

# Primitive Reflexes Explained

Newborn babies instinctively squeeze tightly when a finger is placed in their hand. They suck for food when presented with the nipple from a bottle or breast and push outward when a solid object touches the tongue. These are [primitive](#) reflexes and serve an essential purpose: they promote survival. Most are observable at birth or shortly afterwards and diminish between the second month and first year of life. They are then followed by behaviors that further balance, movement, and posture.

## Persisting or Retained Primitive Reflexes

What happens when newborn automatic responses don't disappear, instead remaining far beyond that initial year? Unfortunately, there is less clarity surrounding retained primitive reflexes, their effects on learning, and treatments or interventions.

### What We Know

Primitive reflexes begin in the central nervous system. The following are examples:

- *Moro or Startle Reflex*: When a baby's head is lowered, and therefore, lower than the rest of the body, an infant will spread out its arms and open its hands in response to the falling sensation.
- *Rooting*: A baby will turn its head in the direction of your hand, with its mouth open and ready to suck, when stroked on the cheek or mouth.
- *Sucking*: This occurs when a nipple or finger is placed in a baby's mouth.
- [Asymmetrical Tonic Neck Reflex](#) (ATNR): Babies take on a *fencer* position when lying with their head to one side, extending the arm and leg on the side it's facing and bending them on the other.

- *Palmar Grasp or Grasp Reflex*: An infant will instantly close its hand around anything placed in its palm.
- *Plantar Reflex*: A baby's toes curl or flex when the sole of the foot is stroked.
- *Placing*: An infant will bend its knee and lift its foot when the sole is rubbed, placing the foot on top of the stimulus.

Because primitive reflexes initiate in the central nervous system (CNS), they indicate neurological development and function. The persistence of a number of these automatic responses, well after their expected end, can indicate an underdeveloped CNS and is also referred to as neuromotor immaturity. It can lead to developmental challenges, including difficulty with balance, coordination, and fine motor skills. Restlessness and increased sensitivity can also result.

Persisting or abnormal primitive reflexes are characteristic of cerebral palsy. They have also been associated with Autism and [ADHD](#). It should be noted that retained reflexes can be inaccurately diagnosed as the latter. The same can occur when reflexes, not attention, are the primary issue.

## Identifying Issues and Making Recommendations

Pediatricians, neurologists, and therapists can administer a developmental assessment, identify concerns, and make recommendations when reflex retention is suspected. Traumatic birth, low birth weight, illness, head injury, and repeated ear infections are among the potential reasons they may remain present long after the first year of life.

## How to Help

We know that neurological concerns can impact learning and behavior. There are a number of evidence based medical and [educational interventions](#) proven to address a number of behavioral and/or cognitive issues. There are also [therapies](#) and educational practices to assist

individuals with identified or suspected retained primitive reflexes.

When considering alternative therapies, request and review all information the provider can offer about available services, training, and research related to these suggested methods. Don't be afraid to ask to see specific data from studies conducted. While testimonials provide some information about customer experiences and growth, they don't paint the full picture.

Even among children whose symptoms or difficulties present similarly, varying or multiple diagnoses may apply. As in all areas of education, individual needs, experiences, and responses to specific techniques can vary greatly. Parents know their children best and are their strongest advocates. The more knowledgeable we become as parents and educators, the more likely we are to recognize and initiate an appropriate course of action.

Copyright: [seqoya / 123RF Stock Photo](#)