QA 37 - Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD)

QUESTION:

What are the current nutrition recommendations and management concerns for children with significant mood disorders such as ADD?

ANSWER:

Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD) are developmental disorders with specific clinical diagnosis criteria. The diagnostic criteria includes inattention, impulsivity, hyperactivity, onset before 7 years of age, duration of at least 6 months, absence of schizophrenia, affective disorder, and severe/profound mental retardation. These criteria are not classified as mood disorders.

The most common effective treatment for ADHD is stimulant medication, i.e. Ritalin, Adderall and Dexedrine. Anorexia and poor intake are side effects of these drugs and may negatively impact growth and nutritional status. Tolerance however to these side effects is often demonstrated over time. Children receiving these medications should be monitored regularly for growth and nutrient intake. Medication should be given with or after meals/snacks to minimize the appetite suppressing effect. Meals and snacks should be scheduled in relation to the time the child receives the medication. For instance, if a child has 1-2 doses during the day, afternoon and evening meals or snacks should be served to take advantage of increased appetite in the afternoon and evening to improve nutrient intake. Nutrition counseling to avoid struggles over eating is critical and promotion of a nutrient-dense diet should be advised.

A variety of other treatments have been proposed and tried, including the Feingold diet (removing all artificial colorings and flavorings and some foods); megavitamins, and eliminating sugar. None of these treatments have been shown to be effective. One study of pre-school children with ADHD demonstrated improvement with the elimination of milk, wheat, and chocolate in their diet. This study however was only done in a small number of children and was not provided consistently. Many families who try the Feingold diet report discontinuing it due to lack of improvement.

There have been a few reports in recent years regarding altered essential fatty acid metabolism in boys with ADHD (there are 3-6 times more boys than girls with this disorder). These reports suggest similar symptoms in these children as those with essential fatty acid (EFA) deficiency and lower n-3 fatty acid plasma levels. However, this is a reported association and not the cause of ADHD. No controlled intervention trials of EFA supplementation have been reported.

References:

1) American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 4th ed., Washington, DC, 1994, The Association.

2) Lucas, B: Nutrition for School-Age Children. In: Trahms, CT and Pipes, PL. Nutrition in Infancy and Childhood, 6th ed, McGraw-Hill, 1997.

3) Burgess, JR, Stevens, L, et al: Long-chain Polyunsaturated Fatty Acids in Children with Attention-Deficit Hyperactivity Disorder. Am J Clin Nutr, 71(suppl):327S-330S, 2000.