

IS THIS REALLY A GLOBAL GLUTATHIONE-DEFICIENCY EPIDEMIC?

1. The Body's Virus Defenses

The body's first lines of defenses against viruses are the antioxidants and antivirals vitamin C, CoQ10, vitamin E, and alpha-lipoic acid.

When all of those prove inadequate, the 800-pound gorilla is glutathione.

When at sufficient levels in the body, glutathione is highly efficient at grabbing viruses and marching them right out of the body.

Normally, we can all manufacture glutathione, especially if we can help the body along with

(1) the vegetables high in sulfur (onions, garlic, asparagus, broccoli) and

(2) the supplements NAC, quercetin, vitamin E, alpha-lipoic acid, CoQ10, and B-vitamins.

However, deprived of its building blocks, glutathione decreases sharply with age, as death-rates increase correspondingly. A major culprit is selenium.

2. Crucial Role Of Selenium

Unlike those other substances, selenium does not just "help" to produce glutathione.

It is a make-or-break component. It MUST be present. This is a quirk of all mammals and maybe of all living creatures.

Read this excellent Danish survey for the full reason why: [History Of Selenium Research](#).

Worldwide, selenium has never been in high supply. There are very few mines. And there is not enough in the world to treat all agricultural lands.

Selenium density in the soils and foods has become worse in recent years because of two eco-measures we thought would exclusively help us:

(1) the cutting back on coal use; selenium used to be propagated along with coal soot.

(2) the spread of organic foods; foods not grown with selenium-enhanced fertilizers.

There are geological maps available on the internet showing the global and local distribution of selenium.

Central China, southern Korea, north-east Italy and the US northwest have little or no selenium in their soils.

And all four of those places are coronavirus hotspots.

3. Easy Ways Of Boosting Glutathione

This YouTube on Glutathione provides some good advice. [Detox Via Glutathione](#). There are also eight good references at the end of this note.

It is simple, cheap, and pretty safe to optimise your glutathione by boosting your selenium in these ways along with the nutrients and supplements in Part 1.

(1) via one or two brazil nuts daily - typically brazil nuts contain the highest selenium content of any foodstuff, and/or

(2) via selenium capsules, widely available in healthfood stores with a recommended daily 100 mcg dose, and/or

(3) via the taking of 5-10 capsules daily of N-Acetyl-Cysteine (NAC) containing also selenium (this seems the best route).

Okay. Do start to feed that 800 pound gorilla. He or she seems to be your best bet.

4. Some References

1. [Glutathione synthetase deficiency \(Nat Institutes Of Health\)](#)
2. [Do You Have a Glutathione Insufficiency? by Amy Myers](#)
3. [10 Natural Ways to Increase Your Glutathione Levels by Kaitlyn Berkheiser](#)
4. [Immune Function and Micronutrient Requirements Change over the Life Course](#)
5. [The biochemistry of selenium and the glutathione system.](#)
6. [Glutathione: A power tool in autoimmune management](#)
7. [Glutathione recycling for autoimmune disease](#)
8. [Eat Glutathione by Josh Mitteldorf](#)

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