

Alternative Medical Approaches to Treating Attention Deficit/Hyperactivity Disorder

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Attention Deficit Hyperactivity Disorder (ADHD) has become a topic of discussion more frequently as the general public has learned more about this condition. It is important for coaches to understand this condition if their gymnast shows signs of or knowingly has ADHD. Dr. Ronald Kamm wrote an excellent article entitled, "Tips for Coaching a Child with Attention Deficit/Hyperactivity Disorder" which was published in Technique Volume 19, #10, pg 22-28. This article for parents and coaches, is a follow-up article to discuss some of the alternative methods for treating ADHD other than the use of prescription medication.

First, I feel it is important to understand what ADHD is. ADHD is a psychiatric diagnosis. It is defined by the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* as follows (A through E):

- A. Either (1) or (2) must occur:
1. six or more of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:
 - a. often fails to give close attention to details or makes careless mistakes in schoolwork, work or other activities
 - b. often has difficulty sustaining attention in tasks or play activities
 - c. often does not seem to listen when spoken to directly
 - d. often does not follow through on instructions and fails to finish schoolwork, chores or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
 - e. often has difficulty organizing tasks and activities
 - f. often avoids, dislikes or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
 - g. often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
 - h. is often easily distracted by extraneous stimuli
 - i. is often forgetful in daily activities
 2. six or more of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:
 - a. often fidgets with hands or feet or squirms in seat
 - b. often leaves seat in classroom or in other situations in which remaining in seat is expected
 - c. often runs about or climbs excessively in situations in which it is inappropriate
 - d. often has difficulty playing or engaging in leisure activities quietly
 - e. is often "on the go" or often acts as if "driven by a motor"
 - f. often talks excessively
 - g. often blurts out answers before questions have been completed
 - h. often has difficulty awaiting turn

- i. often interrupts or intrudes on others
- B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.
- C. Some impairment from the symptoms is present in two or more settings (ex. At school and at the gymnastics club)
- D. There must be clear evidence of clinically significant impairment in social, academic or occupational functioning.
- E. The symptoms do not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia or other Psychotic Disorder and are not better accounted for by another mental disorder.

The mainstream treatment of ADHD is with the use of prescription medication. Usually a stimulant (such as Ritalin, Adderal, Cylert, and Dexedrine) or an anti-depressant (such as Wellbutrin, Norpramin, Pamelor, and Tofranil) is used for treatment. These medications have been studied and shown to be effective treatment choices for children with ADHD.

A recent trend has been for the public to search out "alternative medical" approaches for treatment of their medical conditions. This trend is true with the treatment of ADHD. Several popular books have been printed (The Natural Approach to Attention Deficit Disorder, No More Ritalin Treating ADHD Without Drugs, The ADD and ADHD Diet, Ritalin Free Kids, and many others). The purpose of alternative medical approaches to the treatment of ADHD is to avoid the use of prescription medications due to the side effects and the thought that these medications may only mask the symptoms and not treat the actual problem. This is a topic of great debate since no one truly knows the cause of ADHD.

In relationship to gymnastics, a concern is the use of these prescription medications at the international elite level of competition. The stimulants used to treat ADHD are all banned by the United States Olympic Committee and the Federation of International Gymnastics. Therefore, members of the USA Gymnastics National Team can not take these medications and compete for the USA. These gymnasts must be removed from their stimulant medication and either be placed on an anti-depressant or seek an "alternative medical" approach to the treatment of their condition. Therefore, it is important for potential national team members and current team members with ADHD to have an understanding of a variety of ways to treat ADHD other than with the prohibited stimulant medication.

The nutritional status of a gymnast with ADHD is usually the first thing that is evaluated. Several dietary causes of ADHD have been stated in the medical literature. Dr. Jay Lombard, a board certified neurologist, has studied the effect of deficiencies of omega-3 fatty acids such as DHA (docosahexanoic acid) and ADHD. Dr. Lombard states, "DHA is the primary structural fatty acid in the gray matter of the brain and promotes communication between brain cells by allowing synapses to remain soft and functional...DHA protects cell membranes against oxidative damage and is being actively examined for its potential in treating clinical conditions ranging from Alzheimer's disease to multiple sclerosis and attention deficit disorder (ADD)." Several non-prescription supplements have been produced with DHA for treatment of ADHD.

Pycnogenol is a strong antioxidant food supplement. It is extracted from the bark on the French Maritime Pine Tree. In 1998, it was granted a U.S. Patent for treating ADHD. It helps to increase circulation in the brain. Currently, Dr. Stephen Tennebaum and Dr. Julie Paull are performing a double-blind study with Pycnogenol and ADHD at The Attention Deficit Center in St. Louis, Mo.

One study from Poland found that, out of 116 children diagnosed with ADHD, 95% were deficient in magnesium. Over a 6 month period of time, 50 of the students received magnesium supplementation and the rest of the children did not. The children that did receive the magnesium performed better than the ones that did not. This is another example that deficiencies in a child's diet may be contributing to ADHD symptoms. In addition to nutritional deficiencies, allergies to food and/or the environment may also contribute to ADHD symptoms. According to an article published in the *Journal of Pediatric Child Health* in 1997, diet does play a role in the ADHD child. This article reviewed relevant double-blind placebo controlled food challenge methodology research articles that were published between 1985-1995. It was concluded that a large variety of foods might have a profound affect on some children's behavior, ranging from mood changes to sleep disturbances.

In 1999, Dr. Eugene Arnold published a review article in the *Journal of Attention Disorders*. His review of the medical literature produced 8 controlled studies that link children's diets to ADHD symptoms. By removing certain foods from a child's diet, symptoms improved and when the food was returned into the diet ADHD symptoms increased. A vast variety of foods seem to be associated with ADHD symptoms. The foods that seemed less likely to cause problems were: chicken, lamb, rice, potatoes, apples, bananas, broccoli, cabbage, carrots, cauliflower, celery, cucumbers, and parsnip. Foods that most frequently cause problems are milk, eggs, wheat, corn, chocolate, sugar, orange juice, food coloring, preservatives and additives.

It is recommended that you consult a qualified medical professional to assist you with nutritional concerns and ADHD. Contact a physician or nutritionist with ADHD experience or call the AAEM (American Academy of Environmental Medicine) for the environmental medical specialist nearest to you: 1-800-LET-HEAL (or 1-800-538-4325). Additional information may be obtained from a large variety of web sites on the Internet.

You may simply use any search engine and submit ADHD. Some of these Internet sites are listed here: mediconsult.com, edutechsbs.com/adhd, add-information.com, addclinic.com, helpforadd.com, drrapp.com and healthlinkusa.com.

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