

HAND DOMINANCE

Why is it important for my child to develop a dominant hand?

Hand dominance typically develops by the age of five. You will notice that your child may be using one hand more consistently to pick up items. The hand that is used consistently is called the dominant/doing hand. Hand dominance is an essential part of helping your child to develop pre-writing, handwriting and fine motor skills. Children that continue to switch hands and do not develop hand dominance can have difficulty building strength in the writing hand and in developing these essential skills.

The following strategies are commonly used in Occupational Therapy and are recommended to develop your child's hand dominance;

- **OBSERVE WHICH HAND IS BEING USED CONSISTENTLY:** Your child may begin to show a preference for being right or left handed from the age of two. Observe which hand your child is choosing to use to pick up a glass, pick up a spoon, brush their teeth, pick up a crayon, the hand used when toileting. The hand that is used consistently in these tasks is called the dominant/doing or preferred hand. When you are observing or exploring which hand might be your child's preferred hand it is important to make sure that the object being picked up is directly in front of the child's body and not to one side. For example, place a spoon/glass/toothbrush/crayon directly in front of their body and say pick up the spoon. If the object is not directly in front of the child they will choose to pick up the object with the hand that is closest to the object and this will not give you a true understanding of which hand is preferred/dominant.
- **NAME THE DOMINANT AND NON-DOMINANT HAND:** When the dominant hand is confirmed it is important to name the dominant and non-dominant hand with your child. For example the dominant hand can be called the 'doing hand' the non-dominant hand could be called the 'helper hand'. This will help your child to understand that each hand has a job/role when completing daily tasks. For example when opening a lunch box remind your child that the helper hand must hold the lunch box steady as the doing hand opens the lid and does the important work.
- **PLAY GAMES:** Put your doing hand in the air. Give me a high five with your helper hand. Wave at me with your doing hand.
- **WHY ARE THEY SWITCHING HANDS?** Switching hands can occur if the dominant/doing hand lacks strength and/or if the child has not yet learned to cross their midline.

LACK OF STRENGTH: A child can continue to switch hands when the dominant/doing hand is not yet be strong enough to complete tasks. Please refer to the fine motor skills and pre-writing skills handout for strategies on how to strengthen the shoulder, arm and dominant hand. Continuing to switch hands should be discouraged as the dominant/doing hand will not develop enough strength to hold a pencil, colour, draw and write. As your child learns to use the doing hand more when completing tasks, strength and endurance in this hand will naturally develop overtime.

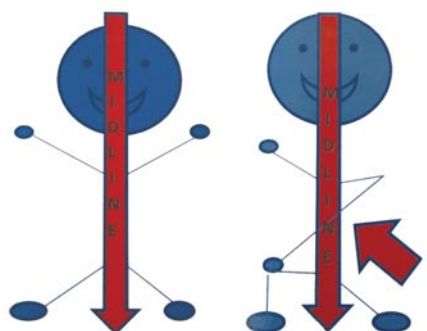
THEY HAVE NOT YET LEARNED TO CROSS THEIR MIDLINE: A child can also switch hands when they have not yet learned how to cross their midline. The midline is an imaginary line down the middle of your child's body. it is important when developing hand dominance that your child learns to cross their midline with the dominant/doing hand. A child that has not learned to cross their midline will continue to switch hands.

- **MIDLINE CROSSING AND SETTING UP THE ENVIRONMENT:**

Place objects on your child's non-dominant side to encourage your child to use their dominant/doing hand to cross their midline and pick up the object. For example when colouring or picking up crayons, place the crayons on the non-dominant side and remind your child the doing hand can only pick up the crayons. When having breakfast place the glass/cup on the non-dominant side and remind your child that the doing hand must pick up the glass/cup.

The Midline divides left and right side of the body.

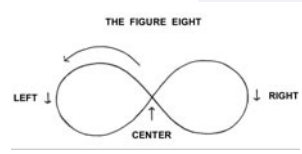
Crossing the Midline: Essential when developing hand dominance.



- **FLOOR TIME:** Encourage your child to assume positions for play that do not allow them to rotate their bodies. A good position to help with this is lying on their tummy on the ground supported on their elbows. This position should be encouraged when playing games such as matching games, card games, Lego, puzzles, putting coins into a piggy bank or connect 4. For example, with your child lying on their tummy with elbows supported, place coins on your child's left and right side with the piggy bank in their midline. Your child can be given a job to hold the piggy bank steady with the helper hand in the midline whilst their dominant /doing hand must pick up a coin on one side, then the other, and so on until all coins are placed in the piggy bank.



- **DRAWING, COLOURING, AND WRITING:** Drawing a large rainbow or figure of eight/lazy eight (number 8 on it's side) encourages your child to work left to right crossing their midline with the dominant/doing hand. Draw these on a chalkboard, whiteboard or A3 piece of paper. Your child could also sit on the A3 piece of paper on the ground and draw the rainbow from left to right or right to left. It is important to observe and ensure that your child is picking up colouring, drawing or writing tools consistently with the doing hand. If the helper hand is seen to be used, encourage your child to drop it and pick it up again with the doing hand. Remind your child that the helper hand holds things steady whilst the doing hand is doing the work.



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- **TOYS:** Toys often need to be stabilised with the helper hand when playing. Examples of these toys include jigsaws, threading beads, building a lego tower, opening bottle tops, nuts and bolts, stencils and lacing boards where your child must bring a lace through a hole with the dominant/doing hand whilst the helper hand holds the lacing board steady.
- **BALL GAMES:** Practise a one handed underarm throw using the dominant/doing hand. An underarm throw is a movement commonly used when bowling. Your child can be reminded to put the helper hand behind their back as the dominant/doing hand is only needed in this game. Bean bags or the object to be thrown can be placed on the ground on the non-dominant side to encourage your child to cross their midline. Give your child praise for using their doing hand for example; "Well done, your doing hand is doing such a good job throwing all those beanbags into the hoop". Also practise bat and ball games or hitting a ball attached to a string.
- **SCOOPING GAMES:** Your child can be encouraged to pick up a spoon with the dominant/doing hand and practise scooping rice, sand or beads into containers such as an ice cube tray. The beads or objects to be scooped can be positioned on the non-dominant side to encourage midline crossing. Ask your child 'which hand is going to hold the bowl steady, which hand is going to use the spoon to do the work?'
- **CHOOSE ACTIVITIES WHERE TWO HANDS ARE NEEDED:** Remind your child that the 'helper' hand holds the object steady as the 'doing' hand does the work. Practise opening and closing containers and screwing lids off jars. Practise pasting and gluing activities. Other activities include peeling stickers off backing, threading beads onto a lace, tracing over their helper hand, pencil and paper tasks and colouring. Your child can practise picking up and holding a child sized scissors in the doing hand under supervision whilst the helper hand learns to hold the page steady when cutting. Learning to play a musical instrument is also an idea.

- **MIDLINE CROSSING AND LEARNING ABOUT LEFT AND RIGHT:** As your child grows they will need to become aware about the right and left sides of their body. Which hand is called right and which is left. To help your child with this as well as continuing to develop midline crossing, practise games where you ask your child to;

- * Put your right hand on your head
- * Put your left hand on your tummy
- * Put your right hand on your left elbow
- * Put your right hand on your left foot
- * Point to something on your right side. Is the chair on your right or left
- * Practise opposite elbow to opposite knee x 10 repetitions
- * Practise opposite hand to opposite foot x10 repetitions

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- **REPETITION AND PRACTISE:** Repetition and practise is key to supporting your child to develop hand dominance and midline crossing.



Cork & Kerry Primary Care Paediatric Occupational Therapy Departments