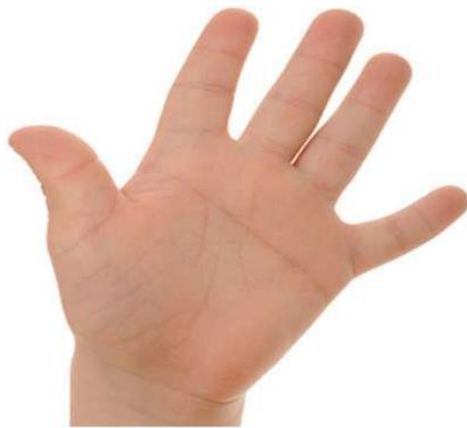


DEVELOPING WRITING SKILLS IN CHILDREN WITH DOWN SYNDROME SOME TIPS

Finger Strengthening Exercises for Writing for Children with Down Syndrome



Strengthening the intrinsic muscles of hand for hypotonia, involving thumb movements as it is used more in pencil grip for writing skill.

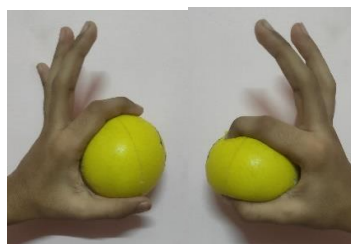
- 1) Make a fist - make a gentle fist by folding your thumb across the fingers



- 2) Ball squeeze - for grip strength, hold a soft foam ball and squeeze and hold for few seconds and release. Repeat for 10 counts.



- 2) Pinch a ball - Pinch a soft foam ball between the tips of your fingers and your thumb. Hold for few seconds and release. Repeat for 10 counts.



3) Thumb sliding - Start with hand out in front, palm up. Thumb away from other fingers as far as possible. Then bend the thumb across the palm so it touches the base of small finger. Hold for few seconds. Repeat for a count of 10.



4) Thumb touch - Hold hand out in front of, with wrist straight. Gently touch the thumb to each of the four fingertips, one at a time, touching the tip making the shape of an "O.". Hold each stretch for few seconds. Repeat for a count of 10.



5) Thumb rotation (opposition movement) - Hold your hand out, with fingers close to each other

except thumb. Rotate the thumb, diagonally direction to touch the base of the index finger.



Activities related to finger exercises

- 6) Squeezing water out of a sponge.
- 7) Dropping coin in a coin box with pinch grasp between thumb and index finger.
- 8) Playing with dough / clay.
- 1) Pop the bubbles on large or small bubble pack by pinching with thumb and index finger or by pushing down on bubbles when sheet is placed on a hard surface.
- 2) Building towers with small Lego bricks.
- 3) Playing with jigsaws & puzzles, develops pincer & tripod grasps.

Effective techniques in writing skills for children with Down Syndrome



Pre-writing skills

1. Use of two or one finger to squeeze a spray bottle



2. Spinning a top holding with thumb, index and middle finger.



Note the elbow and body position

Pre-writing skills

3. Roll a small clay ball with thumb and index fingers and place it.



4. Shoot marbles (Complete hand mind and eye coordination)



Pre-writing skills

5. Making pattern with index finger dipped in paint.



6. Cutting a clay or a paper and also pasting the bits of paper



Transition from pre-writing to writing skills

During the scaffolding stage - a caregiver need to sit behind the child to support their elbow enabling to function as desired.

For the skill of colouring within the lines, the pre-requisite will be the spatial awareness and hand control as part of the pre-writing skills.

writing skills

Important points to be noted before starting to write :

1. Identify the hand dominance
2. Ability of fingers to exert force
3. Steadiness of shoulders while writing
4. Awareness of letter and number formation (along with its name and sound)
5. Sensory processing in pencil control
6. Pressure applied on the surface-mechanics
7. Pre-writing strokes formation
8. Stabilizing trunk and neck to maintain the posture and to ensure readiness.

Writing skills

Issue to be addressed :

1. Hypotonia at fingers leading to hyper-extension

Suggested adaptations :

1. Use of rubber band or gripper for extra grip.
2. Use thick pencils/felt pens
3. Use wrist to pencil support.

Writing skills

Issue to be addressed :

2. Finger Isolation

Suggested adaptations :

1. Use triangular pencils
2. Use socks for hand with three holes (for thumb, Index and middle finger)
3. Use soft pad to tuck in the ring and little finger.

Writing skills

Issue to be addressed :

2. Sitting in upright position

Suggested adaptations :

1. Give a solid support to foot.
Knee to foot at 90 degree.
2. Flat seat with backrest
3. Writing desk at lower chest level.

Pre-writing skills and adaptations for writing skills

compiled
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