



**Northumbria Healthcare**  
NHS Foundation Trust

# Ready to engage and learn

Issued by children's occupational therapy

building a caring future

HOSPITAL | COMMUNITY | HOME

[www.northumbria.nhs.uk](http://www.northumbria.nhs.uk)

## Contact us

You can contact us Monday to Friday 8.30am – 5.00pm. Please choose the team according to where you live.

### Northumberland

Children's Physical Disability Occupational Therapy Service  
Northumbria Healthcare NHS Foundation Trust  
Child Health  
Woodhorn Lane  
Ashington  
NE63 9JJ  
Tel: 01670 564 050

### North Tyneside

Children's Occupational Therapy Service  
Northumbria Healthcare NHS Foundation Trust  
Riverside Centre  
Minton Lane  
North Shields  
Tyne & Wear  
NE29 6DQ  
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Alternatively, you can visit our website:

<https://www.northumbria.nhs.uk/our-services/childrens-services/childrens-occupational-therapy/>

Our sensory systems need to be in an optimum state of arousal to be able to function. This means they must be calm, alert and organised at the same time. Activities that incorporate controlled movement (vestibular) and heavy work (proprioception) help our systems to be more organised and focused.

Just as you may jiggle your knee, tap on a surface or chew the end of your pen, children also need access to activities that help keep them focused and alert.

This pack contains tips and advice for you to support your child to ensure they are in the most optimal state to engage and learn throughout the day. This advice has been made with consideration of both younger and older children. Please select those appropriate to your child.



## Points to consider

- Activities that involve movement (vestibular) (e.g. trampoline, slide, play equipment) are often alerting to children.
- Activities that provide deep pressure to the muscles and joints (proprioception) have a calming and organising effect.
- It is important to follow any movement (alerting) activity with a heavy work (calming) activity. For example, after a child has gone down a slide, it is recommended that they do something heavy (e.g. stomping), before moving onto something new. This helps children's bodies to process what they have learnt, helps them to become more aware of themselves and their environment, and can reduce the likelihood of becoming too over stimulated.
- Encourage heavy work (proprioception) activities little and often throughout the day, to help assist with calming.
- Try to encourage children to be active in an activity where possible. This is where the child is doing the task for themselves, rather than relying on someone's help. This helps them to process information more effectively and works toward teaching them self-regulation skills.
- It is important that all activities are completed in a controlled manner. If a child rushes into tasks, this is disorganising, and they are likely to be more alerting than calming. Combine tasks with counting or breathing exercises, to encourage them to reduce their speed.
- If a child is resistant to the task, do not force them. Instead think about why. Is it because they find the task uncomfortable due to the sensory experience it offers?
- Calming strategies need to be taught. Some children may need more input, direction and support than others.

- Everyone is individual and people will find certain strategies more successful than others (and this can take a long time to work out). When you have clear activities established, consider creating a 'choice board', with visuals of what strategies work for them. Laminate and Velcro strategies for the board and encourage them to choose the strategy. This encourages more active self-calming.

## Movement (alerting) activities

Remember to follow every movement activity with a heavy work (proprioception) one (please see next category). Some of these activities give both alerting and calming input at once.

- Swing (backwards and forwards) - encourage swinging in a rhythmical motion. Be cautious that swings/ play equipment that move in all directions is very disorganising and over stimulating for some.
- Spinning - spinning (but not too much) can be good. This is an important movement avoid spinning them, allow them to spin themselves, by running in circles, using a tyre swing or round about, be cautious that it is not too excessive and over stimulating, the effects of spinning can last 6-8 hours and if there is too much input, this cannot have the desired effect and can later cause a lot of upset. If your child engages in a lot, use heavy work (proprioception) activities to help them process this information and distract onto a new task.
- Get upside down - Have your child hang upside down on play equipment, do front rolls, cartwheels or even somersaults. For smaller children, encourage them to go down a slide head first (make sure that this is safe first).

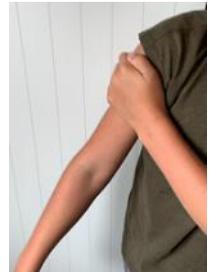
- Rolling - encourage your child to roll back and forth on a therapy ball or peanut ball. Play 'sausage roll'. This is where they lie horizontally across a mat or duvet. The mat or duvet and child are then rolled up into a 'sausage roll'. The child will determine how tight they are rolled. Encourage them to then unroll themselves at the end.
- Jumping stars - too much jumping can be disorganising and over stimulating. Give them an amount to do (e.g. 6 - 8).
- Spiderman - children stand up in their own space. Tell them to pretend that they have a spider walking all over their body and they want to brush it off. Brush it off arms / legs / tummy / back / hair / face, jump up and down to shake the rest off.
- Head, shoulders, knees and toes / follow the leader / Simon says - encourage children to follow the leader who in turn, claps a pattern / jumps on the spot / alternates stamping / identifies body parts etc.
- Window cleaners - pretend to clean a window / mirror in front of you. Make sweeping movements: side to side, top to bottom or diagonally.
- Cross-crawl - this is walking on the spot, but at each step the knee is raised and touches the opposite elbow (which crosses over to meet it). This movement should be done as smoothly and slowly as possible, as this will help to develop more co-ordination and control.
- Sitting in a rocking chair / swaying in a hammock / playing 'row row your boat' - this provides calming linear (back and forth) movement input.
- Other activities – swimming, running, walking, dancing, climbing (climbing frames / monkey bars / tress etc), riding push bikes / balance bike / scooter, walking across a balance beam, wheelbarrow walking, rough-housing play.

## Deep pressure (calming) activities

To be done following every movement (vestibular) activities. Also encouraged little and often throughout a child's day to assist with calming.

- Marching on the spot - this can be a quick and effective way to give heavy feedback between tasks when at the park.
- Indoor sledging - child sits on a piece of strong fabric on a slippery floor surface (e.g. polished wood). Use a piece of rope to pull the child with.
- Wheelbarrow walks.
- Blowing games – bubbles, whistles, kazoo.
- Pushing and pulling games - tug-o-war with piece of fabric or Lycra material.
- Bear hugs - give the child a cuddle, combine with a gentle rocking back and forth for extra calming movement (vestibular) input.
- Squeezing - Play-doh, silly putty, theraputty, wet sponges / cloths, slime, stress ball (pressing against hands for count of 10-20 seconds) etc.
- Playing outdoors – climbing, playing in trees, sand play, water play, digging, gardening, jumping.
- Catching and throwing - heavy sandbags, beanbags and balls.
- Animal movements - stretch like a starfish, jump like a dolphin, wobble like a jellyfish, walk like a crab, slither like a snake, chomp like a shark, waddle like a penguin.
- Creeping fingers - lay out a length of crepe bandage/ paper towel/ fabric. Ask the child to place their hand on the table with the heel of their hand on the fabric and then use their fingers to gather the length into their hand. Repeat with each hand. This can also be done with each thumb.

- Pull up bar - consider a pull up bar that can be attached to their bedroom door.
- Dots and squeezes - encourage children to create a 'dot' in their palm with their thumb and massage. Next, firmly squeeze the wrist and then continue to work up the arm doing a series of deep squeezes. Then encourage on the other hand.
- Wriggle jiggles - encourage children to stand with enough space around them then tell them to; shake one arm, elbow wrist and fingers, then do the same with the other arm. Take weight on one leg and shake the other leg, knees and toes, then do the same with the other leg. Shake body, shoulders and hips. Wriggle face, mouth, lips, eyes, nose, make faces. Stretch your whole body (star shape).



- Weighted backpack - place items (e.g. water bottle) in the bag, to increase muscle feedback (proprioception), to help with calming when in the community. Be cautious that the bag is not too heavy. Ideally, this should be no more than 5% of the child's body weight. It is advised to not use the weight for too long, as its effects can begin to wear off. It is advised to use this for a maximum of 20-minutes. Following this, remove the items and do not place them back into the backpack until there has been at least a 20-minute break. Older children can also benefit from this strategy.

- Encourage alternative positions for both work and play, rather than just sitting, which give increased heavy work (proprioception).



- Shoulder spirals - the child holds their arms out to the side and makes small circles in one direction with both arms. Encourage them to start small and get bigger. Repeat in the other direction.
- Gym ball activities - lying on tummy over the gym ball, walk hands forward and hold. Walk hands back and rest. Repeat. Bounce on gym ball whilst sitting, feet flat on floor (slow rhythmical to calm). Child lies on floor and adult rolls gym ball slowly over backs of legs and back (stopping at the neck) applying pressure as you roll (check with child that the amount of pressure feels ok).
- Upper body push-ups - the child lies on the floor and pushes the top half of their body off the floor with their arms. Make sure their hips and tummy are off the floor. Repeat 10 times.
- Wall press-ups - child stands facing the wall around one a half arms length. They stretch their arms out and place their hands flat on the wall. They bend their arms to take their face toward the wall and back out again without moving their feet. Repeat 10 times.



- Traditional press-ups & strong man press-ups - encourage your child to lie face down on the floor, they then push the top half of their body off the floor with their arms. Make sure they keep hips and tummy on the floor. Be cautious that this does not cause hyperextension (where joints move outside their typical range of movement) at elbows.
- Chair warm-ups - these are sometimes beneficial prior to an activity that is going to require more attention (e.g. schoolwork / mealtimes / movie etc). Count down together slowly for 10-20 seconds for each exercise.



Push palms together



Interlock hands and pull



Hug self tightly



Raise shoulders up



Push up on the chair



Pull shoulders back



Reach high with one hand and then the other

- Bath time - after a bath, encourage 'dabbing' with a towel, rather than rubbing, as this is less stimulating and more calming.

- Meal / snack time - try to include crunchy foods in meals and snacks where possible to increase oral heavy feedback.
- Drinking - encourage sports bottles or using a straw with a cup to also increase feedback episodically throughout the day.
- Routines - build calming sessions/ down time into the day, consider soft music and yoga, factor a walk into the day.
- Household chores - an excellent way to get active calming feedback, whilst also promoting independence, see table below for age appropriate chores.

Ages 2-3	Ages 4 – 6	Ages 7 - 10	11+
<ul style="list-style-type: none"> <li>• Pick up/ put away toys &amp; books</li> <li>• Help wipe the table</li> <li>• Wipe chalkboard/ whiteboard after play</li> <li>• Collect dirty clothes</li> <li>• Make bed together</li> </ul>	<p>All previous chores.</p> <ul style="list-style-type: none"> <li>• Take care of pets</li> <li>• Set and clear table</li> <li>• Help match socks</li> <li>• Fold small laundry items</li> <li>• Put away shopping</li> <li>• Make bed</li> <li>• Tidy bedroom</li> </ul>	<p>All previous chores.</p> <ul style="list-style-type: none"> <li>• Folds laundry</li> <li>• Sweeps / hoovers</li> <li>• Helps washing dishes</li> <li>• Helps with meal preparation</li> <li>• Takes out the bins</li> </ul>	<p>All previous chores.</p> <ul style="list-style-type: none"> <li>• Washes / dries dishes</li> <li>• Unload / load dishwasher</li> <li>• Take bins to the curb</li> <li>• Mops floors</li> <li>• Cleans bathroom</li> <li>• Mow grass</li> <li>• Makes meals</li> <li>• Wash windows</li> </ul>

## Quiet space

- Most children (no matter what their age) benefit from having a quiet space to retreat to. This space has no negative connotations attached to it but is simply a place where they can be directed to when you can begin to see the signs that they need calming. They can use this episodically during the day for 'chill time' (e.g. reading/ listening to music).
- For some children, a squishy space down the side of the couch with some cushions is effective. Be sure the cushions contact his skin and give them a lot of deep pressure. Be cautious on the space you choose, to make sure there are no hazards (e.g. plug sockets or electrical wires).
- This space could be also be either a tent or simply a bean bag. Set up a calm sensory box, which could have some quiet fidget toys in / materials etc. Think about reducing light, sound, busy environmental distractions.
- Some children like a trug (can be purchased online or in local shops). You want the trug to be a size where your child can sit in this with their knees bent but not too big so that there is loads of empty space around them. When in the trug, use cushions to fill in the gaps, to give their body lots of deep pressure.
- If introducing a calming space, try and be sure the child understands its purpose. It is a positive space that can be used until they feel calm. Practice this (and other) tools together first, as calming needs to be taught before we begin to expect children to self-regulate.
- Encourage breaks when using this strategy. If we use something for too long, its effects can begin to wear off and you will no longer see its desired effect. Try and encourage a break after 20-minutes.



## Alternative Formats

If you would like a copy of this information in large print, another language, audio tape or other format please call the Contact Centre on 03 44 811 8118.

## Other sources of information

### NHS 111

### NHS Choices

[www.nhs.uk/pages/homepage.aspx](http://www.nhs.uk/pages/homepage.aspx)

### NICE (National Institute for Health and Clinical Excellence)

[www.nice.org.uk](http://www.nice.org.uk)

### Patient Advice and Liaison Service (PALS)

Freephone: 0800 032 0202

Text: 07815 500015

Email: [northoftynepals@nhct.nhs.uk](mailto:northoftynepals@nhct.nhs.uk)

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