### Hand and finger strength



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### Definition

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 such as doing up buttons and zips, climbing monkey bars or cutting up a piece of steak at mealtimes. It also helps to develop the endurance to complete activities such as writing a full page.

Grip strength refers to whole hand strength. Pinch strength involves the thumb and index finger (and the middle finger if required).

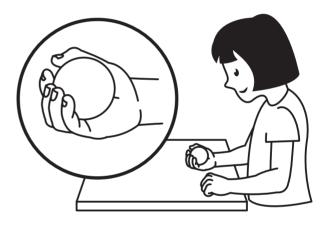
### **Helpful strategies**

• Encourage your child to do everyday activities by herself and only assist if necessary.



- Encourage your child to do fine motor activities as much as possible. For example, drawing, craft activities, playing with playdough, building with blocks.
- Encourage your child to draw and to do activities on a vertical surface. This helps develop and strengthen your child's arms, hands and fingers. For example, encourage your child to draw on a blackboard, colour in at an easel or put stickers on a piece of paper taped to a wall.

Encourage as many strengthening activities throughout the day. Any activity that involves gripping against resistance will increase hand strength when used over time. For example, playing with playdough, or building with duplo or lego. As your child's hand strength improves, increase the amount of resistance in the activity. For example, encourage your child to squeeze a soft ball 10 times. As strength increases encourage her to squeeze a firmer ball.



The number of times or repetitions that your child does an activity can be increased as hand strength improves. For example, once your child can comfortably squeeze a ball 10 times then encourage her to squeeze it 20 times.

Please talk to your occupational therapist if you have any queries about the above information.

## Activity ideas for grip strength

#### **Fine-motor activities**

- Play with playdough, biscuit dough or exercise putty knead, squeeze, roll, cut out using cutters, squeeze playdough through a garlic crusher.
- Make as many playdough sausages as you can in one minute. Then cut up the sausages with scissors or a plastic knife.
- Make a bird's nest by pinching the playdough between the thumb and fingers, then make eggs for the nest by rolling the playdough into balls.
- Pop beads, duplo or construction sets can be pulled apart and pushed together.
- Squeeze soft balls (or squeeze toys) squeeze 10 times or as many times as you can in one minute to make it fun. Progress to using firmer rubber balls as strength increases.
- Newspaper scrunch scrunch up sheets of newspaper into balls. Once a few balls have been made throw them into a bin or at a target.
- Tong relay pick up small toys or objects with a pair of tongs and run and place them in a container. Time your child and see if he can do it quicker next time.
- Hammering activities.
- Hold and use a stapler for art and craft projects such as making paper chains or a book. Use thicker paper or cardboard to increase the strength demands.
- Take lids on and off jars that are filled with fun objects such as stickers, stars, small plastic animals or bugs.
- Sharpen a packet of colouring pencils.

Please talk to your occupational therapist if you have any queries about the above activity ideas.





## Activity ideas for grip strength

#### **Everyday activities**

- During bath-time squeeze water out of a face washer, or play with water toys that require squeezing.
- Squeeze out a sponge before wiping down the kitchen table or bench.
- Use a spray bottle to water plants.
- Get dressed and undressed by yourself.
- Carry shopping bags.
- Cooking mixing, sifting, kneading or use a rolling pin or cutters.
- Peel and cut up fruit or vegetables. Start with easier to cut foods such as bananas or cucumbers and build up to harder foods such as carrots or potatoes.
- Grate cheese or carrots.
- Make toast or sandwiches open jars of vegemite, peanut butter or jam and use a knife for spreading and cutting.
- Use a knife and fork to cut up food at mealtimes. Start with easier to cut foods such as potatoes or sausages and gradually build up to harder foods such as a steak.
- Squeeze juice from an orange or lemon.
- Pour milk, water or cordial from a container to a cup.

Please talk to your occupational therapist if you have any queries about the above activity ideas.





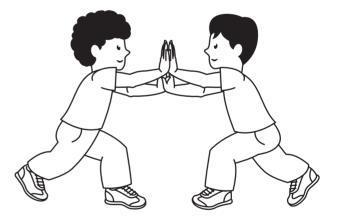
## Activity ideas for grip strength

#### Gross-motor and outdoor activities

- Play tug of war using a dressing gown cord or twist a towel to make a rope. (This activity requires supervision).
- Carry toolboxes, handbags or buckets with water or sand.
- Climb monkey bars, ladders or hang on a trapeze swing.
- Play in a sandpit or garden using spades, rakes and other digging tools.
- Squeeze out a sponge to help wash the car, cubby house or outdoor toys such as balls, bats and bikes.
- Woodwork activities hammering, sawing, sanding.
- Ride a bike or scooter.
- Cricket, tennis and other bat and ball games.
- Stand opposite your child and place the palms of your hands against your child's hands. Try pushing each other over.
- Fly a kite on a windy day.

Please talk to your occupational therapist if you have any queries about the above activity ideas.





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## Activity ideas for pinch strength



Encourage your child to do these activities with her thumb and index finger (and middle finger if required).

- Tear up coloured paper for pasting, paper-mache or collage activities.
- Make ten small balls from playdough or Blu-Tack and then squash the balls between your thumb and index finger. (Pretend the playdough is a bug or egg.) Repeat with the thumb and middle finger, and then with the thumb, index and middle fingers all together.



- Squeeze clothes pegs to remove them from the rim of a peg basket (or ice-cream container). Hang out doll's clothes or dress ups on a clotheshorse.
- Duplo, lego and other construction toys.
- Undo and do up nuts and bolts.
- Squirt a water pistol at a target.
- Use tweezers to pick up small beads, smarties or toys and put them into a container.
- Use an eye-dropper and food colouring to change or mix colours.
- Use stamps and ink pads.
- Draw with chalk on a blackboard or on concrete.
- Peel off and stick stickers.

- Use sticky tape for art and craft projects.
- Knit using needles or a knitting nancy.
- Threading activities such as beads or lacing cards.

Sheet E4

- Make friendship bands using colourful cotton or thread.
- Play with wind-up toys.
- Deal out the cards when playing card games such as Uno, Fish, Snap or Solitare.
- Tie up a balloon.
- Art activities that require colouring or scribbling with crayons or pencils for long periods. For example, trace around your child's body on a large piece of paper and get her to draw and colour in all her features and clothing.



 Scribble or colour over coins, templates or other textured surfaces.

Please talk to your occupational therapist if you have any queries about the above activity ideas.

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### Activity ideas for pinch strength

### **Everyday activities**

Encourage your child to do these activities with his thumb and index finger (and middle finger if required).

- Do up buttons on pyjamas and clothing.
- Do up zips on pencil cases, bags or clothes.
- Squeeze toothpaste onto a toothbrush.
- Peel an orange or mandarin.
- Open up pop-top drink bottles and lunch boxes.
- Open yoghurt containers, biscuit, chip or lolly packets.
- Open a can of tinned fruit or vegetables with a can opener.
- Use an eye-dropper to transfer cordial into a glass of water.
- Writing is a good strengthening activity, however, get your child to stop when his hand is tired. Gradually build up the length of time he writes. School homework can be a good time for practicing writing. Write birthday cards, shopping lists, lists of favourite movies or sportspeople, or make a football ladder.

Please talk to your occupational therapist if you have any queries about the above activity ideas.





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