



IS YOUR BRAIN BALANCED?

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Growing a healthier community, one family at a time!

UNDERSTANDING HOW THE BRAIN DEVELOPS

- Develops back to front
- Starts with neurons (single brain cells) that learn how to connect to each other by firing together
- Neurons that fire together, wire together
- Need frequency and intensity to grow
 - More frequent and more intense = more growth
 - Romanian orphans

We don't grow out of things, we grow **AROUND** them!

THE INFANT BRAIN

- “Bottom” of the brain, sets the stage for development over time
 - Utilize about 25% at birth (primarily the brainstem), increase to 80% by age 3 and 90% by age 5
 - In the first year, the cerebellum triples in size = rapid development of motor skills
 - Use this time to develop the HPA axis and balance the vagus nerve
 - Very important for setting the stage for health as a child develops
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STARTING OFF RIGHT (BIRTH TO AGE 2)

- The Right side of the brain develops first
 - Connects us a sense of “being”
 - Responsible for empathy, intuition, imagination and creativity
 - Big picture (dreaming, wondering, connecting)
 - Big muscle movements
 - The abstract
 - Thrives with
 - Unstructured play, doodling, curiosity, imagination, wonder
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THE LEFT OVERS (AGE 2-7)

- Serves the right brain
 - Small picture tasks, smaller focused muscle activity
 - Focuses on details and functionality
 - Dig into language, mathematics, literacy, analysis and time
 - Logical, calculating, planning, and keeps us engaged in the world as it is (not as we imagine it to be)
 - Concerned with the product not the process
 - The literal
 - Highly sensitive to today's typical "culture"
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IT'S A BIG JOB – DIVISION OF LABOR

RIGHT BRAIN

- Big picture
- Non-verbal communication and EQ
- Large muscle control
- Comprehension
- Math reasoning
- Interpreting information
- Unconscious action

LEFT BRAIN

- Small picture
 - Verbal communication and IQ
 - Small muscle control
 - Word reading
 - Math calculations
 - Processing information
 - Conscious action
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IT'S A BIG JOB – DIVISION OF LABOR CONT

RIGHT BRAIN

- Negative emotions
- Low frequency sounds
- High frequency light
- Interpreting auditory input
- Understanding the abstract
- Cautious and safe actions
- Likes newness

LEFT BRAIN

- Positive emotions
 - High frequency sounds
 - Low frequency light
 - Receiving auditory input
 - Linear and logical thinking
 - Curious and impulsive actions
 - Likes routine and sameness
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IT'S A BIG JOB – DIVISION OF LABOR CONT

RIGHT BRAIN

- Suppresses immunity
- Spatial awareness
- Sense of taste and smell
- Social Skills
- Digestion

LEFT BRAIN

- Activates immunity
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FUNCTIONAL DISCONNECTION

- Not an injury, its developmental weakness (common in ASD, ADHD, Dyslexia, OCD, etc)
 - The two sides of the brain are not balanced in communication
 - Poor communication = under-connection = poor coordination in space and time
 - Manifests in a TON of ways
 - Must correct the imbalance, not medicate the symptoms
 - The body and brain must grow together
 - Parent's **MUST** be involved in the solution
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HOW DID THIS HAPPEN?

- Sedentary Lifestyle
 - Poor diet/Inadequate nutrition
 - Absentee parenting
 - TV/Computer games
 - Pregnancy and birth trauma
 - Stressful lifestyles
 - Environmental toxins
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SIGNS OF A RIGHT BRAIN WEAKNESS

MOTOR

- Poor coordination and gross motor skills
- Low muscle tone
- Clumsiness or odd posture
- Excessive fidgeting
- Poor eye contact
- Toe walking (current or previous)
- Repetitive motions (spinning, flapping, etc)

SENSORY

- Poor spatial orientation
- Sensitivity to sound
- Confusion when asked to point to body parts
- Poor balance
- High pain threshold
- Likes to spin/swing/be in motion
- Compulsively touches things
- Doesn't like to be touched/certain clothes/textures
- Doesn't notices strong smells
- Avoids food because of how they look/Picky eater

THINK ADD/ADHD, ASD, ASPERGERS, TOURETTE'S, OCD, ODD, PDD

SIGNS OF A RIGHT BRAIN WEAKNESS

EMOTIONAL

- Spontaneously cries/laughs
- Sudden outbursts of anger/fear
- Worries or has lots of phobias
- Holds on to past “hurts”
- Experiences panic or anxiety attacks
- Face and body lack expression
- Lacks empathy/feelings for others
- Too uptight
- Risk taker

BEHAVIORAL

- Logical thinker, misses the gist of a story
- Lacks social tact/antisocial behaviors
- Gets stuck in a set behavior and can't let it go
- Disorganized
- Poor time management
- Doesn't pay attention
- Hyperactive/Impulsive
- Obsessive thoughts/behaviors
- Argues often and is uncooperative
- Mimics sounds/words without understanding them
- Hard to form friendships

THINK ADD/ADHD, ASD, ASPERGERS, TOURETTE'S, OCD, ODD, PDD

SIGNS OF A RIGHT BRAIN WEAKNESS

MISCELLANIOUS

- Lots of allergies
- Rarely gets colds
- Has eczema or asthma
- Keratitis on the back of the arms
- Craves foods – dairy and wheat
- Bowel problems
- Body odor
- Appears bloated after meals
- Sweats a lot
- Hands are always moist/clammy
- **RETAINED PRIMITIVE REFLEXES**

THINK ADD/ADHD, ASD, ASPERGERS, TOURETTE'S, OCD, ODD, PDD

SIGNS OF A LEFT BRAIN WEAKNESS

MOTOR

- Poor/slow handwriting
- Immature hand grip
- Overly large writing for age
- Difficulty with small motor like buttoning
- Stumbles over words, esp. when fatigued
- Delayed crawling/standing/walking
- Difficulty planning and coordinating body movements

SENSORY

- Normal to above average sense of smell
- Likes to be hugged/held
- Auditory processing issues
- Doesn't seem to hear well, although testing is normal
- Delay in speaking attributed to ear infections
- Gets motion sick

THINK DYSLEXIA, LEARNING DISABILITIES, PROCESSING AND LANGUAGE DISORDERS

SIGNS OF A LEFT BRAIN WEAKNESS

EMOTIONAL

- Overly affectionate
- Frequently moody
- Loves new things, but bored easily
- Lacks motivation
- Withdrawn and shy
- Excessively cautious or negative
- Socially withdrawn
- Cries easily
- Gets embarrassed easily

BEHAVIORAL

- Procrastinates
- Shy
- Has poor self esteem
- Hates homework
- Is not great at following routine
- Can't follow multistep directions
- Jumps to conclusions
- Doesn't like sleep overs

THINK DYSLEXIA, LEARNING DISABILITIES, PROCESSING AND LANGUAGE DISORDERS

SIGNS OF A LEFT BRAIN WEAKNESS

MISCELLANIOUS

- Chronic ear infections
- Lots of antibiotics in the past
- Tubes in the ears
- Catches colds frequently
- Bedwetting
- **RETAINED PRIMITIVE REFLEXES**

THINK ADD/ADHD, ASD, ASPERGERS, TOURETTE'S, OCD, ODD, PDD

WHY I CARE

- 3 things the brain needs:
 - Glucose
 - Oxygen
 - Stimulation (movement!)
 - Asymmetrical cortical output = altered perception/interpretation of the world
 - Chiropractic has a direct effect on the brain
 - Adjustments balance input from the body to the brain and improve delivery of messages from the brain to the body
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BALANCING THE TWO SIDES OF THE BRAIN

- Don't enhance what is already good!
 - Focus on catching up the weak side
 - Know that you will meet resistance
 - Frequency > Intensity, shoot for at least 4 times per week
 - Requires at least 3 but probably closer to 6 months to make a significant impact long term
 - Get some help!
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PUMP UP THE BRAIN

STIMULATING THE RIGHT

- Drawing and coloring
 - Looking at pictures
 - Smell under right nostril
 - Spinning the body to the left (with arms out, hands clasped, focus on thumbs)
 - Low frequency, relaxing music in left ear (classical, guitar, bass, drums)
 - Building based on imagination, not instructions
 - New and different experiences
 - Tell stories and ask them to repeat the moral, NOT the details
 - Avoid things they are obsessed with
 - Switch up your routine
 - Shape based games – Jenga, Perfection, etc
 - Read imaginary/fantasy books (just not over and over)
 - Abstract art/painting
 - Deep pressure (esp on the left side)
 - Pretend play
 - Skip screen time and get outside!
 - MOTOR, MOTOR, MOTOR, these are not the kids to let sit and do tasks for hours, but they will want to!
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PUMP UP THE BRAIN

STIMULATING THE LEFT

- Mathematics
 - Smell under left nostril
 - Music in right ear
 - Music with a strong beat
 - Talking
 - Spinning to the right (arms extended, hands clasped, focus on thumbs)
 - Eye movement therapy
 - Light touch on the right side of the body
 - Highly monitored screen time (30 min max/day)
 - Encourage routine
 - Build/create by following instructions
 - Memory and learning games
 - Chess, checkers, analytical games
 - Crosswords, word searches, fact/learning books
 - Paint by numbers, Sudoku, Math Games
 - High pitched music (violin and flute)
 - Focus building activities that are NOT screen based like art projects, playdough, drawing
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NEXT STEPS

- Tally which symptoms you/your child displays to determine the side of weakness
 - Start with the simple changes to start strengthening the weak side
 - Stay tuned for more videos to dig deeper into finding and correcting primitive reflexes
 - If you get stuck or feel too overwhelmed, see if we can help!
 - Read more about who we've been able to help at <https://www.ballardfamilychiro.com/videos>
 - Email us info@ballardfamilychiro.com
 - Call or text us (217) 347-5010
 - Find us on Facebook, [facebook.com/ballardfamilychiro](https://www.facebook.com/ballardfamilychiro)
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