

## Update on the Hypothesis that Phosphoric Acid Could have a key role in Autism Spectrum Disorder mechanism

Amos Gelbard\*

*Independent Researchers, Israel.*

### \*Correspondence:

Amos Gelbard, Independent Researchers, Israel.

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### Keywords

Phosphoric Acid, Autism Spectrum Disorder, Glutamate-Glutamine.

In a previous essay, I explained why Phosphoric Acid and its deficiency could be key to understanding Autism processes [1]. I've there brought one referenced study which found Phosphoric Acid deficiency in Autistics [2], that as well as explaining the logic for this hypothesis based on the Glutamate-Glutamine and the ATP-ADP cycle. The reason I'm writing this update is because I've found yet another study which shows phosphoric acid deficiency in Autistic children [3].

The first study I also referenced in the previous essay [2] found its results among 156 Autistic children and compared to 64 controls while this other study that I'm referencing [3] is said to be from urinary samples of 14 Autistic and 14 non autistic children [3] in the report words: "Some metabolites had lower levels in the urine of children with autism compared with the control children. One of these was phosphoric acid, which is linked directly to dietary intake and has been linked to autism spectrum disorders [3]".

So, when you examine the suspicion for Phosphoric Acid deficiency as explained based on the Glutamate Glutamine and ATP-ADP cycle [1] and also now two studies [2,3] finding lower levels in the urine of autistic children, it's plausible to suggest a role for Phosphoric Acid in Autism, perhaps as a possible therapeutic.

### References

1. Amos Gelbard. Is Phosphoric Acid Connected to Autism an Hypothesis. *British Journal of Healthcare and Medical Research.* 2025; 12: 05. <https://journals.scholarpublishing.org/index.php/BJHR/article/download/19485/11559/27918>
2. Chen Q, Qiao Y, Xu X, et al. Urine Organic Acids as Potential Biomarkers for Autism-Spectrum Disorder in Chinese Children. *Front Cell Neurosci.* 2019; 13: 150. <https://www.frontiersin.org/journals/cellular-neuroscience/articles/10.3389/fncel.2019.00150/full>
3. Steve Down. *Autistic biomarkers Organic acids and amino acids.* Wiley Analytical science. 2014. <https://analyticalscience.wiley.com/content/article-do/autistic-biomarkers-organic-acids-and-amino-acids>