Benefits of:

Hands-and-Knees Creeping



- Balance
- Visual Motor Skills & Convergence
- Left/Right Hemisphere Communication
- Impulse Control
- Sensory Integration
- Attention and Focus
- Reading Comprehension
- Story Retelling/Recounting an Event

Vestibular Stimulation



- Visual Motor Skills
- Balance
- Body Awareness (Proprioception)
- Memory

Brachiation



- Increased Oxygen to the Brain
- Improved Breathing
- Decrease in Respiratory Illness
- Better Definition of the Laterality of the Brain
- Increased Hand/Arm Strength
- Improved Visual Motor Skills
- Improved Fine Motor Dexterity
- Improved Hand-Eye Coordination

The Developmental Sequence

Brain Stage	Visual	Auditory	Tactile	Mobile	Language	Manual / Hand Function
Sophisticated Cortex 3-8 years	Visual Lateralization Reading Comprehension	Auditory Lateralization Complete Language understanding	Hand Lateralization Tactile identification of objects	Skilled Leg movement Leg Lateralization	Complete vocabulary, proper sentence structure	Hand Lateralization for writing
Primitive Cortex 18-72 months	Identification of symbols and letters	Understanding of 2000 words and simple sentences	Conceptual understanding of objects	Walking and running in complete cross pattern	2000 words of language and short sentences	Bimanual function with one hand in a skilled role
Early Cortex 9-36 months	Differentiation of similar but unlike visual symbols	Understanding 10-25 words and two word couplets	Tactile differentiation of similar but unlike objects	Walking with arms freed from primary balance role	10-25 words of language and two word couplets	Cortical opposition bilaterally and simultaneously
Initial Cortex 6-24 months	Convergence of Vision, Simple depth perception	Understanding of two words of speech	Awareness of 3rd dimension in objects that appear flat	Walking with arms in balance role at or above shoulders	Two word phrases, spontaneous and meaningful	Cortical opposition in either hand
Midcerebrum Midbrain Level 3-14 months	Appreciation of fine detail Track vertically Unified ocular movement	Meaningful sound appreciation	Proprioception Gnostic sensation Position Sense	Hands/Knees Creeping culminating in cross pattern Balance	Creation of meaningful sounds. Babbling	Prehensile grasp Supination Pronation
Pons 1-5 months	Outline Perception Track Horizontally	Vital response to threatening Sounds	Perception of vital sensation Heat/Cold Pain Hunger	Crawling in the prone position culminating in a cross pattern	Vital crying in response to threats to life	Vital Release
Medulla & Cord Birth-2 months	Pupillary light reflex	Startle reflex	Tactile reflexes Ex. Rooting Babinski Galant	Movement of arms and legs without bodily movement	Birth Cry and crying	Grasp Reflex

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NeuroDevelopmental Movement

Addressing Gaps in the Developmental Sequence

at Carolinas Biofeedback Clinic

What Is it?

NeuroDevelopmental Movement (NDM) is a movement and sensory based, natural, drug-free approach to addressing behavioral, social, psychological, academic and physical challenges in children and teens. Techniques leverage the brain's neuroplasticity and for many, NDM is the missing piece to a complicated neurological puzzle.

Why Do It?



Children can have a wide range of highly challenging brain dysfunction. Some children have a patchy group of challenges that often stand out against a pattern of largely normal NeuroDevelopmental skills, such as poor social skills, behavioral challenges, impulsivity or inattention. They may have good intelligence, while behavior can be extreme and unmanageable. Some children have pervasive NeuroDevelopmental challenges that impact all areas of their functioning, and in more severe cases, children may be globally delayed or brain injured. By replicating the natural order of movements for healthy brain development, NDM prompts the brain to integrate functions that are currently unintegrated, resulting in improvements to social, behavioral, psychological, academic and physical challenges.

Many families have tried intervention strategies, such as behavior modification plans, medications, tutors and various therapies to address their child's struggles, only to find the progress ineffective or incomplete. Because NDM addresses these challenges at the foundational levels of brain function and development, it could be the missing piece that families have been searching for.

How does it work?



NDM provides the client with one of the most comprehensive, effective and natural approaches to some of the most challenging academic and behavioral issues. NDM addresses these issues by evaluating skills at seven developmental levels, and considers reflexes, movement, and sensory development. If there are gaps at any level, work will target them to enhance functionality and help the brain complete the required developmental task. The brain literally constructs the missing circuitry to support new healthy functionality.

You will be given custom-designed movements and simple activities to practice daily in order to replicate and replace any missing stages. Individualized programs will include a combination of reflex, motor, and sensory activities. The program is done from home for 30-60 minutes each day in the context of good family dynamic and support.

You are a candidate if you struggle with:

- Attention deficits
- Impulsivity
- Poor social skills
- Emotional dysregulation
- Behavioral struggles
- Sensory Sensitivities
- Academic difficulties
- Developmental delays
- Brain injury

The NDM Program

- **3-hr Initial Assessment**
- **Individualized protocol**
- **Reassessments every 2-3 months**
- **Ongoing supervision and support via phone, email or zoom for the duration of the program**
- **The average time frame is 18-24 months, depending on program consistency and severity of challenges**

How do I get started?

Visit: cbfclinic.com/NDM to book a free phone consult

Or contact us:

sandy@cbfclinic.com
www.cbfclinic.com/NDM
888-317-5605 ext 701

Carolinas Biofeedback Clinic