

Three important variables to health and wellness

Abstract

Glutathione, magnesium, and transfer factors each play broad, essential roles in health, but modern nutrient depletion and variable supplement quality make effective support challenging. Focusing on high-impact nutrients and choosing well-sourced, well-made products is key to promoting wellness.

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Opinion

When we look at both essential and non-essential nutrients the body requires, it might be important to look at what nutrients provide the most functions.

For instance, glutathione, a three amino acid that the body creates inside the cells is involved in more processes than any other compound in the body. It is too big to cross any of the cellular transport systems, consequently, must be made internally. It is involved inside the cells so supplements are ineffective unless they provide nutrients for the cells to absorb so the compound can be created inside the cell.¹⁻³

N-acetyl-cysteine aka NAC is a good example. Cysteine is one of the three amino acids but the most unstable of all the amino acids. The N-acetyl attachment helps to stabilize it so that the cells can absorb the cysteine and create glutathione.

Magnesium is also multi-functional. It is involved in over 380 functions in a basic cell and even more in a complex cell. Yet commercial soils are depleted due to overuse and fertilizers and toxic chemicals. Consequently, the plants don't make many of the nutrients we need, and we don't get the benefit thereof. So not only are we depleted in magnesium we are also depleted in a variety of plant-based nutrients.⁴⁻⁶

And of course, it doesn't stop there. The grains, etc., fed to the animals we may eat, is also depleted and thus so are the cattle, poultry, pork etc. Everyone is deprived and so are all the cells which have a huge impact on health and wellness at all levels.

The third item I favor is transfer factor. The only compound that teaches the body. It resets and up regulates the immune system. As humans we have 100s of different factors – mothers start transferring them to the fetus at around 3 months. Her delivery muscles ooze with them and so does her breast milk. They are found in all mammals and species like cows and poultry have 1000s of them.⁷⁻⁹

As already said, the cells need to create glutathione.¹⁰

Unfortunately, we can be challenged when attempting to purchase these nutrients. There are 11 types of magnesium - which one to buy?

And most transfer factors in stores are poor quality.

As a consumer struggling to create health and wellness for the self and the family these can be challenging issues that drain the pocketbook.

As we know just because information is on the internet doesn't mean it is a) accurate or b) if it is the whole story or just a segment of what we need to know and c) what brand is a quality brand and not synthetic. Health practitioners, may want to ask for soil samples the nutrients are grown in, that are utilized in the formula or protocol; check the harvesting processes (time of day or season can have a huge impact on the nutrient profile); ask for information regarding formulation processes; etc., all of which can be either supportive or detrimental to the ingredients that their clients need.

Conclusion

Conclusion? Work with the nutrients that have the largest or widest impact. Do your research well and know your products.

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Conflicts of interest

The authors declare that there are no conflicts of interest.

References

1. Vitamins & Supplements. *Glutathione - Uses, Side Effects, and More*. WebMD. 2025.
2. Corey Whelan. *Glutathione Benefits*. Healthline. 2024.
3. Michael Murray. *Glutathione: 5 Science-Backed Benefits*. iHerb. 2025.
4. Nutrition. *Why Magnesium Matters. The Mighty Mineral That Powers Your Body*. Northwestern Medicine. 2024.
5. *Magnesium. Fact Sheet for Health Professionals*. Health Information. 2022.
6. *Magnesium in diet*. MedlinePlus. 2025.
7. Macias AE, Guerra EG. Transfer Factor: Myths and Facts. *Arch Med Res*. 2020;51(7):613–622.
8. Marimuthu Krishnaveni. A review on transfer factor an immune modulator. *Drug Invention Today*. 2013;5(2):153–156.
9. Alejandro EM, Eduardo Guani G. Transfer Factor: Myths and Facts. *Archives of Medical Research*. 2020;51(7):613–622.
10. Glutathione: overview of its protective roles, measurement, and biosynthesis. *Mol Aspects Med*. 2009;30(1–2):1–12.