



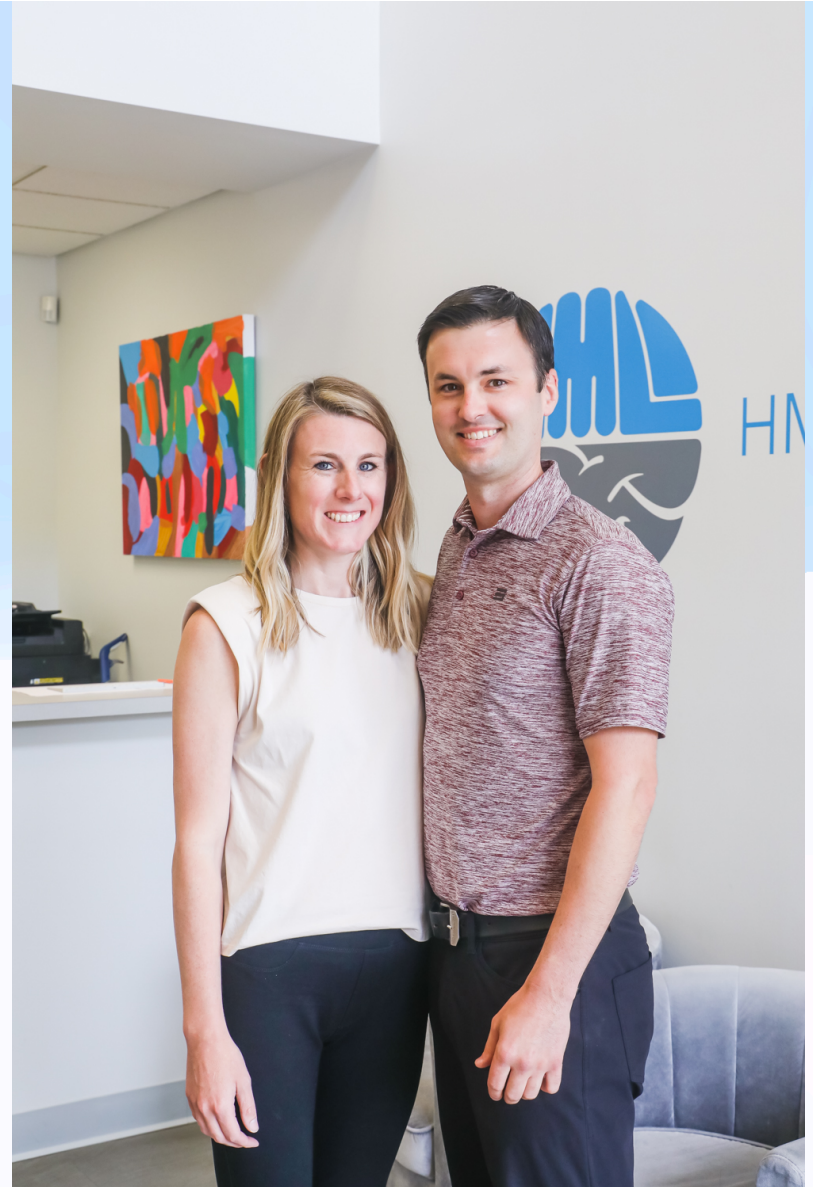
Exploring Functional Approaches to ADHD without Medication

Dr. Alexander Nelson MPE Homeschool Conference 2025



Dr Alex Nelson

- Interdisciplinary Association of Functional Neurology and Rehabilitation
- Fellow of Functional Neurology
- Fellow of Childhood Neurodevelopmental Disorders



What are we talking about today?

- ADHD What is it?
- How to Identify it
- What can be done at home about it.



Attention-deficit/hyperactivity disorder (ADHD) is one of the most common mental disorders affecting children. Symptoms of ADHD include inattention (not being able to keep focus), hyperactivity (excess movement that is not fitting to the setting) and impulsivity (hasty acts that occur in the moment without thought). ADHD is considered a chronic and debilitating disorder and is known to impact the individual in many aspects of their life including academic and professional achievements, interpersonal relationships, and daily functioning (Harpin, 2005). ADHD can lead to poor self-esteem and social function in children when not appropriately treated (Harpin et al., 2016). Adults with ADHD may experience poor self-worth, sensitivity towards criticism, and increased self-criticism possibly stemming from higher levels of criticism throughout life (Beaton, et al., 2022). Of note, ADHD presentation and assessment in adults differs; this page focuses on children.

An estimated 8.4% of children and 2.5% of adults have ADHD (Danielson, 2018; Simon, et al., 2009). ADHD is often first identified in school-aged children when it leads to disruption in the classroom or problems with schoolwork. It is more commonly diagnosed among boys than girls given differences in how the symptoms present. However, this does not mean that boys are more likely to have ADHD. Boys tend to present with hyperactivity and other externalizing symptoms whereas girls tend to have inactivity.

nimh.nih.gov

ADHD is a developmental disorder characterized by an ongoing pattern of one or more of the following types of symptoms:

- Inattention, such as having difficulty paying attention, keeping on task, or staying organized
- Hyperactivity, such as often moving around (including during inappropriate times), feeling restless, or talking excessively
- Impulsivity, such as interrupting, intruding on others, or having trouble waiting one's turn



www.mayoclinic.org

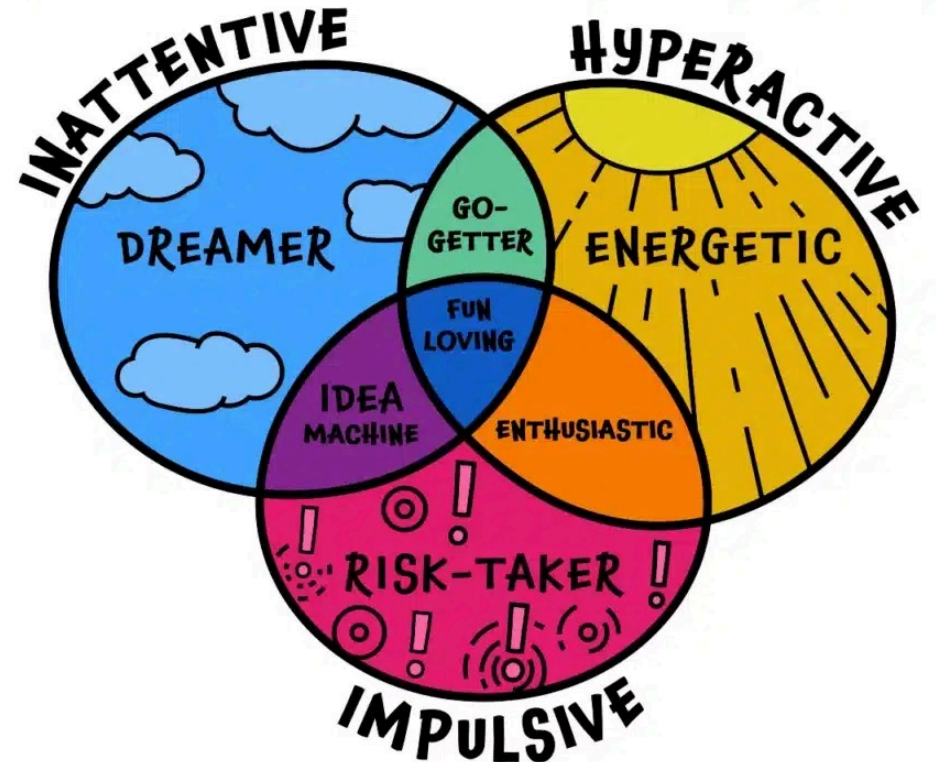
Adult attention-deficit/hyperactivity disorder (ADHD) is a mental health disorder that includes a combination of persistent problems, such as difficulty paying attention, hyperactivity and impulsive behavior. Adult ADHD can lead to unstable relationships, poor work or school performance, low self-esteem, and other problems.

Though it's called adult ADHD, symptoms start in early childhood and continue into adulthood. In some cases, ADHD is not recognized or diagnosed until the person is an adult. Adult ADHD symptoms may not be

ADHD

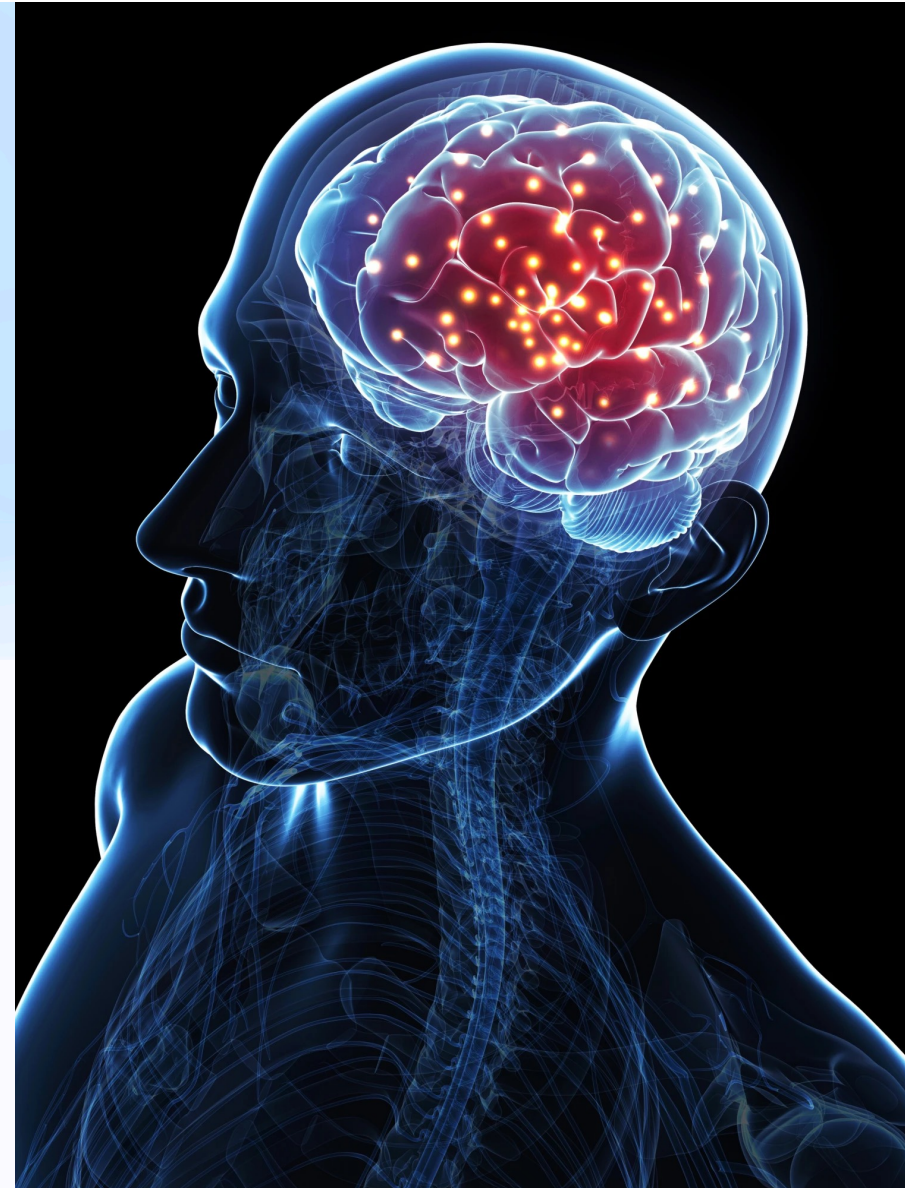
- ADHD
 - Type 1
 - Type 2
 - Type 3

3 TYPES OF ADHD



What is ADHD in the brain? What is happening?

- Our brain develops:
 - Bottom up
 - Inside out
 - Back to front
 - Left to right





NEURODEVELOPMENT 101

Cognitive/Academic
Social
Emotional

Fine Motor
Hands - Eyes - Mouth

Sensory Processing
Vagus
Vestibular
Proprioception

Gross motor
Core Strength

Primitive Reflexes



Sensory Processing



Reflex Retention

LEFT BRAIN

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RIGHT BRAIN

Type I

The gas pedal of our brain:

Positive emotions
Approach behavior
Small muscle (fine motor) control
Light touch processing
High frequency sound processing
Word reading(phonics and decoding)
Math calculations (arithmetic)
Picks out the details of situations
Deliberate and practical with people
Likes routine, sameness, familiarity
Turns on the immune system
Linear, logical thinking
IQ (intelligence quotient)
Verbal communication

When there is not enough LEFT sided function:

Dyslexia ▪ ADHD(inattentive) ▪ Learning disabilities
Poor spelling and letter recognition.
Poor auditory processing ▪ Poor fine motor control (drawing,
hand writing, detailed tasking.) ▪ Task avoidance with academics
Gets Sick often. ▪ Can be shy ▪ Poor self esteem ▪ Poor motivation ▪ And more...

Type III

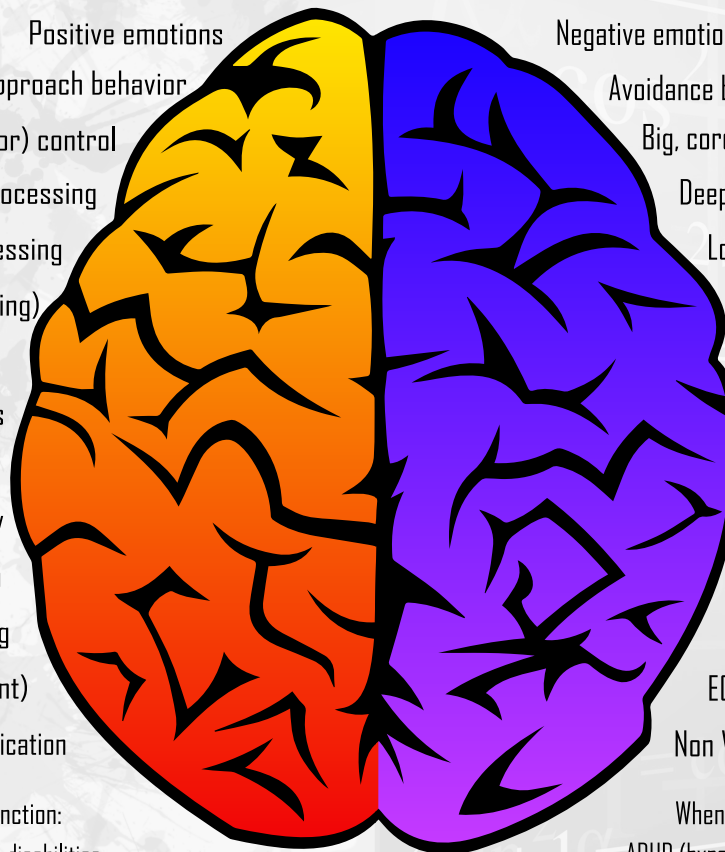
The brake pedal of our brain:

Negative emotions
Avoidance behavior
Big, core (gross motor) control
Deep touch processing
Low frequency sound processing
Reading comprehension
Math reasoning
Understands the "big picture"
Has intuition with people
Likes newness, novelty
Turns off the immune system
Creative thinking
EQ (emotional quotient)
Non Verbal Communication

When there is not enough RIGHT sided function:

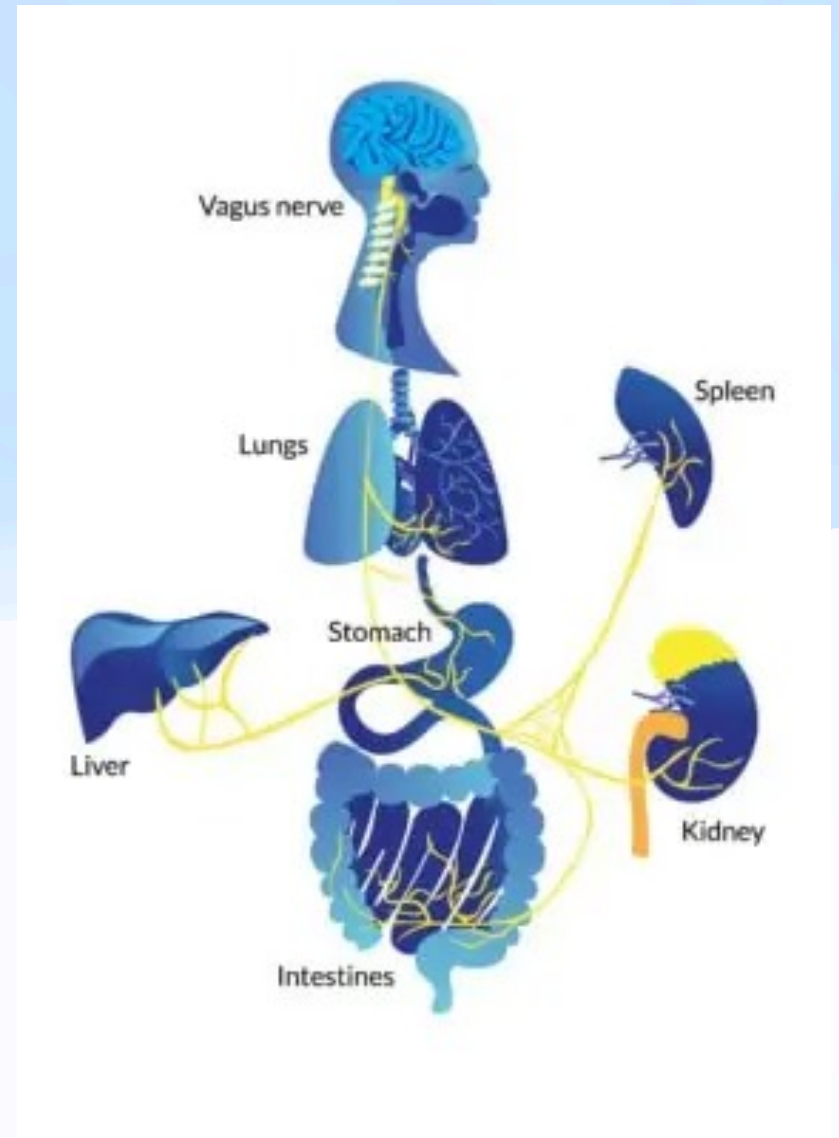
ADHD (hyperactivity) ▪ Mood instability (highs and lows)
Inappropriate social behavior ▪ Poor reading comprehension
Inability to focus in school ▪ Poor muscle tone
Awkward/clumsy ▪ Misses the "big picture" ▪ Asthma and/or allergies
Autoimmunity (immune system over active) ▪ "Space Invader" ▪ And more...

Type II



Autonomic Nervous system

- Two parts
 - Sympathetic
 - Parasympathetic
- Vagus nerve
 - Controls all organs
 - Foundation to feeling the inside of your body
 - Foundation to emotional and social development



Vagal System



**Autonomic Nervous System
through a Polyvagal Lens**

Neural Platforms of the ANS

VENTRAL VAGAL (Freedom, Friends, Forage)

(SOCIAL ENGAGEMENT SYSTEM)

Signaling system for motion, emotion
and communication

SYMPATHETIC (Fight or Flight)

(AGGRESSIVE DEFENSE SYSTEM)

Mobilization system for Fight or Flight behaviors

DORSAL VAGAL (Freeze or Fawn)

(PASSIVE DEFENSE SYSTEM)

Immobilization system for conservation withdrawal



Vagus at Home

- 1:2 breathing
- Exercise
- Vigorous Gargling
- Vibration at top of sternum
- VNS
 - www.hoolest.com

A TRUE STRESS-FREE EXPERIENCE



NO MESSY GEL

No cleanup or risk of shock after gel dries out.



NO FRUSTRATING BLUETOOTH

No long setup times. Use VeRelief in the exact moment you need.

NO ATTENTION

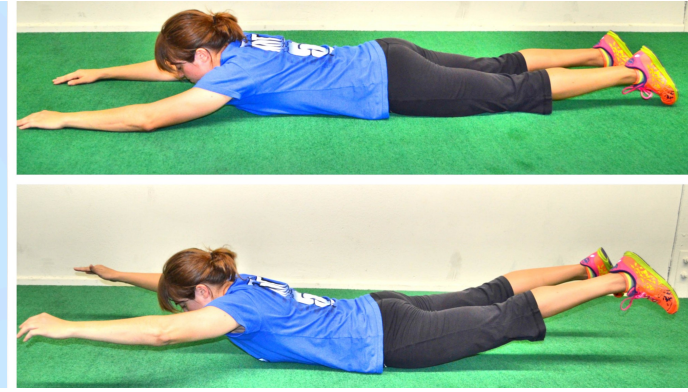
Unlike other devices that draw attention in public, VeRelief is discreet to use in public.



Gross Motor Skills

Building muscle tone

- <https://www.youtube.com/watch?v=JgkL4kyD9vA>
- <https://www.youtube.com/watch?v=q4TMFIIm9Llc>
- <https://www.youtube.com/watch?v=k9w2LJAZ1iY>

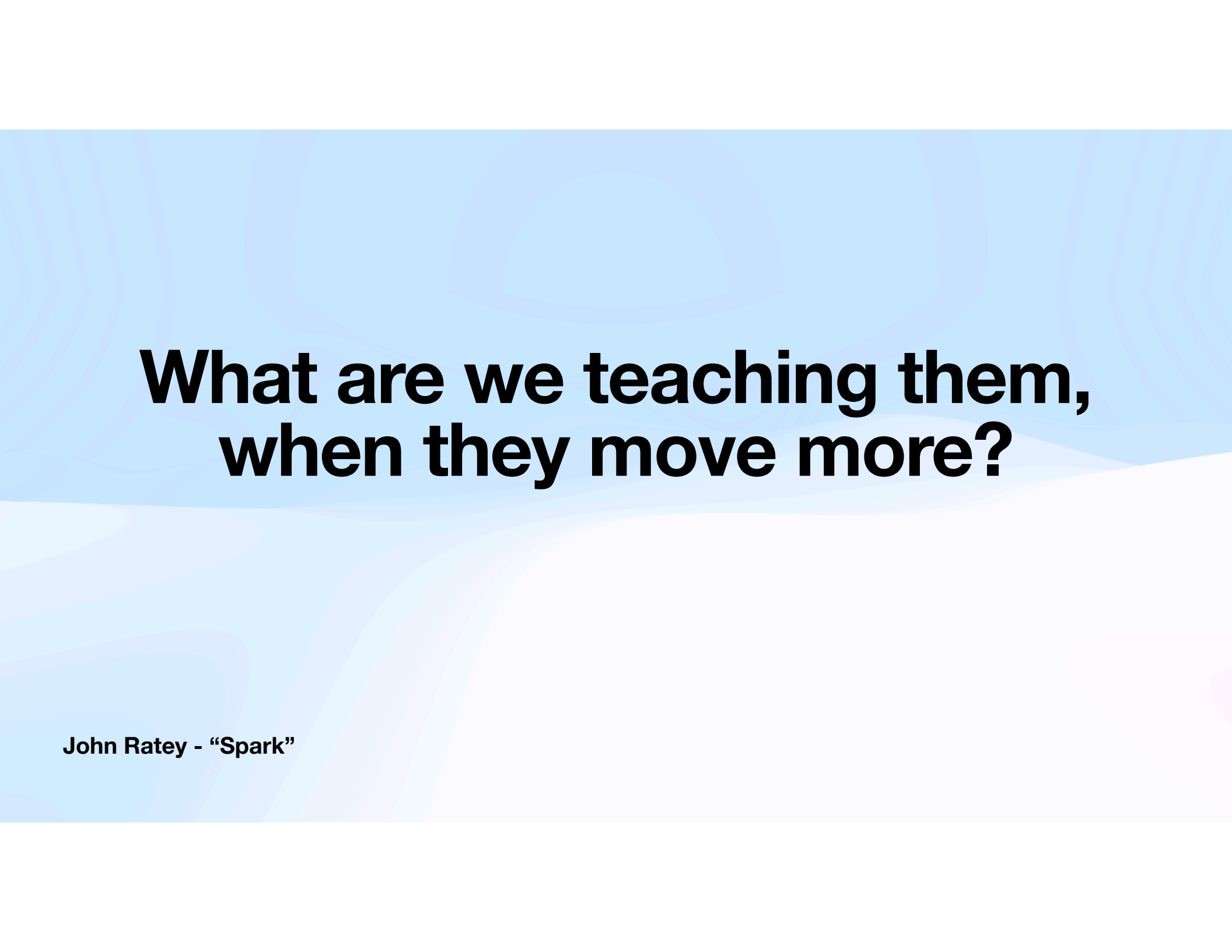


Simple Bridge Exercise Progressions



Basic Side Bridge Exercise Progressions





**What are we teaching them,
when they move more?**

John Ratey - “Spark”

Sensory Processing

- RBW: Look into blue, indigo, violet glasses. Plug right ear
- LBW: Look into yellow, orange, red glasses. Plug left ear.
- Play it safe, go Green.
- Smells
- Tactile input



Proprioception

The brain wants to know where the body is

- 1 legged stand
 - Eyes open
 - Eyes closed
 - Firm surface
 - Perturbed surface



Diet and Lifestyle

Practical applications

- Organic! Look for 3rd party tested labels and USDA. Organic means little to no:
 - Artificial colors and dyes, Processing, Excitotoxins, GMOs
- There is organic candy...
- Then move to reduced/no sugar, gluten and dairy
- Water, ultra filtered!
- EMFs: phones, WiFi, Bluetooth

<https://organicconsumers.org//>

<https://www.ewg.org/>

<https://www.gmwatch.org/en/>

<https://purewaterfreedom.com/>

<https://crystalquest.com/>

<https://lessemf.com/>

Diet and Lifestyle

Screens

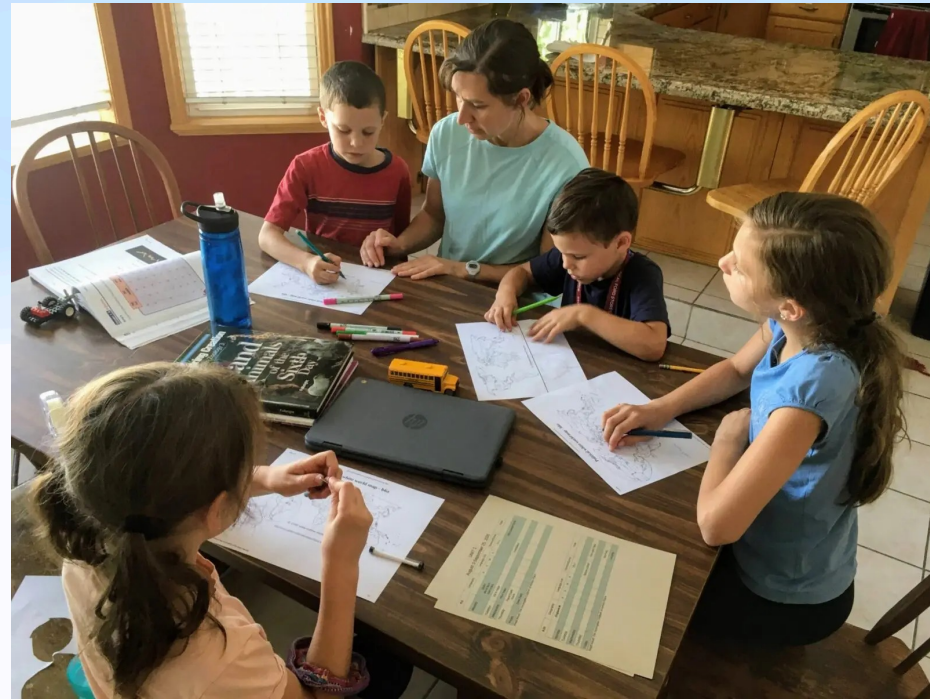


- Ok to use to learn
- Physical books are what we are designed for, however.
- Blue light excitation
- Meant to be Addictive
- Dysregulates dopamine
- Access for God knows what.
- Not to be used before school work
- Not to be used minimum 1 hour before bed
- Keep it to 1-2 hours per day of recreation screen time, or LESS.
- It gets taken away or earned
- You own the device
- Buy your kid a stereo

Environment

Neurologically, why is this important?

- Defined area of home
 - Or defined area at that time, can change
 - Clean up
- Away from working parent(s)
- Quiet or low volume gospel or music in 432Hz tuned
 - Ear buds?
- ***Must foster love of learning***



Set Expectations

What are the rules?

Have to listen, have to try

- Set time frame for work to be done
 - Does not need to be challenging timeline
- What if work is not finished?
- Schedule
- Structure



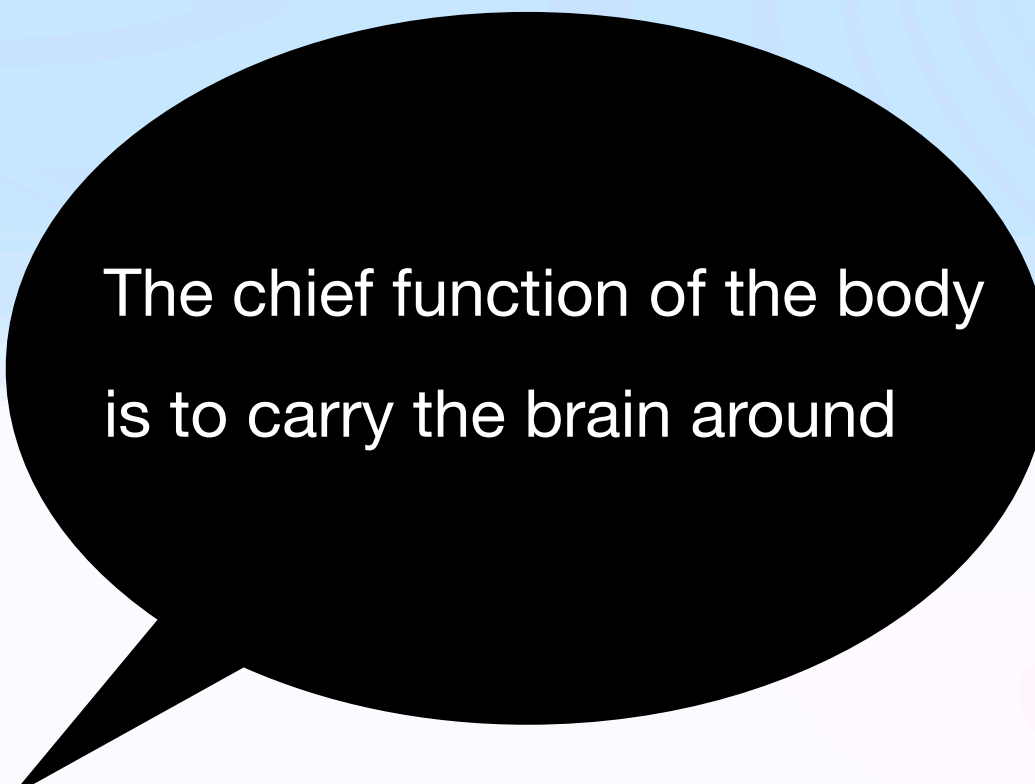
Foster Learning

- Does their school day start with scripture?
 - www.backtothebible.org
- What are your child's strengths?
 - How do you leverage those in school?
- What are their weaknesses?
 - Just work your way through?
 - Find ways to strengthen them?
- Older children leading the littles

Curriculum Structure

Thinking outside the box

- Small breakfast
- Physical activity
 - Heart rate up
- Snack
- School Work
 - Movement break (chores?)
- School Work
- Lunch
- School Work?



The chief function of the body
is to carry the brain around

Thomas Edison



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