

(Handout prepared by Yeu-Li Yeung, Occupational Therapy Student
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Adapted feeding equipment or tools are used to assist children with feeding problems and to increase independence as well as to promote normalization. These tools include cups, plates, and utensils. Adaptive feeding equipment should facilitate the child eating in as typical a manner as possible at home, in school or community. Also, adaptations should be made based on the needs of the individual child.

General Guidelines for Adapting and Using Feeding Equipment

- Consider all the environments in which the child typically eats (i.e. home, school), the types of foods prepared, and time available.
- Respect the wishes, values, and routines of the child and the parents.
- No adaptation should be made if the child has potential to learn the skills within a reasonable period of time.
- The parents, the child, the educator, and the therapists should make *collaborative* decisions on whether to adapt or use special feeding equipment.
- Always choose the least intrusive design that allows the child to be as independent as possible.
- Consider the durability and ease of cleaning the equipment as well as the developmental appropriateness of the equipment
- Consider the *positioning* of the child during mealtimes as a first course of action, and make adaptations as needed there, first. Ideally, the child needs to be seated upright, head at midline, hips at 90 degrees, and feet supported.

Low Technology Adaptations

1) Cups:

- Cut-out cup - commercially available and can be ordered through Sammons-Preston (see resource list at end) or a regular paper/light weight plastic cups can be adapted by trimming away part of the rim of the cup to prevent hitting the child's nose or tipping back the child's head while tipping up the cup
- Cup with smaller diameter- may be easier for some children to keep hands around, and holds less liquid, weighs less than larger cups
- Cup with one or two handles- may be easier for some children to hold, as they can get a tighter grip on handles, and use both hands for greater stability
- Cup with a lid with a spout- typically most useful as transition from bottle, for children with no significant problems with control or coordination of lips, tongue, jaw during feeding activities. Some children use the spout to bite on for greater stability, but this can interfere with the development of jaw, lip, and tongue control.
- Cup with a lid without a spout- to prevent spillage and to control flow of liquid into the mouth; a cup with a recessed lid is useful for teaching a child how to close lips on a cup rim and control flow of liquid, in preparation for using an open cup
- NOTE: A spout should not be used if the child demonstrates a suckling tongue movement pattern. Recommend covered cups with no spout or Infa-trainer cup.

2) Straws:

- Drinking from a straw can help the child develop sucking, and improve lip closure, strength, and control, and use an appropriate chin tuck position.
- A variety of fun and commercially available straws (i.e. colorful ones, Krazy straws) may provide an additional motivation to the child.

3) Spoons:

- Use adapted spoons (i.e. spoon with bent handle or rubber bowl) for children with hypersensitive bite or gag reflex
- When choosing an appropriate spoon, it is important to consider the size and depth of the bowl of the spoon, the plastic material covering the bowl, the shape of the handle, and the length of the handle.
 - Size of the bowl of the spoon and the child's mouth should be proportional
 - It is easier to remove food from a shallow bowl than a deep bowl of the spoon.
 - Heavy plastic spoon provides sturdiness, not as easy to break when bitten.
 - Cold, metal spoon can irritate the child; nylon, plastic, or rubber-coated spoons are more helpful for children who are hypersensitive to hot or cold.
- Built-up handle - to facilitate grasp and develop spoon-to-mouth skill; may build up the handle with foam, textured materials, Dyna-form (putty-like texture) or tapes; may add weights to give more sensory input to help control and steady movement.
- Bent-handle spoon – the handle is bent between 45 to 90 degrees; used for a child with limited movement, to aid their success in getting full spoon in mouth without need for significant control of forearm, wrist and hand movement
- Universal cuff, elastic and hook-pile Velcro, or elastic ponytail holder – loop around palm and/or utensil handle in various configurations to help secure the spoon in the child's hand (available also through Sammons Preston company)

4) Plates and bowls:

- A raised edge or a plate guard – fastened on the edge of the plate to provide a surface against which the child scoops food.
- Scoop dishes (with suction cups underneath) – provides stability onto the table, and side to scoop against.
- Dycem or nonskid pressure-sensitive pads (commercially available) – used underneath a dish or bowl to prevent sliding on table surface.

High Technology Adaptations

- Mechanical feeders that are commercially available
 - Ball-bearing feeder – appropriate for a child with low muscle tone; support weight of the child's arm.
 - Friction feeder – appropriate for a child with spasticity, mild tremors; helps control extraneous motion.
 - Electric feeder – allows the child to feed self without using his or her arms; operates by slight head motion on a chin switch that activates a motorized pusher that fills the spoon and move it to the child's mouth automatically.

References/Resources

Case-Smith, J., & Humphry, R. (1996). Feeding and oral motor skills. In J. Case-Smith, A. S. Allen, & P. N. Pratts (Eds.), Occupational therapy for children (2nd ed., pp. 430-460). St. Louis: Mosby.

Erhardt, R. P., & Merrill, S. C. (1998). Neurological dysfunction in children. In M. E. Neistadt & E. B. Crepeau (Eds.), Willard and spackman's occupational therapy (9th ed., pp. 582-607). Philadelphia: Lippincott-Raven Publishers.

Lowman, D. K. (1999). Adapted equipment for feeding. In D. K. Lowman & S. M. Murphy (Eds.), The educator's guide to feeding children with disabilities (pp. 141-154). Baltimore: Paul H. Brookes Publishing Co.

www.sammonspreston.com 1-800-323-5547

www.babiesrus.com

For more information, consult with an occupational therapist or a speech therapist that has experience working with children with special feeding needs, or you may email Linn Wakeford, MS, OTR/L at wakeford@mail.fpg.unc.edu.