

Fit – 2 Learn – Primitive Reflexes

Reflex	Test	Exercise to integrate reflex
Symmetrical Tonic Neck Reflex (STNR) - Handwriting difficulties Symmetrical Tonic Neck Reflex (STNR) also known as the crawling reflex. STNR is present briefly after birth and then reappears around six to nine months. This reflex helps the body divide in half at the midline to assist in crawling - as the head is brought towards chest, the arms bend and legs extend. It should disappear by 11 months. Developmental delays related to poor muscle tone, tendency to slump while sitting, and inability to sit still and concentrate, poor binocular vision (eyes working together), double vision, difficulty with reading, problems with getting thoughts and ideas down on paper. Consequences of retained STNR  • Poor posture, Ape-like walking • Visual problems – focusing, convergence + tracking • Poor attention, involuntary reflex between arms + legs • Difficulty learning to swim • Poor hand-eye coordination • W sitters, wrap legs around chairs • Hard to copy from board • Avoidant & inflexible  	Testing for STNR 1. Child is on all fours 2. Adult holds head gently and moves head down 3. Look for any movement of the arms or legs - by reflex the child's head goes down their arms come in + their legs want to move out. Testing for STNR 1. Repeat the test, but this time move the head upwards 2. Observe any movement in arms and legs	Stretching Cat  How to integrate the STNR  • Be diligent, slow and thorough • 20 repetitions a day • For at least 40 days • Remember to stop the child W-sitting and to promote sitting cross legged or side-saddle. When sitting on a chair encourage them to sit with feet flat on the floor.

Spinal Galant Reflex – poor focus and inability to sit still. (wriggle Reflex) Impact on mental maths Bladder problems Wriggle Easily distracted Poor balance, coordination Easily distracted	Child in a crawling position Run a thumb up and down one side of the spine If there is wriggle or movement e.g a dropped shoulder then the reflex is still present. 	 Progress to use weights (bean tins) 5 – 10 reps every day for 6 weeks.
Moro Reflex – Concentration, ADHA, Autism Pigeon toe Anxiety Sickness Hyper alert reversals	Not able to cross feet and touch toes Not able to move arm and leg out on one side together.	How to integrate the Moro reflex • Choose the right chair or use a big cushion on the floor • Make sure the child can easily differentiate/feel left and right sides • Ensure child can move arm and leg on each side together • Ensure the child can move head fully forwards and backwards • The whole move requires left and right limbs to be alternated • 5-10 repetitions a day • For at least 40 days  Use a sock and a glove on the right side if the children do not know their left and right.

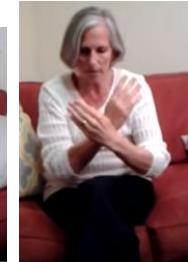
Asymmetric Tonic Neck Reflex (ATNR) – handwriting difficulties

Consequences of retained ATNR

- Problems with mid-line crossing
- Poor hand eye coordination
- Difficulty copying from a board
- Visual tracking problems
- Poor balance and judgement of distance
- Lack of bi-lateral integration
- Poor hand writing; excessive pen grip
- Poor spelling

Testing for ATNR

- Child stands with arms held out in front with relaxed wrists
- Child closes eyes
- Adult stands behind and tells the child that they are going to turn their head and that they should try to keep their arms pointing forward
- The adult gently turns the head to one side, pauses, turns the head to the front, pauses, then turns the head to the other side.
- The arms should stay in place and not move to either side or tilt down.



Star fish

Right arm and right leg over into the foetal position

Star fish (count to 5 as you do it)

Left arm and left leg over – foetal position.

3 X star fish (60 secs) for 30 days.

The Robot exercise: huge advantage is that it has a lot of resistance and is quite easy to get right.



How to integrate the ATNR

- Be diligent, slow and thorough
 - 5-10 repetitions a day
 - For at least 40 days
- Celebrate every few days that you have made progress, keep videos
 - Accept that it takes time, but it is a good investment



Palmer Reflex – Pencil grasp problems

Problems with fine motor skills
Stick out tongue
Sucking/chewing
Poor pencil grip
Difficulty with handwriting

Vision Exercises

Vision exercises

1. Learn to wink with both eyes
2. Squeeze eyes tightly closed count to 10; open eyes very wide look around without moving head

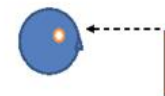


3. Moves to the left and to the right x 10
4. Move eyes up and down x 10

5. Move eyes in circles clockwise x 5
6. Move eyes in circles anti-clockwise x 5

Hold one hand up.
Stroke with the fore-finger of the other hand, from base of palm up the thumb, back to base of palm, then forefinger and so on until the little finger is completed.
Swap hands.
Rub whole hand up the opposite hand.

7. Imagine that there is a big clock in front of you look at the centre, then move eyes out to 1; then back to the centre; out to 2; then back to the centre and so on until 12.
8. Converge and diverge eyes whilst focusing on a pencil top and keeping the pencil top as one single image. Keep practising daily until able to bring the top to your nose without going into double vision.



9. Crossing the mid-line do this exercise **once the primitive reflexes are established**: using two pots at about shoulder width apart, patch one eye. Pick up items from pot A with left hand, move in an arc at eye height across mid-line and place in pot B continue until pot A is empty; still using the left hand return the items in the same manner to pot A; repeat with the right hand. Patch the other eye and repeat. All the time that items are being moved from one pot to another the eye should be following the items.

Eye Muscle Exercises

Use video with class (7 mins)
Head still. We have 6 muscles in our eyes.

<https://www.youtube.com/watch?v=fq9CAAtAaeRI>

Converge and diverge with pen.
Hold head still, and a pen straight in front of your eyes. Bring pen to your nose – eyes should converge. Move pen away, eyes should diverge.



Rooting Reflex

The rooting reflex assists in the act of breastfeeding and is activated by stroking a baby's cheek, causing her to turn and open her mouth.
Retention of the rooting reflex beyond four months may result in difficulty with solid foods, poor articulation, and early thumb sucking.

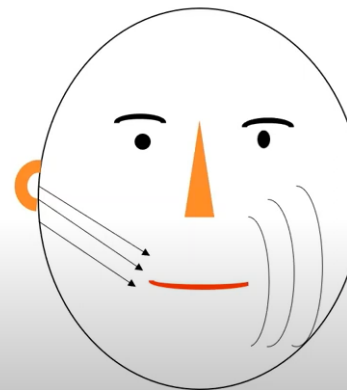
- Tongue lies too far forward
- Hyper sensitive around mouth
- Difficulty with textures and solid foods
- Thumb sucking, which can impact on teeth & palate development
- Speech and articulation problems
- Difficulty swallowing and chewing
- Dribbling
- Hormone imbalance
- Thyroid problems and autoimmune tendency
- Dexterity problems when talking

Test

Stroke down around one side of the child's mouth from nose to chin. Do this three times, moving a little further out each time. Repeat on the other side of the mouth.

Look for a twitch of the hands or mouth on either side

Integrating the reflex – with arms and head staying still.



On both sides of the face in turn:
1. stroke from ear to mouth.

2. Stroke from nose to chin in increasingly wider strokes

Lots of repetitive facial expressions.

Tonic Labyrinth Reflex (TLR) – Poor postural control

The Tonic Labyrinthine Reflex (TLR) is linked to the vestibular nerve from the inner ear. The TLR sends sensory information to the brain regarding the spatial position of the body.

TLR is triggered when the head is tipped backwards or forwards, influencing the tone in the front and back parts of the body, and eye movements up and down. This ensures that the body's balance can be maintained at all times.

Children who have a persistent TLR often appear "clumsy".

If retained, the TLR can lead to poor muscle tone, a tendency to walk on toes, motion sickness, poor sitting postural control and poor balance.

Hard to focus on board and write in a book.

Testing for TLR

The child lies on their stomach with arms down to the side and legs straight.

The child raises their head, legs, and arms off the floor while keeping arms and legs straight.

If they cannot keep both legs straight and hands up, the **reflex** is most likely still present.



Tonic Labyrinthine Reflex Exercises

Helps with posture, learning, speech disabilities and more.



Count to 10. If they can't keep their arms and hands up then the reflex is likely to be retained.

Integrating the reflex – Meatball Exercise



Consequences of retained TLR

- Poor balance and spatial awareness
- Tense muscles & toe walking
- Difficulty holding still & concentrating
- Muscle tone issues & Poor posture
- Difficulty paying attention when head is down, say reading
- Dyspraxia
- Poor sense of rhythm
- Spatial issues, bumps into things

How to integrate the TLR

- Be diligent, slow and thorough
- Max 3 repetitions a day
- For at least 40 days
- Bear in mind you will need to do work with the feet and the walking gait after this, possibly also getting the arches to rise properly.

Superman

