

Toronto District School Board Occupational Therapy and Physiotherapy Services from the Special Education and Inclusion Department

Heavy Work Activities (Proprioceptive Input)

Heavy work activities (i.e. proprioceptive input) **are used for children with sensory processing difficulties to help increase attention, provide calming input and to decrease defensiveness.**

Proprioception is a form of sensory input to the muscles and joints which makes us aware of our "position in space" (i.e. where we are in relation to other objects or people). Children who have difficulty interpreting proprioceptive input have trouble grading and planning their movements and regulating their level of arousal. You may see a child who accidentally breaks things often, appears clumsy and uncoordinated and may have an excessive need to crash and bump into objects, walls and people. **If they are seeking out excessive proprioceptive input, they are looking for a way to calm and organize their nervous system. They may seem disruptive, full of excessive energy, or even unsafe. These are the crashers, jumpers, movers, and shakers!** These are the children we **absolutely** want to target with heavy work activities. It **will** make a difference in them!

Heavy Work Activities Include:

- **Whole body** actions involving pushing, pulling, lifting, playing, and moving.
- **Oral** actions such as chewing, sucking, and blowing.
- **Use of hands** for squeezing or "fidgeting".

The following is a list of heavy work activities/proprioceptive activities that may help regulate a child's arousal level, concentration, or ability to sit still and attend to a task. Feel free to try the activities listed below regularly throughout the day. You want to choose activities **THEY**

are interested in and that IMPROVE their state of alertness to its most functional point. **It is also important to note which activities calm your child, alert them, or over alert them.** This is very unique to each individual and must be observed and treated as such!

These activities should be embedded frequently throughout the day. Here are some ideas!

Gross Motor Activities:

Carrying objects such as:

(Note – maximum weight of object is 5 to 10% of the child's body weight.)

- Bins with books.
- Stacking or moving chairs/books.
- Weighted backpack (use books, toys etc.).
- Large ball.
- Use a weighted lap pad.
- Bins of toys.

Pushing or pulling objects and activities, such as:

- Laundry basket.
- Kids wagon.
- Toy shopping cart.
- Toy vacuum.
- Mop/sweep floor with a child sized broom and dust pan.
- Raking leaves, dirt etc. using small rakes, shovels and wheelbarrows.
- Wipe off the table after snack.
- Riding trikes/ bikes.
- LOTS of movement songs (dancing).

Jumping and bouncing on/with items, such as:

- On an old mattress or soft area.
- Into bean bag chairs.
- Use a rocking chair.
- On a therapy ball **with adult assistance**.
- On a hopping ball with handles.
- Crawl or wheelbarrow walk through an obstacle course.
- Animal walks (i.e. crab, bunny, frog, bear etc.).

"Sandwich"/ Squishing activities:

- Make a child "sandwich" between cushions.
- Roll child up in mat or heavy blanket as a "hot dog" or roll out the pizza dough.
- Roll a large therapy ball on top of them while they lay on the floor.

Fine Motor Activities:

Working at vertical surfaces (at/above eye level), such as:

- Erasing, coloring on chalkboard or easel.
- Washing windows.
- Paint with water (try adding food colouring) on outdoor walls or windows.

Resistive tools or toys, such as:

- Clothespins or spray bottles.
- Use dull scissors to cut putty, play-doh, thick paper or cardboard.
- Play Doh Factory presses and molds.
- Use rolling pins to flatten cookie dough/play-doh.
- Colour/draw with crayon on textured surface.

- Bingo dabber activities.
- Dig and play in the sand.
- Cooking activities such as stirring, pressing, and kneading.
- Etch a sketch with knobs and shaking with both arms to clear the screen.

Fidget or play with stretchy/squishy items, such as:

- Stress balls and other “fidget” toys.
- Playdough.

Sensory Oral Motor Activities:

Resistive sucking using items such as:

- Through thin curly straws.
- Sports bottle with long straw.
- Drink smoothie or yogurt with a wider straw.

Blowing activities, such as:

- Bubbles.
- Noiseless whistles.
- "Snake"/blower party favors.
- Kazoos.

Disclaimer: All activities should be completed with adult supervision. It is okay if your child gravitates towards certain activities and avoids others. This is not individualized therefore some activities may not be appropriate for your child.