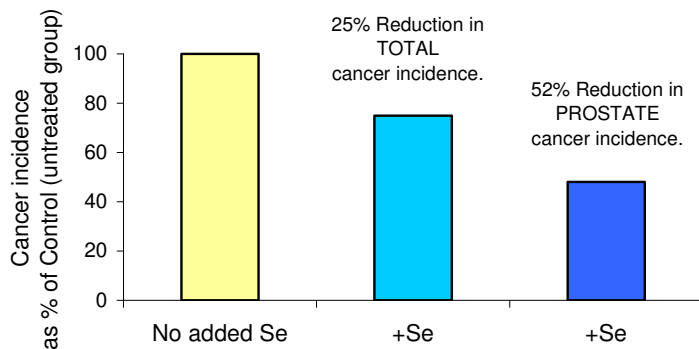
Professor Gerald Combs, Division of Nutritional Sciences, Cornell University, USA.

Selenium is particularly effective against Prostate Cancer.

The following study demonstrates that consumption of 200 micrograms (μg) of Selenium per day reduced the incidence of Total Cancer by 25%, while Prostate Cancer incidence was reduced dramatically by 52%.

Effect of selenium supplementation on incidence of total cancer and prostate cancer in a major US trial.

Treatment individuals took 200 μg Se/day as high-Se yeast
(*Duffield-Lillico et al, 2002*)

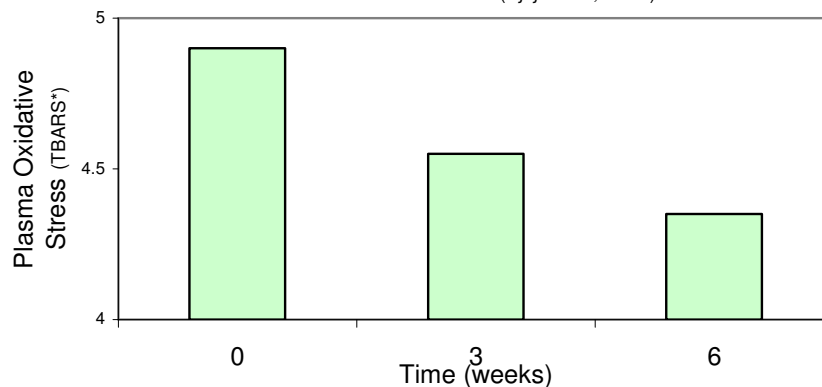


Oxidative Stress is an early risk factor for cancer and other chronic diseases.

The following Serbian study demonstrates that consumption of wheat biofortified with Selenium over 6 weeks reduced oxidative stress.

Oxidative stress in the plasma of volunteers who consumed high-selenium wheat.

*Thiobarbituric acid reactive substances, a standard measure of oxidative stress. (*Djujic et al, 2000*)



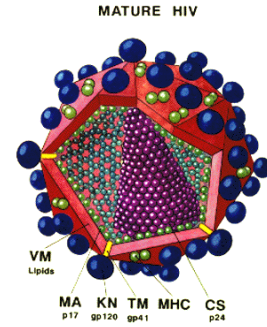
SELENIUM'S IMMUNE-ENHANCING & ANTI-VIRAL EFFECTS.

Selenium helps to control dangerous RNA viruses by enhancing immunocompetence, and by a direct anti-viral effect.

In a Selenium-deficient host, normally harmless viruses can become virulent, and harmful RNA viruses like HIV, hepatitis B and C, influenza and measles become even more virulent.

A US study found Selenium-deficient HIV patients to be 20 times more likely to die from HIV-related causes than those with adequate levels (Baumal, 1997).

HIV is less active if its host is high in Selenium.

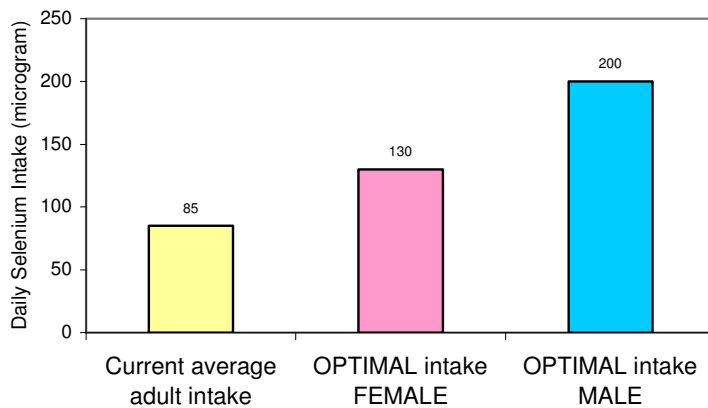


et

<http://pathmicro.med.sc.edu/lecture/hiv7.htm>

SELENIUM: WE NEED MORE!

Estimated current selenium intake for Australian adults compared with estimated optimal intake. (Lyons et al, 2008)



Even if the average Australian adult obtains the recommended RDI of around 85 µg per day of Selenium from natural food sources, additional Selenium is required to provide the estimated Optimum intake. To bridge the gap, adult men should consume an additional 115 µg per day, and adult women 45 µg per day, of Bio-Fort™ Selenium.

HOW BEST TO OVERCOME THIS SELENIUM DEFICIT?

Bio-Fort
Selenium

Selenium in the correct form and amount is essential for health and longevity.

Bio-Fort™ Selenium products offer you the ability to optimise your Selenium consumption in a convenient, measurable and biologically natural form in harmony with your normal diet, and to obtain health benefits beyond those of basic nutrition.

Bio-Fort

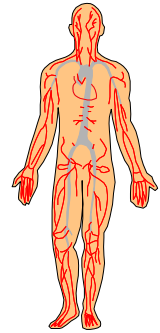
Selenium

CELLULAR HEALTH: The key to life.

Our body's 60 trillion cells live, work and die in a constant cycle, and are the key to our health and longevity.

While certain essential trace elements play a vital role in maintaining cellular health, Selenium is fundamental to human health.

But to work properly, it must be supplied in the correct form.



Bio-Fortification

While Selenium is important, the form in which we ingest it is even more so. To ensure we ingest the most appropriate forms of Selenium, Bio-Fortification is required.

We do this by adding Selenium to the soil where it is absorbed naturally by the plants and converted to beneficial, bio-available organic forms.

When we consume these natural foods, the bio-available nutrients they contain are in a form that is utilised by our bodies more beneficially than the chemical forms provided in artificial powders, supplements or pills. We then gain the benefits of this highly efficient, functional and natural process.

In many parts of the world such as Europe, Great Britain, New Zealand and much of Africa and China, natural Selenium levels are variable, too low, and are falling, and Bio-Fortified grain is grown to provide additional Selenium.

With Bio-Fort™ products you have more effective cellular uptake and utilisation, the safety of avoiding an accidental chemical overdose, and more effective bio-availability. A CSIRO human trial conducted in 2005 showed that Selenium in Bio-Fortified wheat and flour was highly bio-available even after strong heating, whereas flour that was fortified with Selenomethionine post harvest was not.

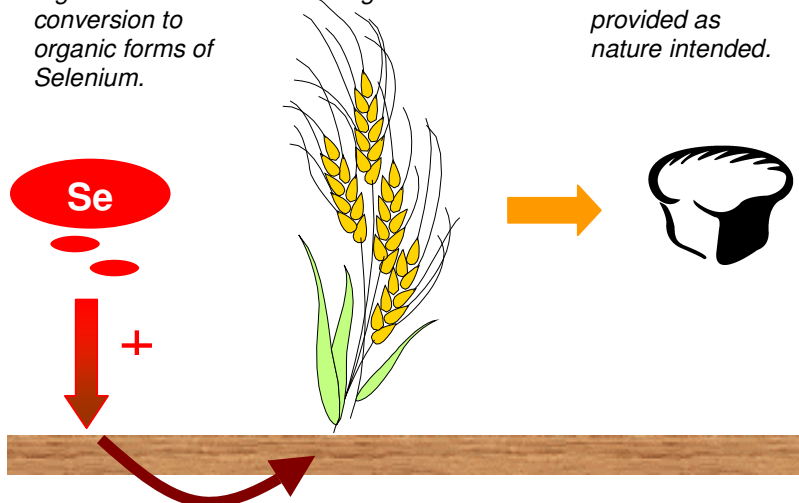
1. Selenium levels are increased in the soil. Soil-borne organisms initiate conversion to organic forms of Selenium.

2. Plants naturally absorb extra Selenium with full conversion to organic forms.

3. Grains are harvested, milled, baked. The optimum amount of Selenium is provided as nature intended.

With **Bio-Fort™** products you will obtain:

- ✓ Better absorption.
- ✓ More effective cellular uptake.
- ✓ More effective utilisation.
- ✓ Longer retention in the body.
- ✓ Safety of avoiding an accidental chemical overdose.



It sure beats taking artificial powders, supplements or pills