Adopting a Healthy Diet May Help ADHD

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January 17, 2012 — When drug therapy fails to control attention-deficit/hyperactivity disorder (ADHD) or is unacceptable, adopting a "healthy" diet, eliminating items known to predispose to ADHD, and adding omega-3 fatty acid supplementation may be worth trying, <u>new research</u> suggests.

"The recent increase of interest in this form of therapy for ADHD, and especially in the use of omega supplements, significance of iron deficiency, and the avoidance of the 'Western pattern' diet, make the discussion timely," the authors write.

Many parents and physicians continue to be interested in how diet and dietary changes, particularly parents wanting to find an alternative to stimulant medication or a complementary therapy. Nevertheless, it remains a "controversial" topic, the authors note.

For their review, J. Gordon Millichap, MD, and Michelle M. Yee, CPNP, from Children's Memorial Hospital in Chicago, Illinois, searched PubMed for relevant studies on the role of diet and dietary supplements for the treatment of children with ADHD.

They note that their recommendations on diet and dietary supplements are based on a critical review of the data and their own experience in a neurology clinic for children and adolescents with ADHD.

The study was published on January 9 in Pediatrics.

Elimination Diets Not Advisable

Perhaps the "most promising and practical" complementary or alternative treatment, write Dr. Millichap and Ms. Yee, is adopting a "healthy" dietary pattern, omitting items shown to predispose to ADHD or to make the condition worse. These items include fast foods, red meat, processed meat, potato chips, high-fat dairy foods, and soft drinks.

They point to a "provocative" study <u>published</u> last year, which found a link between ADHD in adolescents and a "Western-style" dietary pattern that was high in fat, refined sugars, and sodium and low in fiber, folate, and omega-3 fatty acids (Howard et al, *J Atten Disord*. 2011;15:403-411). ADHD was not associated with a "healthy" dietary pattern rich in fish, vegetables, fruit, legumes, and whole-grain foods.

Adopting a healthy dietary pattern "may offer an alternative method of treatment of ADHD and less reliance on medications," the authors of the current study write.

They also note that although many parents report worsening of hyperactivity symptoms after consumption of foods and drinks containing sugar or aspartame — and isolated reports support the parents' observations — most controlled studies have failed to find a significant harmful effect of sugar or aspartame, the authors note.

Additionally, they say that the elimination of sugar and aspartame and adapting additive-free diets are complicated, disruptive, and often impractical; such measures are indicated only in select cases.

Fatty Acid Supplements May Be Helpful

Low levels of long-chain polyunsaturated fatty acids (PUFA) have been reported in the plasma and red cells of children with ADHD in comparison with their ADHD-free peers, Dr. Millichap and Ms. Yee note. Some studies have demonstrated a reduction in ADHD symptoms with PUFA supplementation, although no definitive conclusions can be drawn.

However, the authors note that "on the basis of reports of efficacy and safety, we use doses of 300 to 600 mg/day of omega-3, and 30 to 60 mg/day of omega-6 fatty acids, continued for 2 or 3 months, or longer if indicated."

"As initial or add-on therapy, we have occasional reports of improved school grades and lessening of symptoms of ADHD, without occurrence of adverse effects. Most parents are enthusiastic about trying the diet supplements, despite our explanation of only possible benefit and lack of proof of efficacy," they note.

They also note that iron and zinc supplementation is advisable when there is a known deficiency in these minerals, and this may "enhance the effectiveness" of stimulant therapy.

Dr. Millichap and Ms. Yee have disclosed no relevant financial relationships.

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