#### What is ADHD?

ADHD or Attention Deficit Hyperactivity Disorder is a prevalent neuropsychological disorder affecting approximately 9.5% of children and adolescents aged between 4-17 years according to the most recent National Survey of Children's Health in the US (See Visser et. al., 2013). However, it is important to note that there are increasing numbers of adults who are now also being diagnosed with ADHD. Behavioural, occupational and social difficulties of ADHD arise as a result of brain executive functioning issues. Although capable in many respects, sufferers of ADHD find it difficult to harness their abilities to full capacity because of a combination of the following main deficit areas:

- Inattention
- Impulsivity and
- Hyperactivity

In addition, clinical experience indicates that sufferers often experience accompanying issues including:

- Social difficulties
- Learning difficulties
- · Physical and health issues

We now know from research on brain plasticity that ADHD can be redressed if we optimise nutrient levels in the brain and push the brain to strengthen existing connections or make new ones through the use of educational support and technologies such as Neurotherapy.

# **Classic Symptoms**

The following symptoms of ADHD are indicated in the current issue of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). Note that a diagnosis is dependent on: the number of symptoms present; the age of the individual; the length of time the problems have persisted; the degree to which symptoms impact on social, academic and occupational functioning; and the presence of symptoms in a number of different settings. Furthermore, it is important to note that the symptoms are not solely a manifestation of oppositional behaviours, acts of defiance or hostility, or a failure to understand instructions and tasks.

#### **Symptoms of Inattention:**

- Does not pay attention to details and makes careless mistakes in schoolwork or work.
- Has difficulty sustaining attention in tasks or play activities.
- Does not seem to listen when spoken to directly.
- Does not follow-through on instructions leaving schoolwork, chores or workplace duties unfinished.
- Has difficulty with organisation and managing sequential tasks, for example, is messy and has difficulty keeping materials and belongings in order.
- Reluctant to engage in activities which require sustained mental effort.
- Often loses or forgets things necessary for tasks or daily activities.
- Is often distracted by extraneous stimuli.

### **Symptoms of Impulsivity:**

- Often blurts out answers before questions have been completed.
- Often has difficulty waiting turns.
- Often intrudes on or interrupts others.

- Has difficulty delaying gratification.
- Has difficulty understanding the consequences of actions.

## **Symptoms of Hyperactivity:**

- Often fidgets with hands or feet or squirms in seat.
- Often leaves seat in classroom or in other situations in which remaining seated is expected.
- Often runs or climbs excessively in situations in which it is inappropriate, and seems to be always 'on the go', or for adolescents and adults, this may be limited to being restless.
- Often finds it difficult to engage in play activities quietly.
- May talk excessively.

## **Symptoms associated with ADHD:**

## **Social Difficulties**

- Has difficulty forming and maintaining friendships.
- Has difficulty internalising, and complying with, socially accepted codes of behaviour, leading to conflict and confrontation.

## **Learning Difficulties**

- Off-task behaviour leads to poor academic performance.
- Has difficulty with reading and spelling, and sometimes maths.
- Appears to learn by doing, rather than by listening, reading and writing.
- Often an accompanying auditory and/or visual processing and/or language disorder.
- Organisation and time-management difficulties including forgetting books and failing to hand work in on due dates, leads to poor academic performance.

### **Physical and Heath Issues**

The reduced nutrient levels in the soil in Australia and the US, toxins in our food chain, and Wheat Grain Agglutinin (WGA) in our engineered modern wheat, A1 Proteins in our modern milk can all affect the integrity of cells and lead to:

- Digestive issues, such as food intolerances.
- Asthma, eczema, allergies and glue ear.
- Leaky gut (increased intestinal permeability) and Irritable Bowel Syndrome (IBS).
- Difficulties falling asleep, frequent awakenings, restless sleep.
- Nightmares and night terrors.

Please note that this list of symptoms is not intended to be utilised for self-diagnosis. Normal, healthy children exhibit some of these symptoms at a young age. It is important to seek expert professional advice and assessment if you or somebody close to you appears to be suffering from some or many of these symptoms. When seeking such advice, for best results, it is important that the professional you choose is committed to identifying and treating the underlying causes rather than merely treating the symptoms of ADHD.

### Further Reading:

- American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Washington D.C.
- Visser, S., Danielson, M., Bitsko, R., Perou, R. & Blumberg, S. (2013). Convergent Validity of

Parent-Reported Attention-Deficit/Hyperactivity Disorder Diagnosis: A Cross-Study Comparison. JAMA Pediatr. May: 1-2. Duff, J., Nutrition for ADHD and Autism, in Clinical Neurotherapy: Application of Techniques for Treatment, D. Cantor and J.R. Evans, Editors. 2014, Elsevier: San Diego CA. p. 257-382

• The Dark side of Wheat: A critically acclaimed internet classic, **The Dark Side of Wheat** is now available to own as a downloadable document exclusively from <a href="http://www.greenmedinfo.com/product/dark-side-wheat-ebook">http://www.greenmedinfo.com/product/dark-side-wheat-ebook</a>. It includes two hard-hitting essays that represent a seachange in the way wheat intolerance is comprehended; no longer a rare, strictly genetically-based disease, wheat is revealed to be a species-specific intolerance, whose role in health and disease has been greatly misunderstood since ancient times. The downloadable document also includes a 90-page quick reference guide containing hyperlinks to research on the National Library of Medicine on over 120 diseases that have been linked to wheat consumption.