



Fine Motor Control

What are fine motor skills?

Fine motor skills is the term used to describe movements in the hands and wrists, in particular the more refined movements in the fingers and thumbs. They enable dexterity and precision in our movements. We use our hands on a daily basis for a variety of activities and fine motor skills are necessary for most tasks a child has to complete. They will use them during play, self-care tasks, learning and the school day.

Babies start to use their hands from around 8 weeks old to learn and explore the world around them. From 6 months old, they are able to use their hands with more purpose to reach out and grasp objects. From around 11 months, they may be able to pick up a tiny crumb between their thumb and index finger (a pincer grasp).

The development of fine motor skills improves the way a child manipulates things and has a positive impact on their ability with every day functional tasks such as getting dressed, using cutlery, using technology and drawing or writing. Through playing with their toys, your child will be developing their fine motor skills every day without even thinking about it.



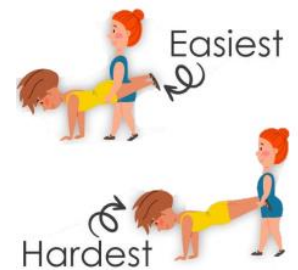
For fine motor skills to become established and to gain control over their fine motor movements, a child needs to develop different grasps, be able to move an object within their hand (in-hand manipulation), be able to isolate each finger, develop their hand strength and be able to use both their hands together (bi-lateral co-ordination).

Activities to Develop Fine Motor Control

Postural stability - When the bigger muscles of the shoulder girdle and trunk are strong and stable, the smaller muscles of the arms and hands can move freely in a controlled way. Try these activities: -



- Encourage your child to play or work above shoulder height, e.g., easel or blackboard, throwing and catching heavy balls (e.g., a large gym ball or a basketball).
- Adventure playgrounds provide lots of fun opportunities for children to develop these bigger muscles through equipment that encourage hanging, climbing, jumping, bouncing or pushing with both arms and legs.
- Work in pairs for wheelbarrow walks. Once they improve you can add obstacles they have to go around or increase the distance. You could even have a race if there are a few people. Ask your child to lie on their stomach, support their legs and ask them to walk with their hands. Make sure they keep their hands pointing forwards whilst they walk. If this is too tricky, start by supporting your child at the hips and slowly progressing down their legs.



Tactile perception - If you are not getting good tactile (touch) feedback from your fingers, it is hard to be accurate with them. Children can sometimes seem clumsy with their hands, dropping small items and letting things slip out of their grasp. They may hold items with too much force, so they can "feel" it properly. If you have noticed this, you can try:

- Messy play activities provide opportunity for tactile play. Examples include Crushing up wheat biscuits e.g., Weetabix, or hoop cereals such as Cheerio's with hands or hide motivating items in a box of crushed up wheat biscuit cereal or oats. Ideally these items should be small items of wrapped food that the child likes, but small plastic toys can be used if this is more motivating.
- Many craft activities provide resistance and thus increased tactile input. Examples are, using different textures such as fabrics, wool, cardboard; making texture rubbings, e.g., tree bark, coins, etc., drawing with paper over a textured surface such as corrugated card; ceramics and clay modelling; squeezing and pinching playdough.



Grasps – how you hold an object impacts on the amount of control you have. If all your fingers are “fighting” to do a job, then you have less chance of completing it successfully. Two of the grasps which give the most control over fine motor tasks and improve dexterity are the tripod grasp and the pincer grasp.



A tripod grasp uses the thumb, index finger and middle finger; this grip is really good for manipulation, e.g., using a pencil, tying shoelaces.

Try these activity ideas to develop tripod grasp. To help them keep your child's other two fingers out of the way, they can tuck a pompom or bead against their palm, using these two fingers to hold it in place.

- Tweezer games. Make sure the child holds the tweezers with three fingers. Ask them to pick up small items such as pompoms or rolled up pieces of paper and move them to a different pot. You can have a race to see who can collect the most items! For younger children, use tongs instead and larger items to pick up.



- Use clothes pegs to hang up dolls clothes or to help hang out the washing. If you have wooden pegs, you can write or draw on them and ask your child to spell words such as their name or match up pictures.
- Paint using a chunky paint brush or chalks, holding these with three fingers.



A pincer grasp uses only the thumb and index finger; this grip is really good for picking up small things, e.g., raisins, counters, beads.

To help them isolate the fingers needed for this grasp, ask them to hold a small item against their palm, using three fingers instead of two. Activities for a pincer grasp: -

- Making jewellery with beads, buttons or pasta shapes. Pick up the beads etc with a pincer grasp.

- Use playdough and pinch along the back of a sausage shape to create spines for a dinosaur, or crocodile.
- Peel off stickers and add them to pictures. You could try a collage and add extra beads, feathers, sequins googly eyes etc to the picture.



In-hand manipulation – lets us manipulate items in our hand without using our other hand. It allows us to move small items from our palm to fingertips, adjust an object using the pads of our fingers and rotate items using our fingertips. You can encourage this by: -

- Picking up and flipping coins or counters using one hand.
- Post coins in a piggy bank, moving the coins from the palm to fingertips using their thumb of the same hand. Start with one coin. Once they find this easy, you can add more coins.
- Stringing beads onto laces to create jewellery.
- Playing card games.



Finger Isolation – allows us to move certain fingers apart from the rest of the hand/fingers. When children begin using their hands, all fingers move together at the same time. As they grow and develop, they gain the ability to move individual fingers. To improve the mobility and the child's control over the individual movements of their fingers you can: -



- Get your child to draw with their index finger in shaving foam, sand or use finger paints.
- Sing hand actions songs such as "Itsy Bitsy Spider".
- Play with bubbles. Ask your child to burst the bubbles using their pointer finger.
- Play 'finger football' with cotton wool balls by flicking them across a table to score a goal.

Hand strength - Giving your child lots of opportunities to get the hands and fingers working together will improve hand strength and dexterity, allowing

them to control pencils and other small objects and tools. Some activities to help develop this are: -

- Arts and crafts. Include cutting things out with scissors.
- Use playdough to make models of animals, people and food. Roll with two hands together into sausage shapes and pinch along the top to add spines or patterns. Push holes into the dough. Press dough firmly with fingers tips then cut out cookies using cookie cutters.
- Construction activities such as Duplo, Lego, Stickle-Bricks, K'nex.
- Squeeze water out of washing up bottles to draw on the paths outside or knock over targets.
- Picking things up with tweezers or clothes pegs.



Bi-lateral co-ordination - if your hands don't work well together, your ability to do many fine motor tasks may be affected. We need both hands to work together in a co-ordinated way when using cutlery, tying shoelaces, building with construction toys and opening lids of jars. The following activities are only a few ideas that can develop this skill.

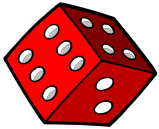
- Twisting/unscrewing e.g., jars, barrels, screwing rods, nuts and bolts. Use construction games that encouraging these actions such as Mecanno.
- Playdough/clay/silly putty e.g., rolling, pinching, squeezing the dough with two hands together. Use cookie cutters and press down with both hands.
- Drawing on blackboard/pavement/old wallpaper etc, using two hands at the same time. Try to mirror the movements of the hands.
- Threading activities e.g., cotton reels, buttons, pasta, beads.



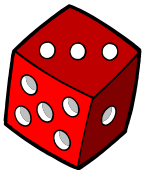
Box of toys

It might be helpful to have box filled with small toys and activities handy. This can be taken out when there is the opportunity to play such as five minutes before dinner is ready.

Some ideas for items you may wish to include: -



- Small Building blocks sets, e.g., Duplo/Lego
- Board games with dice
- Large and small threading beads with string, laces or pipe cleaners



- Hama beads
- Play-dough.
- Clothes pegs
- Tweezers or small tongs
- Small items to pick up such as beads, paperclips, small pom-poms.
- Counters or coins with a container



- Wind-up toys.
- Spinning tops
- Playing games with small pieces, e.g., travel games
- Card games, e.g. snap, matching pairs
- Various craft items; coloured paper, card, tissue paper, stickers, ink stampers and ink pad
- Small squeezable paint and glue bottles
- Cotton buds for painting



Store smaller items in small jars, containers or pencil cases. Use this opportunity for them to practice screwing lids, opening containers and fastening zips.



Adapted from Care & Learning Service, Highland Council: www.highland.gov.uk

These are only a few ideas of activities your child can do that will allow them to increase their fine motor control. For further information on specific skills, see our individual skills handouts.

Further resources:

For more resources to help with developing skills or for further helpful tips and tricks, please visit our website or lookout for our Facebook posts.

www.nhsborders.scot.nhs.uk/cypot

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