

Celebrating Orthomolecular Medicine

Linus Pauling's genius in combining the term "ortho" with "molecular" was a Greek-Latin hybrid referring to the use of the right molecules in the right amounts for the purpose of optimizing brain function. While Pauling rightfully deserves credit for coining and explaining the term orthomolecular, the founding father of this movement was the late Dr. Abram Hoffer. In fact, it was Hoffer's book, *How to Live with Schizophrenia*¹, that inspired Pauling to write his *Science* article in which orthomolecular was first introduced to the scientific community.² A lot has happened since Pauling's 1968 paper. Orthomolecular medicine is now much better understood than it was decades ago, since many internet-savvy individuals as well as many people seeking integrative strategies for their health have learned about its relevance, especially with respect to the treatment of mental illness. Likewise, numerous health care practitioners from multiple disciplines endorse this specific application of nutrition for the betterment of their patients

This journal has also had a steady and continued presence within nutritional medicine even though we continue to be stonewalled for inclusion into PubMed (NLM) indexing. Hoffer would be proud of this journal and the direction it has taken since his passing. He would be satisfied with the breadth of scholarship that continues to emerge. I believe this issue, in particular, pays homage to Hoffer's scientific creativity and original thinking. We have an original article by Hickey and Roberts about oral vitamin C and why the oral form (as opposed to intravenous administration) might be a better long-term treatment strategy for cancer. Their hypothesis makes sense to me, as I hope it will to the readers of this journal. I am often perplexed when my fellow colleagues, interns and students typically mention high-dose intravenous vitamin C without any reference to (or perhaps, even knowledge of) several substantive publications³⁻⁶ that have

shown significant therapeutic results when optimal doses of oral vitamin C were combined with other orthomolecules resulting in improved longevity among cancer patients, as well as improved quality of life. While there will most certainly be some readers who will question the theory put forth by Hickey and Roberts, their paper cogently argues that our biology and even cancer biology is best managed by consuming optimal doses of vitamin C orally.

We also have a review paper by Burford-Mason on the value of magnesium for cardiovascular health and disease modification. Magnesium is such an integral orthomolecule to health, and yet, from my vantage point, it is overwhelmingly under-utilized even by orthomolecularly inclined clinicians. I know this firsthand since I oversee a fairly large outpatient clinic in Toronto. I regularly review files of other colleagues and, to my amazement, this fundamental mineral is often forgotten in lieu of newer and sometimes more expensive treatment options. Consider the likely benefits if all patients with cardiovascular risk factors or established disease were given optimal doses of magnesium. If this became the norm or standard approach, we would observe much less cardiovascular morbidity and significantly less mortality. Why are so many patients developing magnesium depletion? Given the fact that many individuals have problems moderating the "stresses" of life, and combine that with their high-caloric, nutrient-devoid diets, then we have a potentially lethal mix that lends itself to chronic magnesium insufficiency among the populace. Burford-Mason articulates all that we need to know about magnesium and cardiovascular health, and does so very pragmatically. She offers a simple questionnaire that can detect the presence of magnesium insufficiency since standard testing lacks the ability to detect magnesium depletion when it is present. I can attest to this. I have requisitioned numerous red blood cell measurements of magnesium and rarely do they come back positive for a deficiency. Yet, in most cases, these patients still benefit from optimal doses of this mineral and clinically

report improvements usually within days of supplementation.

Lastly, I present a viewpoint article on how orthomolecular medicine is a more rational treatment approach than psychiatric medication for patients struggling with mental illness. I argue that orthomolecular therapies should be used aggressively since their greatest value is not only in their health-promoting actions, but in their ability to spare a significant amount of patients the ill-health that often results from psychiatric medication. I also point out that most patients are unaware of the significant risks involved with psychiatric medication, normally prescribed with little or no valid consent being afforded.

I do hope our readership finds this issue appealing. We look forward to your feedback. We also encourage our readers to contribute to orthomolecular scholarship by submitting papers. All submitted papers will receive an honest review by me and members of our editorial team.

Best wishes in the New Year!



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Editor

References

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