

## **Occupational Therapy Service for Children and Young People** **Advice to Support Fine Motor Skill Development**

Fine motor skills involve use of the small muscles of the hands. They are necessary for many activities of daily living such as buttoning shirts, tying laces, opening lunch boxes or using a fork to eat. They are also a key component of school activities such as manipulating a pencil and using scissors.

The development of the small muscles of the hands, relies upon the development of larger muscles in the body such as core strength and shoulder stability. When the core is weak, and the shoulder cannot stay stable, the hands cannot effectively do their job.

In all fine motor activities, the following strategies should be considered:

- Reflect on the child's level of attention and concentration; are they 'ready' to engage in the activity? If not, try to do an appropriate alerting / calming activity beforehand.
- Be creative and have fun! Example – try to incorporate activities like dress-up to teach zipping and buttons; make a greetings card to practice writing, tracing, cutting and pasting skills.
- Provide a visual demonstration and hand-over-hand guidance where necessary.
- Encourage the child to talk their way through an activity the first few times they complete it. This will help develop planning skills and may also highlight when they get to the “tricky part” of the activity, which you can then focus on.
- Provide positive verbal praise, incentives, and competition so that the child maintains motivation to engage in the tasks.
- Practice, practice, practice – keep practice short but *frequent*, i.e., 5 – 10 minutes of practice twice a day.

### **Correct Posture for Fine Motor Skills**

A child's posture at their table or desk should follow the “**90-90-90 angle rule**” (Please refer to picture).

- Their feet should rest flat on the floor with a 90° angle at their ankles.
- Their knees should be bent at a 90° angle and about 1-2 inches away from the seat of the chair.
- Their hips should be at the back of their chair and positioned at a 90° angle.



### **Core Strength Activities:**

Poor core strength is often overlooked when addressing fine motor skills, but it has a huge impact on a child's fine motor abilities.

Some signs of poor core strength include:



- Resting their head in their non-dominant hand or laying their head and arm on the table.
- Leaning forward or close to the paper.
- Moving around, shifting from side to side or turning their body.
- Slouching in their chair.
- Having their non-dominant hand hold the chair or hang beside their body.
- Appearing tired or complaining of fatigue.

When beginning core strengthening exercise/activities, start with just a few at a time; find some that the child loves to engage in. As time progresses, you should see the child starting to develop self-confidence and endurance. At this point, you can begin adding new exercises/activities.

- Jumping on a trampoline.
- Playing tug-o-war.
- Going swimming.
- Construct obstacle courses which require crawling and climbing.
- Go to the playground and go on the swings, balance beams, monkey bars, climbing frames etc.
- Use a scooter board to move around while lying on their tummy.
- During sedentary play (e.g. reading, watching tv), encourage the child to lie on their tummy and prop their head and shoulders up by leaning on their elbows.
- Sit on a peanut-ball/physio ball. Bounce up and down, roll forward and back, reach for toys while seated etc.
- Do animal walks – bunny hops, crab walk, bear walk etc.



## **Shoulder Stability Activities:**

- Push and pull games; pushing against a wall, pulling a rope, row-row-row your boat.
- Target games / judging games; throwing and catching a heavy ball.
- Using a wheel barrow.
- Crawling games / tunnels / under blankets / through legs.
- Wheelbarrow walks. Instead of the child being held at the ankles by an adult, can they roll over a peanut ball and 'walk' out on their hands to collect a toy and 'walk' back? This will provide more support. As the child becomes stronger, they can 'walk' out further and further away from the ball.
- Playground games - particularly monkey bars, climbing frames.
- Crab football (using hands and feet to walk with tummy facing upwards).
- Drawing / painting on vertical surfaces – easels, pages stuck to the wall, whiteboards etc.
- Completing activities that involve leaning and putting weight through the arms and shoulders e.g. playing board games in side-sitting position.



## **Hand Strength Activities:**

- Theraputty;
  - Hide and seek e.g. hide small marbles/pegs in a lump of putty and child must find them and pick them out.
  - Tug-o-war using the putty.
  - Make small balls and place in a line. Use index finger to squash them flat.
  - Press and flatten to make cookies/pancakes.
  - Make pizza - Roll into balls, flatten with palm, make holes with extended index finger to make "pepperoni".
  - Make dinosaurs - Roll into long sausage and pinch peaks along the length using the thumb, 2nd & 3rd digits.
  - Use a variety of utensils to make different designs in the playdough – plastic forks, garlic press, rolling pin, pastry cutters, pegs or toothpicks.
- Water spray bottles; squeeze to water plants, (indoors / outdoors), make rain marks on paths and walls, or melt "monsters". (Draw monster pictures with markers and the colours will run when sprayed.)
- Squeezing stress balls.
- Putting an elastic band around the fingers and trying to open and close the hand like a flower.
- Tearing cardboard and paper into pieces.



## **Pincer Grasp Activities:**

- Clothes pegs – Have the child clip things together (e.g. make index cards with numbers written on them, the child then clips the correct number of clothes pegs to the numbered index card).
- Picking up objects using large tweezers.
- Counting games – pick up Cheerio's, small cubes/marshmallows or pennies using your index finger and thumb. Put these small items in a small cup to make the task more difficult, requiring more fine motor precision.
- Using eye droppers to "pick up" coloured water for colour mixing or to make artistic designs on paper.
- Paint using cotton buds/ cue-tips.
- Paper crumpling – have the child tear a piece of paper up only using their finger-tips. They then must crumple the paper up into small balls, only using their finger-tips. When they have done this, they can then glue the small crumpled up paper balls onto another sheet to create a collage/picture.



## **Finger Isolation Activities:**

- Playing games with “puppet fingers” - the thumb, index, and middle fingers. When telling a story, have the child's puppet fingers talk about what happened over the weekend, or use them in songs and finger plays.
- Sing finger isolation songs and do the actions (can be found on YouTube) such as baby shark, 5 little ducks etc.
- When using theraputty encourage the child to push each finger into the putty one by one, naming the fingers as they go.



## **Tactile Activities:**

Increased tactile sensory input may allow your child to *feel* their hands more and encourage more skilled use of the hands.

- Put several objects into a container of sand, rice, pasta or small plastic beads. Ask the child to find a particular buried object/toy/shape using their hands
- Washing dishes, baking, planting seeds etc., are all great activities for making children aware of their hands.
- Play with sand; scoop, dig, use a sieve. Put some sand on a tray and make shapes or letters with your index finger etc.
- Finger painting (add sand to the paint to add texture)

