# VESTIBULAR ACTIVITIES FOR SENSORY PROCESSING DYSFUNCTION

- 1. Rocking chair
- 2. Rides in your lap
- Rides on a crossed leg 3.
- Therapy ball bouncing or rolling or side to side.
- 5. Row, row, row your boat song
- 6. Yoga exercises for children
- 7. Ring around the Rosie
- Magic mountain on your knees, lower one then the other and up again 8.
- Swings-both outdoor swing sets and indoor hammock type 9.
- 10. Activities on therapy ball
- Walking, Rolling, Sitting on air cushion such as blow-up air mattress
- 12. Rocker board
- 13. Slides
- Have two adults hold the ends of a blanket. Lay the child on the blanket, pick up the blanket, pick up 14. the ends and swing it forward-backward and side to side. Also, lift one end higher and alternate so child rolls inside blanket (also good for deep pressure proprioception).
- 15. Jumping on trampoline
- 16. Sit 'n Spin
- 17. Rough-housing—swinging child, holding over shoulders
- 18. Door frame climbing and jumping down
- 19. Wall walks-walking up a wall with the feet in a 'prone' type position, feet go from the bottom of the wall and walk their way up to a handstand position. Hold and then can somersault off and over.
- 20. Dancing with one's child to music-parent holding them hugged up against them in the air.
- 21. Horseback riding
- 22. Jumpoline
- 23. Head stands
- 24. Summersaults
- 25. Rolling
- 26. Sitting in an office chair and spinning it for rotary movement
- 27. Scooter board
- 28. Dizzy disc
- 29. Sitting on top of a sheet or blanket and have someone pull it across the floor (linear and angular movement).
- 30. Rolling on grass especially down slopes
- 31. Riding elevators or escalators
- 32. All kinds of Ferris wheels, bumper cars, and other fair rides
- 33. Roller blades
- 34. Walking on pillows and cushions
- 35. Swing hung low so that feet can touch the ground
- 36. Rolling and rocking in a padded barrel, peanut therapy ball, or egg shaped therapy ball
- 37. Climbing wall
- 38. Swimming and pool play
- 39. waterslides and tubing
- 40. Tia Chi
- 41. Tae Kwon Do
- 42. Karate

"The Vestibular System has its receptors in the inner ear and senses movement of the head in all planes. The sensory input we get through the vestibular system tells us exactly where we are in relation to gravity, whether we are still or moving, how fast we are going, and in which direction. Through its influence on muscle tone, the vestibular system affects posture and movement" (The Ready Approach, B. Hanschu 1997).

Vestibular = Moving the head through space; can be linear, angular, orbital, or rotational.

Vestibular sensation can bring about rapid calming or alerting, depending on how the sensation is given. Generally, when you provide slow, predictable, rhythmic sensation you get calming. When you provide rapid, irregular, unpredictable sensation you get increased arousal.

## General Considerations:

Activities should do the following:

- Provide stimulation in all head positions (3 planes)
- Vary speed from static to fast
- Include movement in both linear and angular directions; angular is more powerful, linear is usually more calming

Activities: This is a list of both calming and alerting activities. Discuss with an OT to determine which is best for your student. Any activity that can be done with eyes closed will concentrate treatment and concentrate on the vestibular system. Some of these activities can be incorporated into a Physical Education program, or as a whole class activity. Most of these activities can be provided as a brief pull-out of the classroom when required.

- Rocking in a rocking chair or glider (child sized, or adult sized)
- Swinging in a blanket this depends on the size of the child use up down as well as side to side
- Dizzy Disc spinning in both directions and with varied speed generally to music
- Spinning in an office chair (both directions as above)
- Swings inside and outside (tire swings if can be done safely)
- Playground slides, teeter-totter
- Sit and spin toys
- Scooter board activities
- Self-spinning dancing; jumping in a circle; dancing
- Therapy ball activities
- Hip Hop ball
- Figure 8 walks with activity to bend and touch the floor (pick something up along the way)
- Mini-tramp activities
- Somersaults

Child's Name	 	
Date		

CENTRAL NERVOUS SYSTEM STATE Classroom and Individual Practice

# SENSORY STIMULATION

# **Purpose**

To provide sensory stimulation to increase general activity level or muscle tone in preparation for fine motor activity

### **Materials**

Carpeted area or mat, loud music with irregular rhythm, and tape or record player

## Preparation

Turn lights to highest level of intensity. Provide instructions using loud, fast, enthusiastic tone of voice.

### **Position**

Child stands or sits comfortably on carpet or mat. Adult stands or sits behind child.

#### Procedure

- 1. Child jumps, rolls, spins in circles, or swings to the rhythm of the music or to verbal instructions called out by the adult.
- 2. Child is encouraged to move at a fast pace with irregular stops, starts, and changes in direction.
- 3. Child continues for 5 to 10 minutes, or until desired results are achieved.
- 4. When child is alert or tone is improved, follow with a purposeful fine motor activity. Continue to speak in irregular, enthusiastic tones. Start with rapid irregular movement, such as scribbling on chalkboard or textured surface; and progress to regular drawing, writing, cutting, or other fine motor activity.

## **Desired Response**

Child becomes more alert; muscle tone increases.

### **Undesired Response**

Child reacts with fear or stress responses, or behavior becomes more disorganized. If this occurs, decrease the level of stimulation.

## **Variations and Adaptations**

If child is unable to move independently, hold the child on your lap or in your arms while you bounce, swing, rock, or dance around. Always start with a level of movement or stimulation that is comfortable for the child, and increase from there. If rapid movement is threatening, start slowly and increase speed as comfort increases. Start with simple back-and-forth movement; then side to side; then diagonal; and only when the child is comfortable with all of these, rotary (spinning) movement patterns.

If child is confused, fearful, or overstimulated by the combination of sensory stimulation in this activity, start with simple movements (such as rapid rocking in a rocking chair or on a swing) without music, and add music only when the child is comfortable with a wide range of rapid, irregular movement activities.

In the classroom, let the children get up and move their bodies or jump around quickly for a few minutes to increase attention and muscle tone between periods of inactivity or desk work.

"Stop and go" running games and fast swinging in swings, hammocks, or net swings are playground activities that will increase alertness and tone if done quickly and with many stops, starts, and changes in direction.

### Caution

Do not use this technique with children who are hypertonic (have high muscle tone) or hyperactive (have a high activity level).

Observe child carefully during and following this activity to monitor its effects, and stop when the desired results are achieved. Make sure that it is not overstimulating or causing fear or discomfort.

Spinning can bring on seizures and should not be used or encouraged with seizure-prone individuals.

If movement or music is slow or regular, these same activities can be calming and may decrease tone. Be sure that you are encouraging rapid, irregular stimulation, and that you are promoting the results you want and not making the situation worse.