

Integrating Primitive Reflexes Can Change Your Child's Life

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Have you ever heard of primitive or infant reflexes?? Do you know what they are how they impact your child's development? Let me shed some light on these essential developmental reflexes.

How I was Introduced to Primitive Reflexes

When I was a new orthopedic physiotherapist and first-time mom, I knew that primitive reflexes existed, and that babies were supposed to show certain patterns of movement in infancy. But, that was about it. I had NO IDEA what the impact would be on my child's development.

Fast forward to my second child, who had some 'weird stuff' going on with his feet. I brought him to a physiotherapist who was just starting to specialize in pediatrics. She encouraged me to become a [Physiotherapist specializing in pediatrics](#) since I had kids, was a registered physio, AND had previously been a teacher. She also introduced me to primitive reflexes and how they impact development, learning and behaviour.

One of the very first pediatric courses I took was to learn how to assess and treat primitive reflexes. I learned what the different reflexes are, why they're important, the problems if the reflexes are not fully integrated, and, what we do to integrate them. This ended up being a huge eye-opener, as I now had a

better idea why so many of my former elementary school students struggled with things like reading, writing, focus, attention, coordination and more.

With my 'Mom Hat' on, I started to notice these patterns and trends with my own children, and WOW did things start to make sense with some of the struggles I was noticing. Now, in my practice, assessing for and integrating retained reflexes is something I do regularly with babies, children and teens. I can even spot some parents who haven't fully integrated all of theirs! This is even one of the first things I mentor and train physiotherapy students and residents in.

What are Primitive Reflexes?

In short, they are automatic responses to specific stimuli on the body. They occur in pregnancy and progress through infancy to help us learn how to respond to and navigate our environment. For example how to suck for feeding or even how to come out of the birth canal. These reflexes occur using the lower brain (aka brain stem).



List of Primitive Reflexes

There are many primitive reflexes that should each emerge and integrate within typical time frames. They include:

- Moro Reflex
- Asymmetrical Tonic Neck Reflex (pictured above)
- Fear Paralysis Reflex
- Palmar Grasp Reflex

- Tonic Labyrinthine Reflex
- Symmetrical Tonic Neck Reflex
- Babinski and Plantar Reflexes
- Oral Babkin Reflex
- Rooting Reflex
- Spinal Galant and Spinal Perez Reflexes
- Landau Reflex
- Amphibian Reflex
- And more...

More Detailed Example of Palmar Grasp Reflex

My favorite example is the Palmar Grasp response. Basically, try to imagine a very young baby (newborn to 2 months old). When we touch their hand (the

palm specifically), the baby automatically grasps your finger/hand and we think “wow, this baby is so strong! She is holding me so tight!”. Well, you’re right!! This is how the baby learns to grasp objects, which becomes critical to partaking in life’s activities.

After approximately 3 months of this automatic response, the baby has had enough practice and the higher brain learns to override the automatic response. It learns to choose when to open and close the hand. Accordingly, you will now see that the baby can grasp an object and will randomly drop it as they are still learning how to control their hands. Eventually the movements become more fluid and controlled, and fine motor skills can develop.

What Happens if Primitive Reflexes Don’t Go Away?

In typical development, babies move around a lot to explore and play. For the most part this is enough to integrate the reflexes allowing the baby to develop typical fine and gross motor skills, communication and social/emotional skills.

For various reasons like birth or other trauma illness, prolonged periods of inactivity, spending too much time in containers or being restricted in movement often throughout infancy, skipping or not spending enough time in certain milestones (like crawling) the primitive reflexes will not integrate in a typical fashion. This could lead to a long list of potential problems depending on which reflexes don’t integrate.

This list includes, but is not limited to: anxiety; emotional tantrums and

meltdowns; easily overstimulated; poor balance & coordination; clumsiness; poor impulse control; social & emotional immaturity; trouble with visual skills like hand-eye coordination & tracking for reading; continence issues; postural issues; motion sickness; poor spatial orientation; poor focus & concentration. And the list goes on, and on and on. Interestingly, many of these symptoms can mimic or coincide with other [diagnoses](#) also.

The good news is that the trained Physiotherapists or Occupational therapists here at Play On Pediatric Therapy in Ottawa, can help to integrate them at any age.

How Are Retained Primitive Reflexes Assessed?

First, the therapist will ask you and your child a number of questions. After that, your therapist will assess for most of these reflexes in order to figure out which ones have already been integrated, and which ones need some work.

Each reflex has a different quick assessment which involves asking your child to do a variety of silly-looking active and passive movements. For example it could be running a finger on the bottom of your child's foot, or running a finger down their spine. I screen for primitive reflexes just about every time I do a physiotherapy assessment on a child. They are often related to other developmental concerns. Without integrating the reflex(es), the child may not be able to get to the next level of development or learning.

Testing is simple, quick and pain free. I can test for about 10 of reflexes in less than 2 minutes (as long as the child is cooperative).

How Do we Integrate Primitive Reflexes?

Once we have determined which reflexes are retained/un-integrated, the trained therapist will choose some very specific exercises, games and activities. Some examples are cross jacks, bum shakes, bum walks, or even snow angels. These could be incorporated into the child's therapy sessions, and some will be recommended in the child's home exercise program.

The keys to success for integration are consistency and frequency. If exercises aren't done often enough, there won't be much progress. Also, if exercises are only done sporadically, you risk losing any progress made. Therefore realistically, you should expect to commit to completing the exercises 5-7 days per week for between 5-15 minutes a day for the best results.

Some reflexes may integrate quickly, while others may take some more time and consistency. However, it will pay off!! Your therapist will work with you to create the optimal plan that works for your child and family.

How Can I ensure My Baby or Child's Reflexes are Integrating?

By having a general understanding of what reflexes are, how they integrate and some potential signs/symptoms of unintegrated reflexes. This way you can be more aware of the importance of your child going through various movement milestones. You can be taught some techniques and ways to help

integrate them in your child (even if they are not problems yet), for example encouraging the right amount of tummy time and movements with arms and legs.

Overall, if you're not sure and want specific guidance, seek the help of a trained [Occupational Therapist](#) or [Physiotherapist](#) here at [Play On Pediatric Therapy](#) in Ottawa, Ontario. They can assess and treat your child for their reflexes in addition to other concerns or on their own. Call to talk to one of our therapists to see if this is the right fit for your child.