

## **To sit or to sidesit-----that is the question!!!!**

I was recently asked why I like to sit with children so that they are leaning toward one side with the arms down and supporting on one arm... what I call the side sit position.

Researchers have suggested three 'levels' of sitting. The first level is supported sitting or 'immature' sitting (Fishkind & Haley, 1986 ). The child is placed in sitting with the legs apart or crossed in front and the child places their arms down in front of them. The child can learn to stay in this position by using stronger back muscles (in the upper parts of their bodies) and their stronger hips muscles (hip flexors) plus behind knee muscles (hamstrings) in the lower part of their bodies. These muscles help you learn to balance without a lot of effort. They hold the position and move the body backwards and forwards. Movement in this forwards-backwards 'sagittal plane' will develop more easily than the next two levels of sitting.

The second level of sitting is 'transitional'. This occurs when the child is able to control their sitting position by actively putting their arms down when they start to move side to side. This is movement in the lateral plane and requires more muscle work, more effort and BALANCE of the torso.

When your child first tries to move side to side in sitting she will most likely fall over. And after that try, she will make every attempt not to go sideways! A child may move her legs wide apart so that her head and trunk are able to move only forward and backwards. Movement side to side is harder to control and will need extra help to develop. This movement prepares for balance skills by assisting the development of the muscles around the shoulder, trunk and hips that are needed for transitions and balance. Starting to prepare for level 2 in sidesitting allows the shoulder and elbow to become strong and stable. The shoulder muscles help support the head and ribs and allow the muscles around the lower trunk to work effectively.

An exciting aspect of sidesitting is that support on one hand frees the other arm and hand to develop more mature reaching skills. Rochat (1992) talks about the development of mature reaching including the ability to support on one arm while the other arm is free to move. Transitional sitting allows for this movement pattern to be practiced during play.

The third level is 'mature' sitting. This sitting is very dynamic: the child can move into and out of any kind of sitting position they choose and usually use one or both arms to assist with the change between movements.

Mature sitting forms a basis for further movement series. The child can move from floor to sitting to crawling, to kneeling or standing. This highest level of sitting requires that all of the muscles work together in the transverse or rotational plane of movement.

While your child may be working on the first level of sitting, I can begin to work on transitional or side sit in play sessions. I will ask for you to practice sitting in the side sit at home, because it is so difficult to master without a lot of practice.

If your child cannot yet sit dynamically, we may also practice the basic transition of moving

from lying on the back up into a sitting position. The sidelying lift up to sit, setdown series forms a basis for a 'routine' of movements. You may also be taught how to lift your child up to a sidesit, carry them in sidesit and setdown in sidesit positions. This series of lift up to sit and setdown into sidesit can also advance to occur from the all fours and a standing position as the child adjusts to being up higher against gravity. (See downloads on Practicing Basic Transitions for pictures)

Fishkind M, Haley SM: Independent sitting development and the emergence of associated motor components. *Phys Ther* 66: 1509- 1986.

Rochat,P. Self-sitting and reaching in five to eight month old infants: The impact of posture and its development on early eye-hand coordination. *Journal of Motor Behavior* 24(2): 210-220, 1992.