THE ULTIMATE CHEAT SHEET

PRIMITIVE REFLEXES CHEAT SHEET

A QUICK REFERENCE OF PRIMITIVE REFLEX DEVELOPMENT AND INHIBITION

myCHILDwillTHRIVE
A Path to Recovery from Neurodevelopmental Disorders
## Primitive Reflexes Cheat Sheet

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<th>Reflex Name</th>
<th>Description</th>
<th>Age Develops</th>
<th>Age Inhibited</th>
<th>Signs and Symptoms of Retention</th>
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</table>
| Moro Reflex                  | - Considered the "fight or flight" response - activation of the sympathetic nervous system  
- Triggered by sudden unexpected occurrence of any kind  
- Arms and legs move outwards with quick inhalation, then freeze momentarily and then arms and legs tuck back in and the child exhales  
- Accompanied by a possible outburst of cries                                                                 | Begins to develop 9 weeks in utero | 2-4 months of life | - Hypersensitive/reactive  
- Poor impulse control  
- Vestibular related problems such as motion sickness, poor coordination (noticeable in ball games)  
- Physically timid  
- Oculomotor and visual perception problems  
- Poor pupillary control (sensitivity to light) likely caused by adrenal fatigue  
- Poor auditory discrimination  
- Dislike of change or surprise |
| Palmar Reflex                | - Light touch or pressure in the palm of the hand will cause the fingers to close                                                                                                                         | Begins to develop 11 weeks in utero | 2-3 months of life | - Poor manual dexterity/fine motor skills  
- Poor writing skills (messy writing or pressing too hard)  
- Speech difficulties (hand and mouth relationship via the Babkin response) |
| Asymmetrical Tonic Neck Reflex (ATNR) | - Movement of baby's head to one side will result in extension of the arm and leg to the side that the head is turned and bending of the limbs on the other side of the body  
- ATNR assists in a vaginal birth                                                                                                                      | Begins to develop 18 weeks in utero | Approx. 6 months of life | - Balance may be affected as a result of head movement to either side  
- Homolateral, instead of normal cross-lateral movements when walking, marching, skipping etc.  
- Difficulty crossing the mid-line  
- Poor ocular pursuit movements (eye tracking)  
- Difficulties with hand eye coordination  
- Poor handwriting and poor expression of ideas on paper |
| Rooting Reflex (Grasp Reflex) | - Searching, sucking and swallowing reflex  
- Light touch of the cheek or stimulation of the edge of the mouth will cause the baby to turn the head toward the stimulus and open the mouth in preparation for sucking                                                                 | Begins to develop 24-28 weeks in utero | 3-4 months of life | - Hypersensitivity around lips and mouth  
- Tongue may remain too far forward in the mouth (makes swallowing and chewing of certain foods difficult)  
- Speech and articulation problems  
- Poor manual dexterity (Babkin response) |
| Spinal Galant Reflex         | - Assists in the birthing process  
- While the child in in the prone position, stimulation of the back on one side of the spine will result in hip flexion (rotation) to 45 degrees towards the side of the stimulus                                                                 | Begins to develop 20 weeks in utero | 3-9 months of life | - Fidgeting  
- Bedwetting  
- Poor concentration  
- Poor short term memory  
- Unilateral or bilateral postural issues |
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| Tonic Labyrinthine Reflex (TLR)  | ● Two parts to this reflex: flexion (forward) and extension (backwards)  
● Basis for head management and postural stability using major muscle groups  
● Reflex is elicited by either moving the head forward (flexion) or backwards (extension), either above or below the spine  
● TLR exerts a tonic influence on the distribution of muscle tone throughout the body - helping the baby “straighten out” from the flexed position in the womb  
● Balance, muscle tone (balance between flexor and extensor muscles) and proprioception are all trained during this process | Flexion: Begins to develop in utero  
Extension: Present at birth | Flexion: Approx. 4 months of life  
Extension: Up to 3 years old | ● Poor posture - stoop (Flexion) walk on toes (Extension)  
● Hypotonus - weak muscle tone (Flexion), stiff jerky movements (Extension)  
● Vestibular problems (poor sense of balance, motion sickness) - (Flexion and Extension)  
● Oculomotor dysfunctions - visual-perceptual difficulties and spacial perception problems (Flexion and Extension)  
● Poor sequencing (Flexion and Extension)  
● Dislike of sporting activities (Flexion)  
● Poor sense of time (Flexion)  
● Poor organizational skills (Extension) |
| Symmetrical Tonic Neck Reflex (STNR)* | ● Two parts to this reflex: flexion (forward) and extension (backwards)  
● When child is prone resting on all four limbs, flexion of the head causes the arms to bend and the legs to extend  
● Head extension, on the other hand, causes the legs to flex and the arms to straighten.  
● Helps the child to defy gravity by getting up off the floor onto hands and knees from the prone position  
● Helps to inhibit the TLR and forms the bridge to the next stage of development | Both flexion and extension emerges 6-9 months of life | Both flexion and extension 9-11 months of life | ● Poor posture  
● Tendency to “slump” when sitting especially at desk/table  
● Simian (ape like) walk  
● Poor hand-eye coordination such as copying from the board  
● Inability to sit still and concentrate |
| Landau Reflex* | ● Helps to inhibit the TLR and forms the bridge to the next stage of development  
● Engages the extensor tone throughout the body in the prone position if the baby is suspended in the air with support under the stomach  
● To assist with posture development | Emerges 4-5 months of life | 3.5 years of life | ● Affects the development of balance and muscle tone in rapidly changing conditions  
● Runs with stiff awkward movement  
● Find hopping, skipping and jumping difficult |

*Considered a “bridge” reflex between primitive and postural

References:
1. [Disconnected Kids, Dr. Robert Melillo, Penguin Group Inc, 2009](http://example.com)
2. [Reflexes, Learning and Behaviour, A Window Into the Child’s Mind, Sally Goddard, Fern Ridge Press, 2005](http://example.com)