



Vranch House

Ideas to Help Develop Arm and Hand Strength

Activities to strengthen arms and hands

The shoulder

Although we generally associate the hand with writing and other fine motor activities, the whole body has a role in these tasks. The shoulder and the spine provide the stability that supports the positioning and movement of the arm and hand.

- Make 'hot dogs' – Roll the child in a blanket / towel with slow, firm, steady pressure. Pretend to add 'ketchup', 'mustard', 'relish', 'onions' .
- Play 'melt the ice' – Hug knees as hard as you can. Hold this position except for the body parts named one at a time that can relax slowly like 'melting ice'.
- Have a 'turtle race' – place a large bean bag/jacket/throw on a child's back for the shell and have the child crawl while trying not to lose the shell. Increase the difficulty by incorporating an obstacle course.
- Play 'Tug of war'. Use a large diameter rope or a long towel rolled along its length to provide a good gripping surface. Let the child do most of the pulling.
- Swing from monkey bars, tree branches and rope swings.
- Push, pull or carry heavy objects – wagon, wheelbarrow, boxes, vacuum, stack of books, tray of milk cartons for snack time.
- Imitate animal walks – crab, bear, seal, bunny hops, frog leaps, donkey kicks.
- Bear weight on hands – wheelbarrow walking, push-ups from the floor/wall/chair, position self on all fours and rock, hold up upper body while lower body is supported by a large ball, chair or cushion.
- Play target games with differently weighted balls/items.
- Lie on stomach propped on elbows while reading, playing a game, watching TV.

Wrist

The wrist joint is stabilised by equalising the length and strength of the extensors and flexors of the wrist as they cross the joint. This balance is necessary to shape the hand to perform fine motor tasks. The wrist is more stable but less functional in a flexed position. A bent (flexed) wrist posture should not be seen if skill development is progressing normally. The wrist joint should be straight or slightly extended for fine motor hand skills.

- Write or draw on blackboard above eye level with chalk positioned like a knife
- Work in a vertical position whenever possible to colour or paint.
- Use rolling pins to flatten material such as clay or crush crackers into crumbs. Keep hands open on rolling pin rather than use the handles.
- Practice various pouring activities – strive for accuracy in force of movement, use different size containers, material types, material weights, material amounts

Arches

The arches of the hand direct skilled movements of the fingers and grade the power of the fingers. The hand should be mobile enough so that it can become hollow and form a deep gutter at the base of the long finger.

- Play finger patterns while supporting hand on a ball
- Stabilise the forearms on a tabletop with palms down. Scrunch a towel under the palms using the fingers.
- Play 'spider' on a mirror.
- Cup hands to shake dice when playing a game.
- Close zip lock bags using a pinch grip with each finger and thumb.

Developmental activities to strengthen the muscles in the hand

To use our hands with speed and precision, we use intrinsic muscles which are the tiny muscles inside the hand.

- Shape the fingers to pick up varying size of objects. Ask the child to guess the shape that the hand needs to make before picking up the object.
- Play Tug of War using small objects
- Roll small balls of Play Dough or Silly Putty between the thumb and fingers 2 & 3
- Bead stringing/threading cards
- Squeezing a ball
- Snap clothes pin exercises
- Paper punch tasks
- Play with tweezers
- Putting coins in slots
- Pick up sticks
- Holding, moving small objects in hand (jacks work well)
- Turning over discs and cards
- Tiddly Winks
- Cutting activities, including cutting tiny straws, old playing cards and normal paper. Start by positioning scissors appropriately and putting something in the child's hand to keep fingers 4 & 5 blocked

Blended grips

A blended grip is a combination of power and precision grip in the same hand. One-handed activities that require a combination of power and precision are:

- Pushing a cap off a ball point pen, turning on a torch,
 - opening or closing a safety pin,
 - picking up a pencil and 'flicking it into position' to write,
 - adjusting the nozzle on garden hose, buttoning a cuff button,
 - Screwing or unscrewing the cap from a tube of toothpaste with tube held across the palm.
- Bilateral activities that require a combination of power and precision:
- Shoe tying,
 - Knots, braiding,
 - knitting,
 - crocheting,
 - playing 'Cats cradle'

This information sheet was developed by Vbranch House Therapists .
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