The Effect of Experimental Supplementation with the Klamath Algae Extract Klamin on Attention-Deficit/Hyperactivity Disorder.

Cremonte M, Sisti D, Maraucci I, Giribone S, Colombo E, Rocchi MBL, Scoglio S.


Abstract

Attention-deficit/hyperactivity disorder (ADHD) is a chronic neurobiological condition with onset in childhood. The disorder is characterized by inattention, impulsivity, and/or motor hyperactivity, which often affect the development and social integration of affected subjects. Phenylethylamine (PEA), naturally contained in the Klamath Lake microalgae and concentrated in the Klamin® extract, is an endogenous molecule with a general neuromodulatory activity. It functions as an activator for the neurotransmission of dopamine and other catecholamines, and very low concentrations of PEA may be associated with specific psychological disorders such as ADHD. The aim of our study was to evaluate the efficacy of the Klamin extract in treating a group of subjects diagnosed with ADHD. Thirty subjects, aged 6-15, who had been diagnosed with ADHD according to the DSM-IV TR criteria, were enrolled. The supplement was administered to all the subjects, who reported to an ADHD clinic for routine follow-up visits. Observations were made and data collected over a 6-month period. After 6 months of therapy the subjects appeared to show significant improvements based on assessments of their overall functioning, behavioral aspects related to inattention and hyperactivity-impulsivity, attention functions in both the selective and sustained component and executive functions. The study appears to confirm the initial hypothesis that the Klamin extract may positively affect the expression of ADHD symptoms. Additional larger studies on the effects of Klamin on ADHD are needed to further investigate the potential of this extract in ADHD treatment.