

Fine motor skills: Hand Strength



What is it?

Fine motor skills are movements that involve intricate and skilful use of the hands and fingers. Hand strength refers specifically to the power of the muscle groups within the hand. Grip strength refers to whole hand strength. Pinch strength involves the thumb and index finger (and the middle finger if required).

Muscle strength of the hands and fingers increases as children grow and participate in everyday activities. Activities such as climbing, playing with toys or scribbling with crayons all help to develop and strengthen the muscles of the hands and fingers. Hand and finger strength is important as it is required for many everyday activities children engage in, such as dressing, using cutlery, using scissors and completing pencil activities.

Children with reduced hand strength skills may:

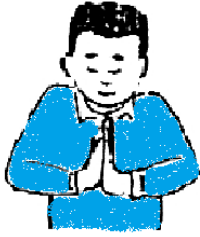
- Fatigue easily during fine motor activities
- Be unable to successfully complete every-day tasks expected for their age:
 - opening/ closing scissors
 - open/ close small containers or bottles
 - managing buttons and zips
 - tying shoe laces
 - assembling pieces during construction tasks
- Struggle to keep up with the same level of written work as peers of the same ability
- Find it difficult to sustain the quality of written work , particularly for longer pieces
- Alter the grasp used to manipulate small objects

5 key ideas:

- Provide opportunities to further develop hand strength
- Ensure appropriate positioning at the desk to create a good base of support for fine motor activities
- Be mindful of the child's tolerance level, and work within their limits by breaking tasks down into manageable chunks to facilitate success
- Consider compensatory strategies to encourage success such as adaptive scissors or pencil grips
- Encourage child to self-monitor, taking a short break before the experience of hand strain – simple activities such as stretching out the hands or dropping arms down beside body and shake gently, should provide some relief

Strategies for the classroom and home:

- Complete warm up exercises before activities that use the hands:



Push palms together really hard!

Make sure elbows are at right angles to wrists. Hold for a count of 5. Slowly release. Repeat 5 times.



Pull hands apart as hard as possible!

For a count of 5. Release. Shake out hands. Repeat 5 times.



Give yourself a big tight hug!

Hold for a count of 5. Release and give arms and hands a big shake out. Repeat 5 times.



Reach up high!


Stretch one arm up and then the other. Draw circles in the air. Repeat the sequence 5 times.

- Provide opportunities to further develop hand strength:
 - Gross motor activities such as climbing frames or jungle gym
 - Playdough and clay play – see sheet enclosed
 - Art and craft activities involving tearing/ scrunching paper , pipe cleaner modelling, hole punching
- Construction activities such as Hammering activities, assembling nuts and bolts (with screw driver or by hand) or building games in which objects must be pushed



- together and pulled apart e.g. Lego/ duplo/ stickle bricks, K-nex
- Games with clothes pegs
- Assign child jobs such as cleaning tables/ board or watering plants with a spray gun
- Adapt tasks where possible, considering breaking tasks down into manageable chunks, allowing short breaks and using alternate resources such as pencil grips/ adapted scissors
- Encourage independence with self-care tasks to build stamina, such as opening containers or carrying / pouring tasks

Activity ideas for home:

- Have your child help out with everyday chores in the house:
 - Dusting, polishing
 - Hoovering
 - Putting away shopping
 - Pulling wet clothes from the washing machine
 - Rip up junk mail
 - Baking – mixing, rolling
 - Drying dishes
 - Sweeping, collecting up leaves
 - All gardening activities – digging, watering plants, weeding
 - Washing the car
- Play-park activities – monkey bars, climbing frames, swings
- Playdough/clay/plasticine – see info sheet enclosed
- Clothes pegs – place pegs around the edge of a container, or hang socks on a play clothes line 
- Finger football – tear off small pieces of paper, crumple them up, and use fingers to flick them toward 'goals'
- Tweezer games – use tweezers to pick up buttons/cotton wool balls/ dried peas etc.
- Bubble wrap – burst the bubbles on a sheet of bubbles wrap
- Construction toys e.g. Lego, K-nex etc