

Game on!

Emerging gaming & esports opportunities

Clinically-studied solutions to support peak performance through a holistic approach



Esports—it is one of the most exciting (and fun!) categories to hit our industry in a while but cracking the code to reach the gaming consumer has been somewhat elusive. However, gamers are savvy, rely on their online community to discover the next big thing, and may be more willing to adopt supplementation more readily. Other products such as blue-blocker glasses and ergonomic gaming chairs have caught on in the last few years and with a little education and clinically demonstrated benefits, there are a few key white space opportunities in the esports market where supplements can complement existing products which have had market success.



Blue blockers vs. macular carotenoids

Blue light is a component of the visible light spectrum with the greatest source of blue light being the sun. However, modern lifestyles are increasing exposure to blue light from other sources including energy efficient lights, personal devices, televisions, and you guessed it, computer screens. With gamers experiencing the effects of extensive blue light exposure such as [digital eye strain](#) (a.k.a., computer vision syndrome) and with symptoms manifesting in as little as two hours, the need for products to help filter blue light emerged.

Blue light glasses were quick to hit the market—but unless worn all the time, their protection was limited only to screen time. Moreover, blue light protectors and “night mode” options have been known to change the colors of screens, which can drastically effect game play especially for games that depend on color contrast. The macular carotenoids (lutein, RR-zeaxanthin, and RS [meso]-zeaxanthin), present predominantly in certain vegetables and found in high concentrations in the macula of the eye can absorb blue light, and in this way, protect the eyes against blue light damage from the inside out.

“With gamers experiencing the effects of extensive blue light exposure...in as little as two hours, the need for products to help filter blue light emerged.”



The eye-brain connection

Since lutein readily passes through the blood-brain barrier and is also concentrated in certain parts of the brain, it is suggested that it confers cognitive benefits as well. Out of all the carotenoids found in the brain, lutein and zeaxanthin are the most abundant and deposited in areas of the brain associated with information processing and memory. Retinal tissue is unique because it is, essentially, an extension of the brain and lutein levels in the macula are correlated with levels in the brain. Indeed, research has shown that higher lutein levels including higher MPOD (Macular Pigment Optical Density) is positively correlated with cognitive function and performance. Considering gamers need to rely on the sharpness of both their eyes and brains, support for both could be the difference between first and second place.



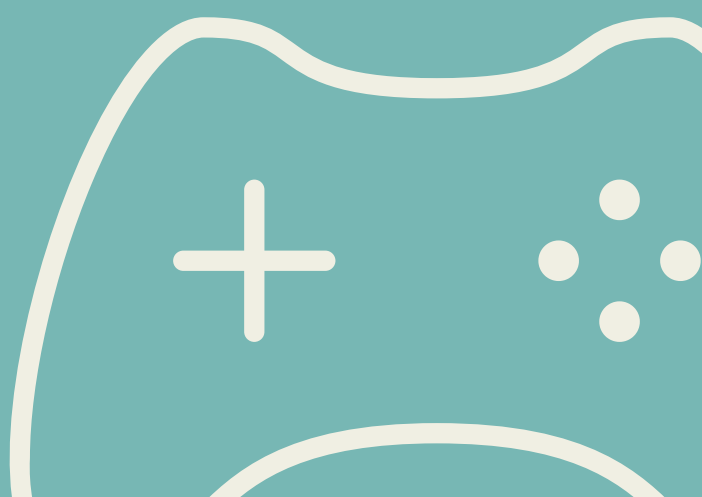
Macular carotenoids and sleep

Lastly, macular carotenoids have also shown sleep benefits. Digital device use extends well beyond the length of the natural day and adds to the duration of blue light exposure. And not all light is the same. For instance, both blue and green light have [short wavelengths](#) and have been shown to suppress melatonin, a hormone which has long been associated with the sleep-wake cycle. However, blue light has been shown to suppress the secretion of melatonin more drastically.

In an experiment conducted by Harvard researchers, it was shown that [blue light exposure](#) suppressed roughly twice the amount of melatonin and shifted circadian rhythms twice as much as green light.

Supporting gamers both day and night

Lutemax 2020 delivers all three macular carotenoids in a 5:1 ratio as found naturally in the diet and has been clinically shown to help with the following benefits—all which can support gamers and esports athletes.



Blue light protection¹

Protects eyes from harmful high energy blue light

Supports healthy visual function for fatigued eyes from digital device use

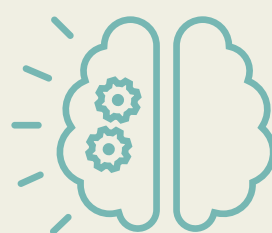
Reduces the impact from screen glare and digital eye strain as a result of prolonged screen time



Visual performance^{1,2,3}

Supports contrast sensitivity

Helps to clearly identify objects from the background



Cognitive and stress support^{4,5}

Promotes mental sharpness and focus

Promotes calmness while under stress



Processing speed^{1,2,3,4}

Supports visual processing speed

Supports faster brain function

Improves ability to see an object more clearly, process faster and react more quickly



Sleep¹

Supports improved sleep quality

Synthetics vs. natural energy vs. sustained energy

It's safe to say that controversy and traditional sports go hand in hand. Esports is no different with the issue of doping coming to light most notably in 2015 when [Kory "SEMPHIS" Friesen](#), a renowned Counter-Strike: Global Offensive (a.k.a, CS:GO) player, spoke about the rampant abuse of the popular ADHD drug Adderall at top-ranked events. In response, leading professional esports teams and ESL (formerly known as Electronic Sports League), the world's largest esports company, with support from the [World Anti-Doping Agency \(WADA\)](#), created [The World Esports Association \(WESA\)](#) to help address challenges in gaming including doping.

The functional beverage industry was quick to fill in this white space opportunity positioning their standard caffeine drinks with an esports spin. While N. America† and W. Europe†† showed that energy drinks are popular amongst gamers in their regions, APAC††† stood out with China (36%) and India (38%) both showing at least a third of their gamers guzzling their energy.

17%
N. America



26%
APAC



15%
W. Europe



The energy drink category is crowded with products lacking differentiation

Gamers are frequently looking for the next new trend and have a more positive brand attitude toward energy drink companies in all three regions, than their non-gaming counterparts. This is especially evident in Western Europe where 38% of gamers reported a positive brand attitude toward the energy drink titan Red Bull in comparison to only 17% of non-gamers.

38% Gamers

VS.

17% Non-gamers

Next gen clean, sustained energy

 **Xtenergy**

Xtenergy is a natural caffeine, clean-label friendly ingredient derived from green coffee bean using a solvent-free extraction process. With clinically demonstrated benefits including being more alert and better mood as well as being less jittery, tense, and tired, Xtenergy delivers sustained-release energy over several hours and produces a same-day effect that gamers can feel.⁶



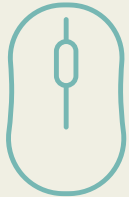
 **enXtra**[®]
PERFORMANCE • ENERGY • FOCUS

Want a caffeine-free option? Award-winning, clinically studied enXtra is a unique caffeine-free ingredient that targets a cognitive process known as "Attention Network Function" (ANF), which is the ability of the brain to allocate processing resources to a specific task. enXtra offers a unique approach to help gamers stay alert and focused by supporting mental energy.^{7,8} In one study, enXtra showed a decrease in error rates while other research showed enXtra provided energy while supporting a feeling of calmness.^{8,9,10}

enXtra was granted a cognitive performance patent and has also been certified by Informed Ingredient, a Quality Assurance certification for dietary supplement manufacturing facilities, which ensures that ingredients have been tested for banned substances and comply with WADA guidelines.

Ergonomic devices vs. curcumin

Where there is a problem, there is a market. And as gaming became more prevalent, so did the demand for comfort during gameplay which ushered in a new niche market for ergonomic devices such as chairs and mice.



And while manufacturers of these claim to help with the physical effects of gaming, they are still evident. A recent article by [Harvard Health Publishing](#) claimed that prolonged gaming can cause “repetitive stress injuries” such as carpal tunnel syndrome, tennis elbow, and “Gamer’s Thumb” (also known in the medical field as “de Quervain’s tenosynovitis”). What these all have in common is pain and inflammation caused by the overuse of specific muscles and tendons when gaming.



Moreover, gaming contributes to a sedentary lifestyle, which has been playfully named by the scientific community as “[Sitting Disease](#),” with experts saying that “[sitting is the new smoking](#)”. While there are many contributing factors such as weight gain associated with sedentariness, one that should cause concern is poor circulation which can cause anything from aching extremities, stiffness and cramping to more serious issues such as varicose veins or blood clots.

Active wellness for inactive gamers



The antioxidant and anti-inflammatory properties of curcumin have made it a consumer favorite in recent years. However, because curcumin has poor solubility and absorption, large doses of standard curcumin powder are typically needed for health benefits. In a placebo-controlled, crossover study comparing commercial curcumin products, Curcuwin increased relative absorption of total curcuminoids 46-times over standard curcumin.¹¹ But what makes sports nutrition patented Curcuwin uniquely positioned for gaming and esports is that it has been clinically shown to promote circulation.^{12,13}

Let’s grow together and win.

Want more information on how we can help you differentiate and grow your business in a crowded marketplace with our Specialty & Botanical Actives?

[CONTACT US NOW](#)



†North America (Canada and the U.S.)

†† Western Europe (Germany, the U.K., France, Spain, Italy, the Netherlands, Belgium, and Sweden)

††† APAC (China, India, Japan, South Korea, Taiwan, Philippines, Vietnam, Singapore, Thailand, Malaysia, Australia, Indonesia, and New Zealand)

References

- 1.Stringham JM, Stringham NT, O’Brien KJ. Macular Carotenoid Supplementation Improves Visual Performance, Sleep Quality, and Adverse Physical Symptoms in Those with High Screen Time Exposure. *Foods* 2017 6(7), 47; <https://doi.org/10.3390/foods6070047>.
- 2.Stringham JM, O’Brien KJ, Stringham NT. Macular carotenoid supplementation improves disability glare performance and dynamics of photostress recovery. *Eye Vis.* 2016 3:30. (LAMA II)
- 3.Stringham JT, O’Brien KJ, Stringham NT. Contrast Sensitivity and Lateral Inhibition Are Enhanced With Macular Carotenoid Supplementation. *Invest Ophthalmol Vis Sci* 2017. 58 (4). 2291-2295.
- 4.Stringham NT, Holmes PV, Stringham JM. Effects of macular xanthophyll supplementation on brain-derived neurotrophic factor, proinflammatory cytokines, and cognitive performance. *Physiology & Behavior.* 2019; 211: 112650
- 5.Stringham NT, Holmes PV, Stringham JM. Supplementation with macular carotenoids reduces psychological stress, serum cortisol, and suboptimal symptoms of physical and emotional health in young adults. *Nutr Neurosci.* 2017 15:1-11.
- 6.Xtenergy human pharmacokinetic and caffeine visual analogue research scores study. Data on File, OmniActive Health Technologies.
- 7.Shalini Srivastava, Mark Mennemeier & Surekha Pimple. Effect of Alpinia galanga on Mental Alertness and Sustained Attention With or Without Caffeine: A Randomized Placebo-Controlled Study. *JACN* 2017. <https://doi.org/10.1080/07315724.2017.13425762>.
- 8.Shalini Srivastava and Surekha Pimple.Effects of Cymbopogon Flexuosus, Alpinia Galanga, and Glycyrrhiza Glabra on Attention: A Randomized Double-Blind, Placebo-Controlled Pilot Study. *BAOJ Nutrition* 2017: 3 (1); 042.
- 9.Shalini Srivastava. Selective enhancement of focused attention by Alpinia galanga in subjects with moderate caffeine consumption. *Open Access Journal of Clinical Trials* 2018; 10; 43-49.4.
- 10.Shalini S, Mark Mennemeier, Jayesh Choudary. A Randomized Placebo Controlled Clinical Trial Demonstrating Safety & Efficacy of EnXtra® in Healthy Adults. *J Am Coll Nutrition* 2020.<https://doi.org/10.1080/07315724.2020.1753129>
- 11.Jäger RT, Lowery RP, Calvanese AV, Joy JM, Purpura M, Wilson JM. Comparative absorption of curcumin formulations. *Nutr J.* 2014 Jan 24;13:11.
- 12.Oliver et al. “Novel Form of Curcumin Improves Endothelial Function in Young, Healthy Individuals: A Double-Blind Placebo-Controlled Study.” *Journal of Nutrition and Metabolism.* July 2016
- 13.Curcuwin US Patent

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