

## Activity Ideas for Hand Strengthening and In-hand Manipulation

If children have a degree of hypermobility over their thumb joints and/or fingers they may experience difficulty with fine motor control. When they are completing tasks that require the grip and manipulation of objects and tools, they have to work harder to carry out these activities.

Where there is hypermobility present through the wrists, elbows and shoulders this impacts on the ability to stabilise objects and apply necessary pressure and power within tasks that involve use of the hands.

The following is a list of activities that can be used to develop strength of the hand. They aim to develop overall grip, manipulation and stabilisation which will result in improved control of fine motor tasks. They need to be implemented in a graded way and can be part of everyday activities. It is better to carry out these activities on a 'little and often basis' rather than for longer periods of time to prevent fatigue and encourage development of hand strength. Make it fun!

### Activities for Home: (Working/playing with an adult)

- **Construction toys** – lego, k'nex, meccano, nuts and bolts.
- **Baking** – 'rubbing in' method, making/rolling out cookie dough.
- **Tearing/scrunching tissue paper into small balls** – use to make a collage, decorate cards etc.
- **Playdough** – squashing, squeezing, rolling, pinching, poking, pressing.
  - Make pretend food
  - Make dinosaurs – roll a sausage shape and pinch a spine along it, poke holes for eyes etc.
  - Make hedgehogs by pushing cocktail sticks into a ball of dough
  - Hide small items inside a big ball of playdough then get the child to pull it apart to find them
- **Feely bag** – place lots of small objects inside a drawstring bag. Ask the child to place their hand inside and without looking, select one item at a time and tell you what it is. Alternatively, ask the child to find a named item within the bag by touch alone. Use both hands individually.
- **Penalty shoot out** – tear and scrunch up paper into small balls. Line them up then take it in turns to flick them into container or 'goal' using index finger and thumb.
- **Use a hole punch**
- **Water targets** – when weather allows, use squeazy bottles filled with water or trigger-action water pistols to hit a target (or each other!)
- **Squeazy football** – use a turkey baster or squeazy toy to play table-top football with a tissue paper ball.

- **Coin race** – using small coins and only one hand see how many coins the child can pick up, one at a time, using a pincer grip then moving the object into the palm of their hand without dropping any or using the table, body or other hand to assist. Try to beat the score each time – keep a scoreboard, or race against each other.
- **Clothes peg hunt** – peg clothes onto the child's clothing whilst they keep their eyes closed then let them find and remove all of the pegs. Start with large pegs that require less strength then gradually introduce pegs that require greater force to open/close them. Alternatively sort out and hang up the family washing together.
- **Popping bubble wrap between finger and thumb.** Race against each other to pop an identified number
- **Commercially available games** that involve use of tongs to collect items, pressing down with index finger etc. e.g. Tiddly winks, 'Flipping frogs', 'Operation' (disconnect the battery to reduce frustration!).
- **'Tug of war'** – Grip a piece of thin card between pads of index finger and thumb and pull against each other.
- **Bandage race** – Place a crepe bandage or length of wide ribbon on the table, stretching away from the child. Have the child place their wrist on the end of the bandage nearest them. With one hand, gather the material into the palm of the hand using fingers and thumb as quickly as possible. Race against the clock or each other.
- **Hair-band stretch** – Place small towelling hair bands around the end joints of the index finger and thumb. Count how many times you can stretch the finger and thumb open and closed without flicking the hair band off.
- **Activity Tray for School: (Working independently or with another child)**

#### Instructions

- Use a standard classroom tray or box, marked with an age appropriate picture of hands at work, to enable the child to identify it.
- Select a range of activities from those below to include in the activity tray. Change the activities regularly to maintain interest.
- Place each activity in a different container; this in itself gives daily opportunities to practice skills requiring hand strength and dexterity. Try to include: screw-top jars, small 'lunch-box' type containers with lids, re-sealable bags and zip wallets.
- Allow the child to select an activity from the tray as a reward for completing his work, during 'free-choice' time etc. This means that they have some independent choice but the activities are all things that will help him develop relevant skills.
- It is important that all activities offered look age-appropriate for the child's chronological age, even though they may be working on skills that are developmentally below this.

- Ensure that each activity has a picture with it to show what is required, if it is not obvious. Initially, an adult may need to work through the activity with them until they become familiar with it.

Activities:

- **Sorting activities**, incorporating use of small plastic tongs or tweezers. This could incorporate science concepts, letters, numbers etc.
- **Small construction toys** e.g. lego, k'nex, meccano, (with designs to copy).
- **Small clothes pegs** and letter/number/picture cards to be pegged onto a word or number line e.g. cvc words, pattern sequence etc.
- **Feely lotto** – drawstring bag filled with small objects or plastic letters, numbers etc and lotto board(s) with corresponding items. Items are to be identified by touch alone and matched with those on the board. Alternatively use a purse and a selection of coins to match by touch alone.
- **Playdough picnic** – Include laminated pictures of plates of food e.g. sausage, chips and peas, pizza etc. and a plastic plate. Encourage the child to use playdough to make the food shown in the picture (e.g. pinching, rolling with whole hand and/or finger tips).
- **Target Practice 1** -Tiddly wink counters or 'flipping frogs' with a target marked out on a piece of card.
- **Threading** – Use small 'soup-pasta' tubes, tiny beads and a short length of plastic clothes line. Include sequencing/pattern cards to copy.
- **Target practice 2** – Include tissue paper to tear off and scrunch into small balls, a turkey baster or squeazy toy (age appropriate) that will puff air plus a target sheet or goal to aim at.
- 'Rubik cube' type puzzles (requiring simultaneous grip and twisting/turning).

**N.B.** These are ideas not an exhaustive list; please feel free to be creative, add new ones or adapt the activities for any class topics that you may be covering, remembering that hand strength and in-hand manipulation are the targeted skills.