Putting ADHD into Focus



PowerPoint slides are available for download at:

www.YourBrainOnlyBetter.com/presentations/

Who is Nectar?

The Nectar Group is an education company dedicated to helping students overcome learning challenges so that they can reach their full potential. With our assessment-driven process, we use scientific tools to evaluate and pinpoint the root causes of learning difficulties. Then, we create custom solutions utilizing cognitive neuroscience to resolve those root issues.

We optimize learning and take a holistic approach to improving school, work, and life performance by providing:

- Therapeutic interventions that are grounded in neuroscience to treat the causes of learning difficulties for all ages
- K-12 and collegiate level academic tutoring in reading, writing, and math to build solid content and prepare students for college and beyond
- Study skills and executive function coaching to ensure successful student outcomes
- One-to-one educational services via educational consulting, individualized schooling, and homeschool support



Who do we work with?



Clients ages 6 and up



All types of diagnoses:

ADHD, Dyslexia, Autism Spectrum, "Slow Learners", Gifted, Twice Exceptional, TBI



Students and adults looking for a competitive edge



Nectar provides all services to clients around the world via our unique eCoaching remote video services

Presentations and Common Symptoms of ADHD

What is ADHD?

- ADHD is a developmental disorder consisting of difficulties with attention, distractability and impulsivity. It is felt to be a disorder of executive dysfunction.

 Executive functions can be described as the central processes that are involved in giving organization and order to action and behavior. A good analogy is that of the "maestro" who conducts an orchestra.

 Some examples of executive functions include planning, the ability to inhibit or delay responding to stimuli, and emotional control.
- A more interesting way to think of ADHD is as a disorder of self-regulation. It is not just that children can't inhibit their impulses, but they have trouble both activating and fine tuning their behavior, attention, and emotions (Nigg, 2017). This explains children who cannot get started on or finish their homework but can focus on Legos™ or their stamp collection for hours. Their natural interest does not have to be "regulated" for those activities in order to pay attention.
- Dr. Sanford Newmark, Head of the Pediatric Integrative Neurodevelopment Program at UCSF

Inattentive Presentation



6+ symptoms (children), 5+ symptoms (17 and older)

- Fails to give close attention to details or makes careless mistakes
- Difficulty sustaining attention in tasks
- Trouble listening when spoken to directly
- Does not follow through on instructions
- Difficulty organizing tasks and activities
- Dislikes, avoids, or is reluctant to engage in activities that require sustained mental effort
- Loses items necessary for tasks or activities
- Easily distracted
- Forgetful in daily activities

Hyperactive/Impulsive Presentation 4



6+ symptoms (children), 5+ symptoms (17 and older)

- Fidgets or squirms in seat.
- Leaves seat in situations when remaining seated is expected
- Runs or is restless in situations where it is inappropriate.
- Unable to play or engage in activities quietly.
- "On the go," acting as if "driven by a motor"
- Talks excessively.
- Blurts out an answer before a question has been completed
- Has difficulty waiting his or her turn
- Interrupts or intrudes on others

Attention-Deficit/Hyperactivity Disorder: Three Types



Predominantly inattentive presentation



Predominantly hyperactive/impulsive presentation



Combined presentation

Criteria are met for both types

Attention-Deficit/Hyperactivity Disorder: Diagnostic Criteria

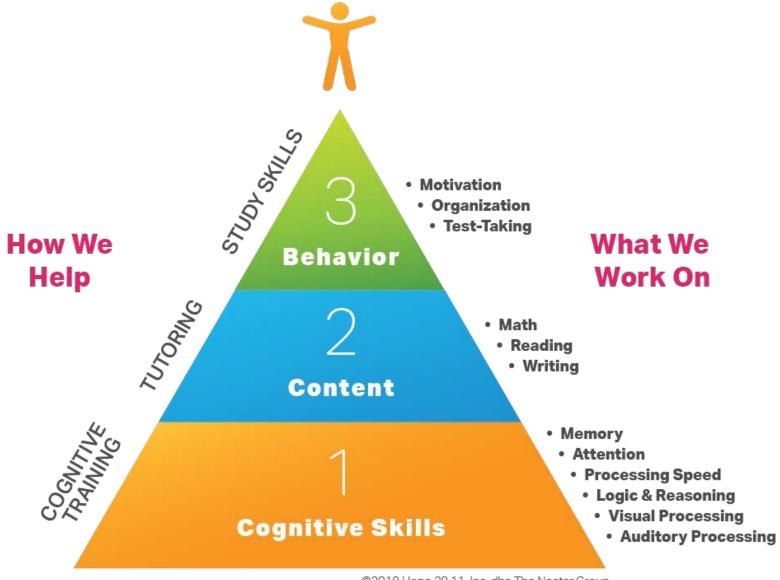
- For all types, symptoms must be present before age 12
- Symptoms must be present for 6+ months in multiple settings
- Prevalence:
 - 5% of children
 - 2.5% of Adults

Severity:

- Mild:
 - Meets baseline or a little over for symptoms
 - Minor impairment
- Moderate
 - Moderate impairment
- Severe
 - Excess of symptoms over baseline
 - Marked impairment

Understanding the root causes of ADHD

Potential Pyramid™



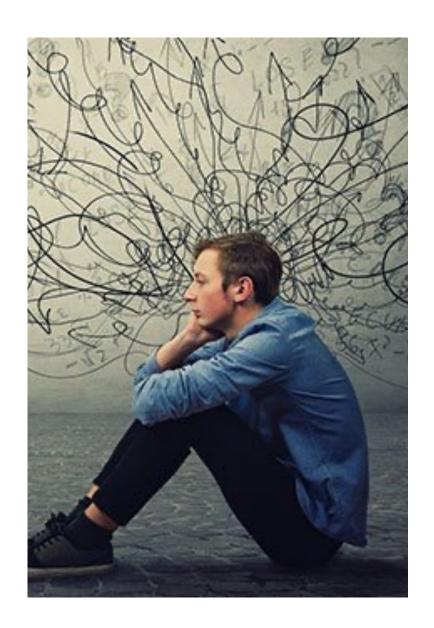
Root Causes of Cognitive Weaknesses

- Neurological Factors: Reduced maturation of processing speed, working memory, and attention, reduced brain volume, & increased slow brain waves
- Genetic Factors: Highly heritable, more frequent in males than females (especially hyperactive type)
- Environmental Factors: Low birth weight, lack of oxygen or physical birth trauma, environmental toxins, emotional trauma, digital media overuse



Cognitive Function and ADHD

- ADHD is a diagnosis of symptoms!
- It is imperative to determine the root cause(s).
- Research shows that 92% of cases of ADHD are caused by one or more deficits in cognitive function.
- The two areas that most commonly cause ADHD symptoms are short term memory and processing speed.
- You can have ADHD symptoms and not have ADHD.

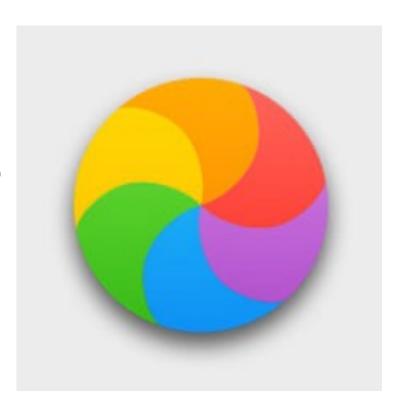


Processing Speed Issues vs. ADHD

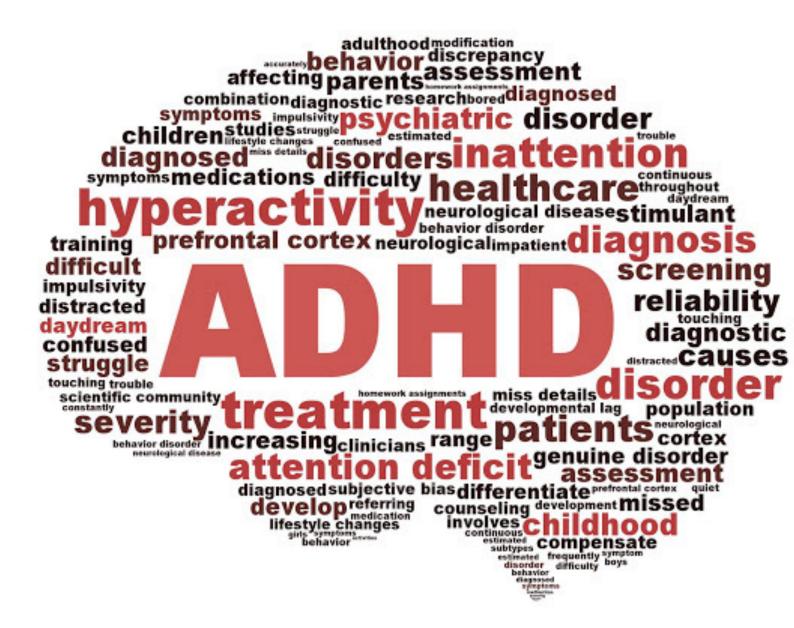
The supercomputer running on dial-up internet:

- Zones Out or Daydreams
- Locks up
- Things take longer than they should
- Compensatory measures to speed up the brain result in fidgeting or hyperactivity (slower the brain, busier the body)
- Misses information

Medications do not treat cognitive skills. To actually TREAT ADHD, must treat the cause, not the symptoms.



ADHD Symptoms Survey



"My child may have symptoms of ADHD... now what?"



Methods for Diagnosing ADHD

Two Methods for Diagnosing ADHD

Symptoms Based Pharmaceutical Model

- Most often done with a pediatrician
- Parent/Teacher surveys of observed symptoms
- If you have enough symptoms the result is a dx
- No evaluation of root causes or comorbidities
- High rate of misdiagnosis
- Focus is on symptom management usually through medication

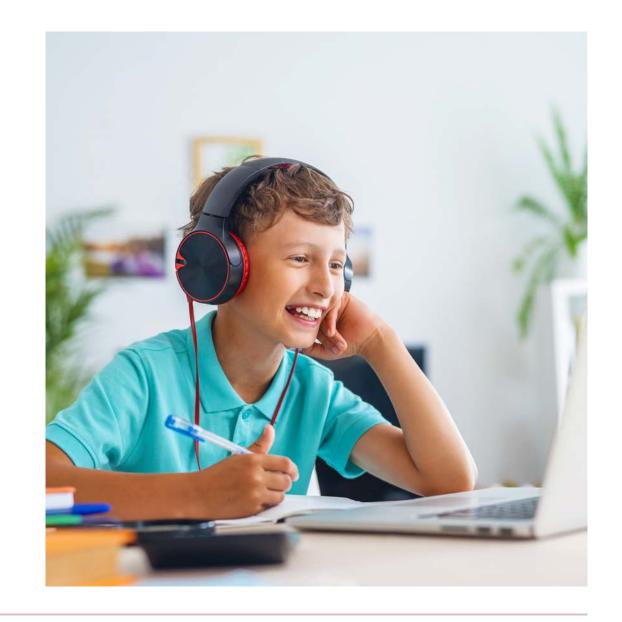
Assessment Based Neuropsychological Model

- Done with a licensed clinical or neuropsychologist
- Involves Parent Interview, student interview, and testing of cognitive function, academics in reading, writing, math, observed symptoms, psychosocial evaluation, and attention and focus tests
- Looks for the root causes and cooccurring disorders (i.e. dyslexia and ADHD or anxiety and auditory processing disorder)
- Comprehensive and high accuracy
- Focus is on treatment of the root causes and complete biopsychosocial treatment

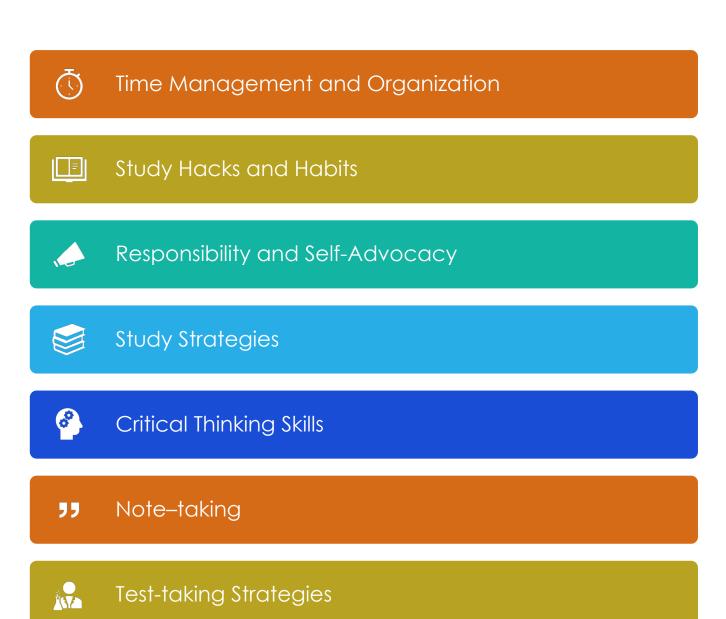
Holistic Treatment of ADHD

Cognitive Training

- Cognitive assessment to pinpoint specific cognitive strengths and weaknesses
- One-to-one intensive coaching that targets cognitive deficits
 - Works by stressing a weak area through mental exercise, encouraging the brain to build new neural networks
 - Neurons that fire together, wire together! (Hebb's Law)
 - Corrective measure that improves the primary underlying cause of ADHD: weak cognitive skills (Short-term memory, processing speed, and attention)
 - 70% of children on ADHD meds, come off meds within 6 months of therapy

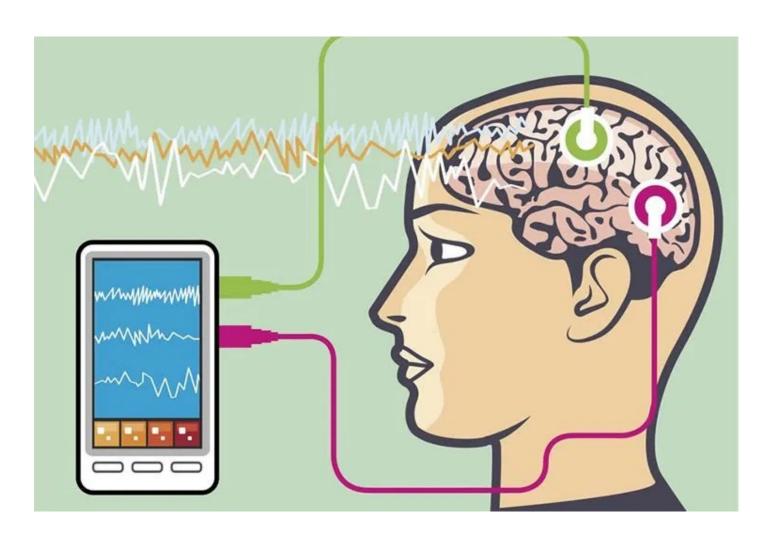


Study Skills and Executive Function Coaching



Neurofeedback

Electroencephalogram (EEG) biofeedback



Learning how to have more control over brain waves in order to control attention

Sensors attached to the head that provide feedback to a monitor

The client is asked to do a certain task (e.g. video game) that alters brain waves and sees their brain activity in real time

Over time, the client learns how to control their brain's responses to stimuli

Psychological Interventions

Psychotherapy (talk therapy, play therapy and art therapy)

- Learn and practice strategies to mitigate inattentiveness, hyperactivity, and impulsivity.
- Help increase coping with the emotional impacts of symptoms
- Learn how to challenge negative thinking and build self-esteem.

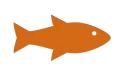
Parent Coaching

- Emotional and intervention support for parents
- Teaching specific discipline techniques that are proven to be effective in reducing behavior problems
- Learn how to communicate more effectively and increase familial coping



Supplements and Diet

There are many dietary and nutritional supplements* that may help with the management of ADHD.



Diet high in healthy fats such as coconut oil, flaxseed, avocado, fatty fish such as salmon, and olive oil.

• Supplementing with Omega 3's (fish oil).



Balanced meals and snacks

• Each meal or snack should contain healthy fat, complex carbohydrates, and protein

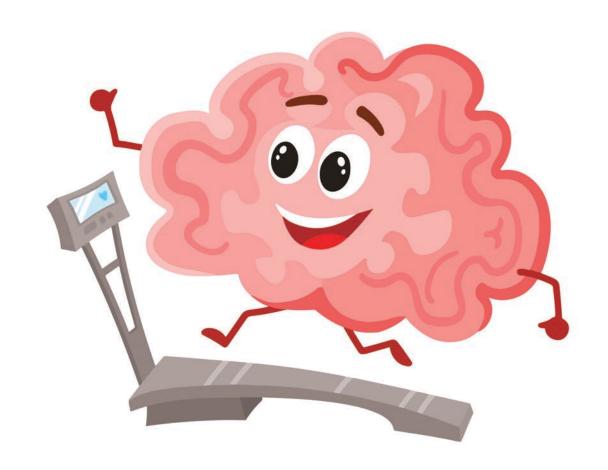


Limit or eliminate sugar, processed food, & neurotoxin consumption. Test for and eliminate gluten/grains if needed.

Exercise

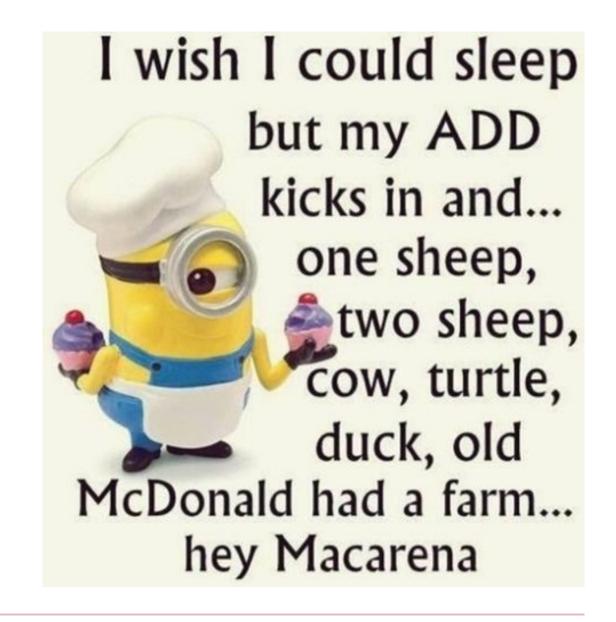
Regular exercise

- Five times a week for at least 30 minutes each time
- Targets the same chemicals that stimulant medication targets
- Focus on what the ADHD brain needs:
 - Structure
 - Need for Variety



Sleep

- Practice good sleep hygiene
 - Build in a daily bedtime routine
 - Create a relaxing bedtime environment
 - Cool temp
 - Dark
 - · Quiet or white noise
 - Limit caffeine and screen time, especially in the second half of the day



Medication: "No one was born with a Ritalin deficiency." -Dr. Pierre Brunschwig, M.D.

Should be considered as a **last resort** only after a comprehensive psychological evaluation and attempting all other biopsychosocial interventions. **Medication does not treat the root issues but rather manages symptoms.**

Can be addictive and are often abused. Significant short and long-term side effects.

Negative impacts: Stimulants Non-Stimulants Elevated <u>Personality</u> Digestive Appetite heart rate Fatigue Insomnia Dizziness Mood Swings and blood changes suppressant Issues pressure

Strategies for Learning



Set a focus timer for sustained attention to schoolwork. Hold tightly to work time and break time. Clearly communicate the timelines so children know what to expect and when a break is coming



Engage in technology-free activities during breaks



Get outside and engage in physical activity, sunshine, and fresh air



Utilize parental technology controls: block access to apps & social media



Set and stick to a routine bedtimes, wakeup times, mealtimes



Control sugar and processed food intake...ensure access to blood sugar balancing snacks and meals

Next Steps

Full Comprehensive Cognitive Assessment-

Non-diagnostic, but can answer if the student has indicators of ADHD so they can begin treatment

Psychoeducational Battery
- Full diagnostic
assessment



How The Nectar Group can help

- Psychoeducational assessments to diagnose or rule out ADHD.
- Cognitive assessments to pinpoint strengths and weaknesses and determine intervention.
- Assessment Review & Recommendations
- Cognitive Skills Training to strengthen key skills such as working memory, attention, and processing speed.
- Individual tutoring to fill academic gaps resulted from inattention and hyperactivity.
- Executive Function and Study Skills Coaching to improve skills such as self-advocacy, study skills, time management, and organization.
- One-to-one coaching for goal setting and future planning.
- Family integrative health & wellness coaching.
- Free consultations to determine best next steps.

Thank you so much for your time!



Feel free to contact us at:



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