



Children's, Women's and Family Services

Sensory Integration Advice and Strategy Pack

Children's Occupational
Therapy Service



If you have any comments about this leaflet or
the service you have received you can contact :

Paediatric Occupational Therapist
Children's Therapy Department
Princess Royal Community Health Centre
Greenhead Road
HUDDERSFIELD
HD1 4EW
Tel. (01484) 344299

www.cht.nhs.uk

If you would like this information in
large print, Braille, audio, CD or in
another language contact the above.

Illustrations on the front cover by local children
Imogen, Ayesha and Rosie

Halifax Area

www.parent-and-carers.org.uk

The following parks playground equipment may offer sensory feedback as well as the natural elements of the environment.

Manor Heath Park

Shibden Park

Further Reading

For more information, the following book may be useful for parents/carers:

The Out-of-Sync Child – recognizing and coping with sensory integration dysfunction. Carol Stock Kranowitz, 1998. The Berkley Publishing Group.

Useful Websites

www.sensoryintegration.org.uk
<https://projectwildthing.com/wildtime-ideas>

Huddersfield Area

The following forest schools run in the Huddersfield area once a month on a weekend and some provide holiday provision during the school holidays.

www.naturesfootprints.co.uk - Beaumont Park
www.bemoreoutdoors.org - Slaithwaite
www.facebook.com/abesInTheWoodForestSchool
- Slaithwaite
www.kirklees.gov.uk/cliffehouse
- Shepley

Reinwood School – please contact either the junior or infant school for more details 01484 222207 or 222209

The following parks playground equipment may offer sensory feedback as well as the natural elements of the environment.

Greenhead Park
Beaumont Park
Cliffe House Adventure playground

Sensory Integration Advice and Strategy Pack

Purpose

The aim of this advice and strategy pack is to provide parents and carers with introductory information on Sensory Integration and strategies to try at home to support your child.

If you have any questions or concerns, please seek further advice from the Children's Occupational Therapy Service on 01422 261340 (Calderdale) or 01484 344299 (Huddersfield).

What is 'Sensory Integration'?

Sensory Integration

Sensory integration is the ability to take in, sort out, process and make use of information from the world about us. As a result, a plan of action can be carried out in response allowing us to interact with our environment (e.g. something touches your back so you turn around to look what it is).

Information about our body and the world around us is gathered from the 7 senses (see below). In order for the higher levels of the brain to work effectively, the lower levels must first sort out the information accurately. This processing of sensory information is called sensory integration.

The 7 Senses

The 7 senses are fundamental to a child's ability to learn, socialise, play, develop skills, dress, eat and function in any environment. Although we are familiar with the senses involved in taste, smell, touch, sight and sound, most of us do not realise that our nervous systems also sense movement and body position. Touch, movement and body position are integral to Sensory Integration therapy as a treatment approach.

- Touch (tactile sense)
- Movement (vestibular sense)
- Body position (proprioception)
- Sight (vision)
- Sound (auditory sense)
- Smell (olfactory sense)
- Taste (gustatory sense)

Improving Vestibular (Movement) Processing

The vestibular system is our balance and movement sense. It tells us where our body is in relation to gravity, whether it is moving and how fast. The movement receptors are located in the inner ear and are stimulated by activities such as turning, rolling, swinging and jumping.

Vestibular input tends to be calming if it is slow and rhythmic (e.g. moving back and forth), and alerting if it is fast and variable. These activities must be done calmly initially and always with caution as some children may be very sensitive to vestibular input.

- ☺ **Rolling** – Roll across the room, try rolling with arms above the head.
- ☺ **Jumping** – Jumping on a trampoline. Jump and crash into bean bags and soft play equipment.
- ☺ **Sliding** – Move down slide in playground in different ways e.g. sitting, lying forwards, backwards.
- ☺ **Swinging** – Play on playground swings.
- ☺ **Climbing** – On monkey bars or climbing frame in the park.
- ☺ **Rocking** – On a rocking chair.
- ☺ **Bouncing** – Sit on a gym ball and bounce up and down. Space hoppers are also great for bouncing around.
- ☺ **Spinning** – Child pretends to be a spinning top by standing with arms out and twirls around. For intense input try spinning on a roundabout.

Improving Tactile (Touch) Processing

Our touch receptors are located in our skin and are stimulated by touching and feeling objects with different textures, temperatures and pressures.

- ☺ **Water play** – Fill a container with soapy water and add a variety of objects (e.g. plastic bottles, sponges, toy water pumps) for the child to play with. You may want to add a drop of food colouring to make it more fun!
- ☺ **Sand play** – In a sandbox add small toys and containers which the child can arrange, bury and rediscover. Alternatives to sand are dried beans, rice, pasta, popcorn and mud.
- ☺ **Feelie Box** – Cut a hole in the top of a shoebox. Place different objects in the box (e.g. spoons, marbles, plastic animals, cotton wool ball, etc.) and have the child hold and guess what he is touching without looking.
- ☺ **Swaddling** – Roll the child up tightly in a sheet/blanket/towel (do not cover face).
- ☺ **Back rubs** – Apply firm and even pressure to your child's back, arms and legs. Rub downward, the way hair grows. Ensure pressure is firm and even – not light and tickly.
- ☺ **Squash** – While child lies on stomach, roll a gym ball over their back and legs using firm even pressure.

Dysfunction in Sensory Integration

For some children sensory integration does not occur as it should and information from the senses does not flow and integrate efficiently. The result may be that the child is unable to respond to sensory information in order to behave in a meaningful, consistent way. They may also have difficulty using sensory information to plan and organise what they need to do and as a result they may find learning difficult.

Some Signs of Dysfunction in Sensory Integration

- ☐ Over-sensitive or under-responsive to sensations of touch, movement, sight or sound.
- ☐ Unusually high or unusually low activity levels.
- ☐ Bothered by certain noises, smells, textures, lighting etc.
- ☐ Has difficulty keeping hands to themselves - constantly touches other pupils or objects.
- ☐ Unable to focus - is impulsive, fidgety, inattentive and easily distracted.
- ☐ Has a poor sense of body and/or spatial awareness - frequently misjudges distances between themselves and other people/objects.
- ☐ Immature fine and gross motor coordination skills.
- ☐ Clumsy and falls/ trips often.
- ☐ Poor bilateral co-ordination (using both body sides together) and difficulty crossing the midline.
- ☐ Appears slouchy – struggles to sit up straight/ sprawls across the table/leans on others and furniture.

- Poor oral-motor skills (chewing, speaking)
- Slides out of their seat easily - is 'all over the place' with their arms and legs.
- Reduced independence with self-care skills e.g. dressing, feeding, toileting.
- Difficulties with motor planning.

Activities to Help Develop Sensory Integration

General points to remember:

- ☺ Make sure activities are supervised and playful in their approach.
- ☺ Always allow the child to do the activities in his or her way (as long as it is safe).
- ☺ Ensure you have enough space and you are away from other sensory interruptions (a corridor is not really sufficient).
- ☺ Try to build activities around a child's particular interests - don't be afraid to be creative.
- ☺ Don't continue an activity if the child becomes distressed.
- ☺ Don't expect these activities to 'fix' the child but they should have positive benefits long term.
- ☺ If child becomes overly excited/distressed apply a calming strategy e.g. firm pressure to the shoulders and arms, swaddling etc
- ☺ HAVE FUN! These activities will also promote a child's confidence and self-esteem. They will provide natural ways of developing social skills - consider carrying them out with friends/siblings, or in groups and even the whole class at school.

Improving Proprioceptive (Body Position) Processing

Proprioception is the sense that gives us an awareness of our body position and provides information on where we are in space, how far to reach and how much pressure to use. The receptors for this system are located in our muscles, tendons and joints and are mainly stimulated by movement, resistive activities (pushing and pulling against something) or by stretching at a joint.

- ☺ **Tug of war games** – Pull on a rope or stretchy band tied to the wall.
- ☺ **Wheelbarrows** – Child walks on hands while adult holds legs. Place a gym ball under abdomen if child finds this too difficult.
- ☺ **Animal walks** – Imitate moving like different animals e.g. snake, mouse, elephant, bear, rabbit, etc.
- ☺ **Get active** – Go to the park, play gym, swimming, etc.
- ☺ **Rough and tumble** – Have a pillow fight, crash into a large pile of cushions,
- ☺ **Heavy loads** – Encourage child to carry shopping bags, laundry basket, box of toys, etc.
- ☺ **Spring Clean** – Encourage child to help with vacuuming, washing the car, cleaning windows, digging in the garden, etc.