

# All About the ATNR Reflex

The **Asymmetrical Tonic Neck Reflex (ATNR)** is a primitive reflex present from birth. Often called the "fencing reflex," it's activated when a baby turns their head to one side. In response:

- The arm and leg on the face side extend
- The arm and leg on the back-of-head side flex

This posture resembles a fencer holding a sword. The reflex is involuntary and helps a newborn begin hand-eye coordination and visual tracking in early life.

## When Should the ATNR Reflex Integrate?

The ATNR reflex typically begins to fade by 4 months and should be fully integrated by 6 months of age. Integration means the reflex no longer automatically activates and the baby gains more voluntary movement and control.

If the ATNR is retained beyond this window, it may interfere with gross motor, fine motor, and academic skills.

## Why Does the ATNR Reflex Exist?

This reflex helps with several important early developmental tasks:

- Assists in the birthing process
- Encourages hand-eye coordination by connecting head movement with limb responses
- · Prepares the body for rolling
- Helps establish awareness of both sides of the body

As the brain matures, voluntary movement replaces this automatic pattern. When it does not, the reflex can interfere with everyday functional skills.

# Signs of a Retained ATNR Reflex

If the ATNR reflex remains active, a child might display:

- Difficulty crossing midline (e.g., drawing an X or tying shoes)
- Poor handwriting or trouble with spacing on the page
- Difficulty turning their head without disrupting arm movement
- · Slouching or leaning during seated tasks
- Challenges catching a ball or bilateral coordination
- Avoidance of crawling or delayed crawling
- Trouble with reading eye movements (left-to-right tracking)



# Parent Education: Why It Matters

The ATNR reflex connects head movement with automatic limb responses. If retained, this connection interferes with:

- Bilateral coordination (using both hands together)
- Visual tracking for reading and copying
- Hand dominance development
- Gross motor tasks that require rotation or crossing the body's midline

A child may appear clumsy, frustrated with drawing or writing, or constantly switch hands when using tools. These challenges can impact school performance and self-esteem. Fortunately, gentle and consistent movement patterns can support integration.

# **5 Simple ATNR Integration Exercises for Home**

These exercises are rhythmic, symmetrical, and designed to connect both sides of the body. Perform in a quiet space and repeat several times a week.

### 1. Toy Tracking Turns

- · Lie child on their back.
- Slowly move a toy or light from one side of their visual field to the other.
- Encourage head turning while arms remain still.

### 2. Lazy 8 Arm Drawings

- Use a large paper or whiteboard.
- Have your child draw large sideways figure 8s using one hand, then the other.
- · Encourage smooth head and eye tracking.

### 3. Wall Angels

- Child stands or sits against a wall.
- Slide arms up and down slowly like making snow angels.
- Focus on keeping head still as arms move.

### 4. Crawl and Freeze

- Practice slow crawling.
- Every few steps, have the child stop and look left or right.
- Observe for limb stiffness or collapse.

#### 5. Cross-Crawl Marches

- March in place while touching opposite elbow to knee.
- Keep the head facing forward or alternate turning slowly.

These activities help break the automatic connection between head movement and limb extension by encouraging independent control. Repetition trains the brain to override the reflex and promotes fluid movement, visual tracking, and coordination.

# 5 Playful Ways to Integrate ATNR Reflex Support

For kids who avoid structured movement, these playful ideas promote reflex integration in natural settings:

#### 1. Obstacle Course Crawls

Create tunnels and paths that require crawling. Place toys on either side to encourage head turning and reaching across midline.

## 2. Bubble Pop Chase

Blow bubbles and move the wand across the child's field of vision. Encourage them to turn and pop with opposite hands.

### 3. Windshield Wiper Game

Lie on backs and move arms or legs side to side like windshield wipers, encouraging midline crossing.

### 4. Tummy Scooter Races

Ride on belly on a scooter board, reaching forward and turning head as they collect bean bags or soft toys.

### 5. Ribbon Dancing

Use long ribbons or scarves. Dance or trace figure-8s in the air, watching the ribbon move with head and eyes.

# Rhythmic Reflex Play for the ATNR Reflex (For young or low-attention children)

### 1. Rolling Over Story Time

What to do:

- Lay your child on their back on a soft mat or blanket.
- Slowly help them roll side to side while telling a short, repetitive story (e.g., "the bear rolled this way... and that way...").
- Pause briefly with each head turn to the side.

#### Why it helps:

- Encourages head turning with full-body rotation, gently activating the ATNR pattern.
- Provides vestibular and proprioceptive input while building tolerance for midline shifts.
- Head-led rolling supports coordination between the eyes, neck, and limbs.

#### 2. Peekaboo Side Reach

What to do:

- Sit in front of your child or lay them on their back.
- Slowly present a toy or your face at one side of their head.
- Encourage them to turn to look or reach (even briefly), then shift to the other side.





### Why it helps:

- Gently activates head-turning with reaching, mimicking the ATNR's extension/flexion pattern.
- Promotes visual tracking, midline orientation, and shoulder movement without verbal demands.
- Builds awareness of both sides of the body in a fun, relational context.

### 3. Bubble Catch & Turn

#### What to do:

- Blow bubbles and slowly move the wand across your child's visual field, encouraging them to turn their head left and right to follow the bubbles.
- If they're able, encourage reaching with either hand to pop bubbles on both sides.

#### Why it helps:

- Encourages head movement with arm activity, the key trigger of the ATNR.
- Promotes crossing midline, visual tracking, and symmetrical engagement.
- Fun, non-threatening way to integrate reflex patterns without direct instruction.

Helping your child integrate the ATNR reflex doesn't require perfection—just consistent, loving movement that feels fun and safe. Rhythmic and cross-body activities build body awareness and improve attention, coordination, and learning readiness.

