

Lifestyle change, in addition to pharmacotherapy, enhances seizure control in young adults.

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Epilepsy is one of the most prevalent neurological disorders that affects about 65 million people globally, with adolescents and young adults representing an estimate of 150,000 new diagnoses annually. This is especially concerning since seizures disrupt their critical development period involving education, career advancements, and social interactions. Despite the availability of anti-seizure medications, 30-40% of individuals continue to experience persistent seizures. This highlights an urgent need for complementary treatment approaches using non-pharmacological methods. This review aims to evaluate whether consistent lifestyle modifications like improved sleep quality, stress management, regular physical activity and dietary changes can effectively reduce seizure frequency in young adults alongside medication. Findings from multiple clinical studies and randomized controlled trials reveal that 7–8 hours of consistent, uninterrupted sleep reduces seizure frequency by 16%, stress management interventions reduce it by 29–35%, structured exercise programs result in 36% fewer seizures, and the Modified Atkins Diet (MAD) decreases seizure occurrence by 50%. These lifestyle areas share comparable effects on the brain. For instance, a MAD diet, improved sleep quality and quantity, better stress management approaches, and getting the appropriate exercise can help balance brain chemicals like Gamma-Aminobutyric Acid (GABA) and glutamate, which control when and how seizures occur. In addition, these interventions decrease inflammation in the brain, reduce oxidative stress, and increase neuroplasticity, factors involved with long-term neurological health and reduced seizure risk. This review advocates using consistent lifestyle modifications alongside medication in patients with epilepsy to control seizure frequency, since it is promising, low-cost, and non-invasive.