

Hand Skills

Pincer Grasp

The development of the pincer grasp is an important milestone in a child's fine motor skills. It refers to the ability to pick up small objects using the thumb and the tip of the index finger. This skill typically develops in stages:

- Raking Grasp (around 6-7 months): Before the pincer grasp, babies will use their whole hand or a "raking" motion to bring objects toward them. They don't yet have the fine control to pick up small objects between their fingers.
- Inferior Pincer Grasp (around 8-9 months): At this stage, babies can use their thumb and the side of their index finger to grasp small items, though it's not yet a precise grip. It's more of a "thumb and finger" pinch, but the fingers aren't fully extended yet.
- Fine or Superior Pincer Grasp (around 10-12 months): By this time, babies are able to pick up tiny objects using the tips of their thumb and index finger in a more controlled, pinching motion. This grasp is essential for tasks like picking up small pieces of food or toys, and it sets the foundation for later skills like holding a pencil or using scissors.
- By around 12 months, most children are able to use a refined or neat pincer grasp, and it becomes a key part of their ability to manipulate objects, self-feed, and explore their environment. Occupational therapy can help children develop this skill when needed, ensuring they have the strength and coordination for more complex tasks as they grow.
- When first starting out, many children will need to use the index and middle fingers together against the thumb for pinching. As all of the hand muscles develop and strengthen, there will be less reliance on the middle finger.

If your child is using all fingers to "rake" items into the palm or pinching with the thumb against the side of the index finger, try some of these activities to develop a more mature pincer grasp:

- Note: Supervision is required as children may mouth the objects suggested for practice.
- Simple sorting of small, objects such as beads, beans, pompoms and cotton balls into ice cube trays etc. will help practice this skill. Practice peeling stickers.
- Placing coins/bingo chips into narrow slots such as a piggy bank.
- Use a pinch to pull off /squeeze pieces of playdough. Try having the child push candles in/out of a playdough cake, and find small toys hidden in the playdoh (like pony beads).
- Practice opening/closing zip-lock bags using fingertips.
- Use tongs, tweezers, and strawberry hullers to move safe small objects to containers.
- Practice opening and closing clothespins using the thumb, index and middle fingers. Start with clothespins that are easier to open (plastic is often easier than wooden). Put these clothespins on the sides of containers or on the edges of firmer paper.
- If the child is having difficulty pinching with just the index and middle fingers opposite the thumb, have them hold a small object (coin, pompom) against the palm with the ring and pinky fingers of the hand.
- A pincer grasp will firstly help a child to feed more independently by being able to pick up small bits of food and place the food into the mouth. The pincer grasp allows for a more refined and neater way to get food into the mouth. Help your child to develop a pincer grasp by placing small food pieces on their thumb pad and encourage them to pinch this food and then bring it to their mouth. Alternatively, hold a small piece of food in your fingertips and encourage the child to grasp the food from your fingertips. Practice this during meals and snacks.

Index Finger Isolation

Index finger isolation is a critical skill, focusing on the ability to move and use the index finger independently from the other fingers. The ability to isolate the index finger generally begins to emerge around 12 months of age. At this stage, infants start to show more refined finger movements, like pointing or using their index finger to explore objects. This milestone is crucial as it marks the beginning of developing more precise hand control. By the age of 2, children should be able to consistently isolate their index finger for activities like pointing to objects or pressing buttons.

To help a child learn how to isolate their index fingers, consider practicing the following activities for a few minutes per day:

- Caregiver modelling the action of pointing or poking with index finger.
- Caregiver helping child curl in their middle/ring/baby fingers into the palm, so that only the index finger is straight, until index isolation becomes habitual.
- Poking holes in balls of play dough, or in plastic wrap stretched over a bowl, or in soil to plant seeds.
- Drawing with the tip of index finger in finger paint or shaving cream on table or mirror, or tracing lines/patterns/shapes in wet sand.
- Using cause/effect toys with push buttons or dials (e.g. toy phones).
- Pointing to pictures or parts of pictures, or touching sensory books with finger.
- Pressing keys of keyboard toys or musical instruments.
- Placing a sock with a small hole cut in it pulled down over the hand and held at the wrist with a tie, so that only the index finger can extend through the hole. This should be used only while doing pointing exercises.

Wrist Rotation

Wrist rotation is an essential skill in occupational therapy, involving the ability to rotate the wrist to perform tasks such as opening a container, turning a doorknob, using a screwdriver, drawing and writing. This skill is crucial for daily activities and fine motor development. Typically, wrist rotation begins to emerge around 18 to 24 months, when toddlers start to gain the strength and coordination to rotate their wrists effectively. By age 3 to 4, children refine this skill, allowing for more complex movements and control over tools and utensils.

Consider the following suggestions to work on wrist rotation:

- Offer toys that the child must turn to insert, like the piggy bank toy with slot for “coins”, and square and triangle shapes to insert in formboard puzzle & shape sorters.
- Provide hand over hand assistance to teach the child how to turn their hand/wrist when they are playing with those toys.
- Provide cue word “turn” while helping with hand over hand assistance to turn their wrist to insert shape/toy.
- Practice with both right and left hands.