



*Assistive and Instructional Technology  
Supporting Learners with Disabilities*

# ASSISTIVE TECHNOLOGY SUPPORTS FOR POSITIONING

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Examples of assistive technology (AT) items used to support the various positions and movements used by children to explore and participate in various settings are listed below. Consider the various features of commercially available ones as well as adaptive equipment for a full range of options. Then match them to the specific features the child needs. Adaptations can further help to provide a more customized fit. Remember, the goal of the AT is to meet the developmental and participatory needs of the child and his family in the context of their natural environments

## SEMI-RECLINED

When a child is on her back she can move arms and legs freely but is limited in what she can see. Supporting a child's head at 30 ° allows her to better visually explore her surroundings, lets her feel more comfortable and makes it easier to use her arms while still able to move her legs. Shoulder supports help the child to bring her arms and hands together. This position can be used on the floor, in a crib or on a caregiver's lap.

In a slightly higher 45° semi-reclined position a child's body continues to be supported, but is tilted to a more upright posture. This position allows a child to view more of the environment including his/her hands and can also reduce reflux. It also supports the child to face the caregiver and is often the preferred position for early back and forth communication. Many products are available to support this position. Consider features that best meet a child's needs and preferences:



Boppy



Noggin Nest



Gymini Bouncer

## Adaptive materials/Tips

- Rolled towels, pillows or stuffed animals placed under the head, neck and/or knees.
- Towels rolled and secured with rubber bands to adjust positioning
- Pillows to provide head control, lower extremity abduction
- Bean bags, tires snow tubes can be used for supporting a semi-reclined position
- Child's car seat with child-specific supports are often used for semi-reclined position
- Non-slip material can be used to further stabilize the base
- Babies with visual impairments enjoy having something to kick against.



## SIDE-LYING

This relaxing position allows a child to more easily focus on the activity in front of them. If one arm is easier to use, position the child with that arm on top. It makes moving hands/arms easier as a child does not need to work as hard to overcome gravity. Supports to position a child in side-lying on the floor or in a crib include:

- **Rolled towels, pillows, and cushions** can be used in front of and behind a child for side support
- **Positioning pillows:** provide semi-permanent positioning that form to the body's shape (Versa Form Positioning Pillows)
- **Pediatric positioner:** specially designed positioning systems enable children to lie on their left or right side in a secure, comfortable position



TadPole Positioning System

## ON TUMMY

This is a good position for a child as it helps to strengthen developing muscles in his/her neck, back, shoulders and hips. However, this position can be difficult for a young child to maintain. Begin by placing the infant on his/her tummy for short periods of time across a caregiver's knees. As a child grows, this position can be used while playing on the floor, or on a bed, with supervision. Providing additional support under a child's shoulders will make staying in this position easier. Place toys or mirrors nearby for the child to notice, interact and play with.



Tummy Triangle



Wingbo



Cylindrical Roll

### Adaptive materials/Tips:

- Rollers are firm, yet soft cylindrical shaped aids. Firm, dense ones normally last much longer and can also be a valuable aid to help a child to begin to use her arms and shoulders.
- Measure the distance from a child's armpit to her elbow. This is how wide the supportive roll should be. Make sure her elbows can still touch the floor while on her tummy.
- Rolled towels, cylindrical cardboard mailers, or a pillow placed under arms and across chest.
- Tummy time builds muscles needed for crawling.

## SITTING

This is the most natural position for a child to see and interact with people and activities in their environment. Trunk supports are often needed to extend sitting and reduce fatigue. Trays provide front support as well as a place to interact with toys. Some booster seats with appropriate supports can be placed on the floor and used for play. Consider a variety of seating options for the family to use in different environments such as in the sand box, bath tub, at the grocery store, or out for dinner.



Bumbo



Reclining Feeding Seat



Trip Trap Chair

### Adaptive materials/Tips:

- Adjustable floor seats can provide removable inserts for the growing child. Providing a tray or table for front support while a child is sitting can free up a child's hands to play. Trays provide a place for food, toys and books.
- Consider a durable chair with non-slip base that can be used in several environments
- Floor tables can be purchased separately and used with many seating systems. Use a cardboard box as a table or tray.
- Consider inflatable wedges and discs provide active supports for seating
- Car seats \*\* often include head, seat and back cushions for additional head and truck support. Consider using the child's car seat for routines such as eating or play.
- Wedges or non-slip material placed under a child's bottom prevents her from slipping forward when sitting.
- Large plastic bins or laundry baskets can be used for corner seats or bath chair; toys are then confined within reach. They provide children with visual impairments a secure play space with boundaries.
- Foot supports provide an easy way for secure sitting. Placing blocks or a cardboard box under a child's feet can be adequate supports.

\*\* NOTE: Check the Consumer Product Safety Commission website, [www.cpsc.gov](http://www.cpsc.gov), to be sure that any model you're considering -- hasn't been recalled.

## POSITIONING FEATURES TO CONSIDER:

- Appropriate size for child's height/weight
- Firm back support
- Adaptable back for reclining
- Degree of tilt: 30° or 45°
- Head/neck support
- Side support
- Shoulder/arm support
- Foot rest
- Front support/
- Tray or table height
- Removable/adjustable insert
- Washable
- Portable
- Adjustable floor height
- Safety restraints
- Stable, wide base, slip resistant
- Seat cushiness/texture
- Bounce response
- Vibration
- Music/sounds
- Toy holders /attachers
- Family aesthetic appeal

