Tryptophan-enriched antioxidant cereals improve sleep in children with autistic spectrum and attention deficit hyperactivity disorders

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Journal of Cellular Neuroscience and Oxidative Stress, 9 (1), 608-616, 2017

The intake of foods rich in tryptophan produces beneficial effects on sleep. The majority of children with neurological disorders like autistic spectrum disorder (ASD), cerebral palsy or attention deficit hyperactivity disorder (ADHD) have sleep problems. To evaluate the effect of tryptophan-enriched cereal intake on sleep of children with neurological disorders. Involving 7 children with ASD, 9 children with cerebral palsy and 6 children with ADHD. They carried a wrist actimeter to record activity. The second and fourth week children ingested control cereals at breakfast and dinner. The first, third and fifth week test cereals were administered at breakfast and dinner double-blinded, i.e., participants didn’t know if they ingested tryptophan-enriched cereals or control cereals. Sleep efficiency improved in children with ASD after tryptophan-enriched cereals consumption at dinner. Sleep efficiency and wake bouts improved in children with cerebral palsy after consumption of tryptophan-enriched cereals at dinner. Assumed sleep improved in volunteers with ADHD after consumption of tryptophan-enriched cereals at dinner. Actual sleep time, sleep efficiency and immobile time improved in these children with ADHD after consumption of tryptophan-enriched cereals at dinner and when they ingested tryptophan-enriched cereals at breakfast and dinner too. In conclusion, intake of tryptophan-enriched cereals improves sleep of children with ASD and ADHD.