University of Lethbridge

NEWS RELEASE

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ULethbridge-led study finds multi-nutrients can have a beneficial effect on ADHD

Dr. Brenda Leung, a professor in the Faculty of Health Sciences at the University of Lethbridge, and a team of researchers found that multi-nutrients positively affected the behaviour and physical health of children diagnosed with ADHD.

The study was recently published in European Child & Adolescent Psychiatry and Leung discussed the results in the ADHD Science podcast.

"Our study revealed several important findings about behaviour change, height growth and the safety of a multi-nutrient treatment for children with ADHD and emotional dysregulation," says Leung. "The results showed significant and continued improvements at 16 weeks compared to eight weeks of multi-nutrient treatment."

Leung, who's also the Emmy Droog Chair in Complementary and Alternative Health Care, collaborated with researchers at the Oregon Health & Science University and the Ohio State University to evaluate the safety and effectiveness of a multi-nutrient product for ADHD in children aged six to 12. The multi-nutrient, a commonly available product, consists of vitamins, essential minerals, antioxidants and some amino acids. Each site recruited participants who were then randomly assigned to receive either the multi-nutrient or a placebo for eight weeks. A condition of the study was that the children stop any ADHD medication two weeks before beginning the study. Participants, whether they were in the placebo or multi-nutrient group, had the opportunity to stay in or join the multi-nutrient group for an additional eight weeks.

"We wanted to know the effect of taking these nutrients for 16 versus eight weeks," says Leung. "We found that those who took the nutrients for 16 weeks continued to respond to the nutrients as rated by a clinician."

In addition to assessment by clinicians, feedback was also sought from parents and caregivers. Overall, more than half of the participants who took the multi-nutrients for eight weeks showed

improvement compared to those who took a placebo. Those who took the multi-nutrient for 16 weeks continued to show improvement. In the group of participants who received a placebo followed by the multi-nutrients, response went from 23 per cent during placebo to 64 percent with multi-nutrients. Leung says the initial response may be due to the placebo effect.

Another significant finding was the improvement in growth. Leung explains that a side effect of ADHD medication was height suppression. Even children who take a medication holiday, such as over the summer, don't catch up.

"What's interesting is that the kids taking the nutrients grew more than the children who were initially in the placebo group," says Leung. "Children who took the multi-nutrients for 16 weeks grew 2.3 centimetres compared to 1.8 cm for those who were initially on the placebo and took eight weeks of the nutrients."

Leung says a larger study is needed to address questions such as whether a multi-nutrient would help the height suppression effects of ADHD medications. Thanks to a grant from the Canadian Institutes of Health Research, Leung is working with patients and stakeholders to design a pragmatic study and is looking to hire a post-doctoral fellow to work on the project.

This news release can be found online at Multi-Nutrients and ADHD.

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