



Albion Nutritional Facts News is a monthly publication of Balchem®. It is to create awareness and educate the public about the importance of mineral nutrition and Albion nutritional products.

# ESPORTS

## Nutrients for Esports

Welcome to our latest newsletter which we hope have helped to keep you updated on the latest mineral nutrition news. If you have any comments or questions, please [contact us](#).

(Part 1 of 3)

### **Energize and Strategize with Magnesium for Esports**

Esports have seen a large surge in interest across the globe and has become a profession for many players. Over 50 colleges in the U.S. have established varsity e-gaming teams, many of which offer scholarships<sup>1</sup>. Esports athletes are dependent on cognitive processes to be successful, requiring that a player have sufficient cognitive energy to be able to focus and form tactical strategy, learning from their opponents. Here are two ways Magnesium plays an essential role in the brain to help accomplish this.



#### **Energy Management**

The brain represents only about 2% of the body's weight, but it is one of the largest consumers of energy at about 20% of total expenditure<sup>2</sup>. One of magnesium's biggest roles is to facilitate proper energy management. It does this by binding itself to adenosine triphosphate (ATP)—the energy currency of the body—and then is carried into the mitochondria to be metabolized. By deeply imbedding itself in ATP production, magnesium is an essential nutrient for maintaining energy levels<sup>3</sup>.



### Neurotransmission

Magnesium is also a regulator of neurotransmitter signaling through modulating the activation of N-methyl-D-aspartate (NMDA) glutamate and gamma-aminobutyric acid alpha receptors<sup>4</sup>. It also helps to maintain adequate calcium in the brain, which is another neurotransmitter regulator. Increased levels of magnesium in the brain help support vital neuronal processes and the mechanisms that enhance learning and memory.

Proper nutrition is essential and magnesium plays a vital role in supporting several of the cognitive processes esports athletes rely on. Get ahead of the game by making sure to supplement with clinically validated Albion<sup>®</sup> magnesium.

#### References:

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3. Yamanaka, R., Tabata, S., Shindo, Y., Hotta, K., Suzuki, K., Tomoyoshi, S., & Oka, K. *Scientific Reports*, 2016;6:30027. doi:10.1038/srep30027
4. Adaes, S. (2017, July 26). *Nurturing the Brain - Part 11, Magnesium*. Retrieved February 4, 2019, from BrianBlogger: <http://brainblogger.com/2017/07/26/nurturing-the-brain-part-11-magnesium/>

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