

Nutritional OUTLOOK

Positioning cognitive health ingredients toward gamers and e-sports athletes, a SupplySide West 2019 report



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The industry is setting its sights on the gaming industry, seeing it as a major opportunity to promote ingredients that support energy, cognitive function, physical performance, and visual health. At SupplySide West 2019, Kemin Industries devoted an educational session to this subject, titled “The Gamer Opportunity,” outlining the potential of the category.

As Diane Ray, vice president of strategic innovation with NMI, explained during her presentation, the gaming market generated \$139 billion in revenue and is expected to grow at least 10% by next year. Not only that, but gamers, ranging from the casual player to the competitive, profession e-athlete skew younger, 40% of them being between the ages of 18-35, a majority of which are millennials.

According to NMI, millennials are notably open to taking dietary supplements, with 62% stating they believe they can manage health issues by taking vitamins and supplements. They are also more concerned about conditions that relate directly to gaming, specifically mental focus, vision and blue light exposure, and lack of energy than the general population.

“This same target audience has a lot of appeal because they are increasing their use of supplements,” explained Ray. Over the last few years, millennials increased their supplement usage by 36%, compared to gen X and boomers, who increased their usage by 30% and 22%, respectively.

When it comes to gamers, they have rather specific needs, both cognitive and physical. Energy drinks certainly have popularity in the gamer space, but finished product manufacturers are being more sophisticated in how they delivery energy to gamers specifically. A mass market example of this is a Mountain Dew product called Game Fuel, which contains L-theanine.

“Other energy drinks have a lot of caffeine to get you going but they’re focused on physical movement or they’re so high in caffeine that you get the jitters and don’t feel very comfortable,” explained Derek Tim of Taiyo International to Nutritional Outlook. “Adding cognitive products like Suntheanine actually antagonize some of the jitters you get from caffeine but then providing that cognitive benefit,” such as calmness and mental alertness.

While energy is important, more paramount is focus, and although gaming is largely stationary, quick reaction time is critical. L-theanine is only one ingredient that makes this possible. In a randomized, double-blind, placebo-controlled trial, subjects taking Kemin’s patented spearmint extract [Neumentix](#) showed an 11% improvement in concentration and sustained energy after 90 days of supplementation¹.

In this same study, physical performance was measured using the Makoto Arena, a 360-degree, multi-planar, game-like environment that closely mimics a sports environment, and it is designed to assess the link between cognitive function and physical performance. Statistically significant improvements in reaction time were also observed among subjects taking the spearmint extract. These results in reaction time apply particularly well to virtual reality (VR) gaming, which is growing in both consumer and competitive spaces.

Nutrition 21 is another company that sees a great deal of potential in the gamer space, using its experience in sports nutrition to target a new type of athlete. In a recent double-blind, placebo-controlled [study](#), researchers found that the firm's patented ingredient nooLVL (read "new level"), an inositol enhanced arginine silicate, significantly enhanced perceived energy, focus, and accuracy².

In the study, 60 healthy subjects who spent more than five hours a week gaming were assigned to either receive nooLVL or placebo for seven days. On day one and day seven, before and 15 minutes after dosing subjects were given cognitive assessments, a mood questionnaire and then played video games for 60 minutes. Immediately after gaming, cognitive tests were repeated. Compared to the placebo group, the supplement group had increased levels of perceived energy, decreased anger, decreased fatigue, and 66% fewer errors in cognitive tests.

In addition to cognitive health ingredients, Kemin is also positioning its FloraGLO Lutein for the gamer market, to support eye health and protect against blue light exposure. However, a number of studies have also demonstrated the ingredient's support of [cognitive health](#), specifically visual memory and complex attention.

References:

1. Falcone PH et al. "The attention-enhancing effects of spearmint extract supplementation in healthy men and women: a randomized, double-blind, placebo-controlled, parallel trial." *Nutrition Research*, vol 64 (2019): 24-38
2. Tartar JL et al. "A prospective study evaluating the effects of a nutritional supplement intervention on cognition, mood states, and mental performance in video gamers," *Nutrients*, vol. 11, no. 10 (2019): 2326