Adaptive Feeding: Field Report

By Debbie Zwiefelhofer, RD, LD

*Nutrition & Foodservice **Edge Magazine** – July-August 2012*

Have you ever tried to loosen or tighten a screw with a dime or other not-so-suitable object instead of a screw driver? Any carpenter will tell you that you need the right tool to get the job done. This applies to so many facets of life and yet we often opt to "punt" in some way.

Adaptive feeding devices are some of those "tools of the trade" that can often be undervalued as a key component of a feeding plan. However, a whole world of specialized mugs, plates, utensils, and other items exist as specialized "tools" to assist individuals with their feeding independence. Most facilities have some adaptive eating devices that regularly get used, but have you checked out all the options lately? The Association of Occupational Therapists had its annual meeting in April and this writer was fortunate to be able to attend. By way of disclaimer, this writer is not a feeding therapist and as such cannot begin to report all the applications for the many different adaptive items. This article will highlight some of the categories of products seen at the conference along with some hints and tips from the therapy experts. One thing is certain, you will want to work with your facility's occupational therapist to determine which "tool" your patient or resident needs, and compare that with what you have on hand to determine what you need to buy.

Non-Skid /Non-Slip Mats

Perhaps one of the easiest adaptive items to implement is the non-skid mat. For people with their arm in a sling, or those using a non-dominant limb as a result of a something like a stroke, keeping items in place can be extremely difficult. With non-skid mats, first think placemat and then take the vision further to encompass virtually any surface where things need "help" to stay put. Non-skid is for more than just the meal tray or table top. These non-skid mats are helpful for high chair trays, wheel chair seats (especially for individuals who use their chair as a utility cart), wheel chair foot rests, bedside glass coasters, and virtually anywhere something goes better when it doesn't move around.

Non-skid mats come in different colors and materials, all designed for the purpose of keeping items from sliding. The mat material can also be purchased in rolls to allow it to be custom cut into the shapes you want to fit or fill. Those spaces are not all horizontal either. The non-skid material can be cut and wrapped around toothbrush handles, wheelchair handles, razors, cell phones, and so on. Think about your patients that have a hard time because things slide away from them. Then determine what you can secure in place with some of this nonskid material.

Cups/Mugs

Specialty cups come in a variety of sizes and most tend to fall into two main categories of use: 1) for limited range of motion, or 2) for ease of self-feeding and reducing spillage. Cups can be bottom weighted to prevent tipping. Nose cut-out (nosey) cups seem to be one of the most popular items recommended by the occupational therapist. These are the cups with a steep cut side for the nose that allows for drinking without having to tip the head back. Nosey cups are used for people who have little/no shoulder flexion or with head/neck problems due to any number of health conditions. The Cup Chart lists some of the more standard cups and common uses.

One handle, two handle, closed handle, open handle, thumb handle, and T-handle—oh my! Yes, there is quite a variety of handle configurations. The different handles also have unique purposes. Two-sided thumb handles help reduce spilling caused by tremors. Fat handles make the cup easier to grip. Two-sided handles allow for double gripping to better steady the cup. And the T-handle allows for a variety of different grasping positions. The variety of lids (see Lid Chart) are to help with everything from reducing spills to controlling the amount of liquid dispensed with each tip and sip.

Keep in mind that cups and mugs don't always need to be "special." Other common drinking aids include water bottles with straws or pop-up lids, lidded travel mugs, straws (fat, skinny, bendable), and any number of common drinkware items.

Plate Guards

Plate guard, food guard, or food bumper are one-and-the-same and will be either a stainless steel or plastic rim that snaps onto the edge of a plate. Their purpose is to create a high edge that helps food go onto the fork or spoon and keeps it from going over the plate rim and onto the table. The main benefit of a plate guard over specialty plates is maintaining dignity. Being able to use the plate that everyone else gets their food served on is a nice touch at mealtime. One key for purchasing this item

Figure 1: Cup Chart

CUP TYPE	USE
Nosey cup/glass	Inability to tip head/neck
Wide base	Helps prevent tipping
Weighted base	Helps prevent tipping, steadies hand with tremors (i.e. Parkinson's)
Wedge	For dysphagia and other neurogenic diseases, impaired tongue function, decreased range of motion, at-risk for aspiration, oral motor weakness
Closed handle	One or two handles; for weak grasp or tremors
Open two-handle	For weak grasp; supports keeping hand tight around cup/mug
Oralflo	Designed to combine water and medication pills for easier swallowing
Infa-trainer	Encourages chin-tuck and prevents neck hyperextension during drinking

Figure 2: Lid Chart

LID TYPE	HELPS WITH
Long spout (also called tube lid): with or without straw hole	Controlling flow of liquid
Short spout: with or without straw hole	Controlling flow of liquid
Anti-splash with straw hole	Keeping liquid from sloshing over the edges
Depressed	Training to drink
No spill	Sealing tight to prevent spilling when tipped

is to make sure to order the size that will best fit your dishes. The plate guards come in small (fitting 6-9-inch plates) or large (fitting 9-11-inch plates). If too small, they will break (if forced) or easily pop off. If too large, they will not be secure enough to hold steady to the edge of the plate. Therapists report the stainless steel versions have a longer life than the plastic ones, which eventually wear out from washing and use. The plastic ones also seem to be more commonly discarded as 'single-use' when they are actually dishwasher safe and intended to be reused.

Plates and Bowls

Non-skid mats and plate guards probably best preserve dignity, but if they are not the right tool then a variety of special plates and bowls are available to help with self-feeding. Some manufacturers are now making plates and cups in more attractive colors and patterns compared to the days of beige or beige. Most specialty plates and bowls are going to be a type of melamine plastic that is dishwasher safe and latex free. Some have nonskid or suction cup bottoms to aid them staying in place. Refer to the Plate Chart for a summary of options.

Utensils

Last, but not least, are the many available utensil options. Grip size and overall weight are going to be determining factors for special utensil selection. This is one item where "one size fits all" does not work very well. Weighted utensils will most often be used for hand stabilization. Even with weighted utensils, the same weight may not suit all individuals and will need to be customized. A man's larger hand may require a bigger grip and more weight than the same utensil would if used by a woman or child. Coated spoons are important for people with teeth or

Figure 3: Plate Chart

PLATE TYPE	USE
Partitioned plate: standard, high-sided	Three compartment dish for keeping foods separated and individually scoopable.
Scoop dish/bowl	High curved rim on one side to aid in getting food onto utensil. The lowered edge reduces the need to lift the utensil over the plate edge.
Inner lip	Inside lip (all around plate) aids in pushing food onto utensils and helps reduce spillage off the plate.
High-sided	Higher side (1-1/4 inch) all the way around to keep food inside the plate rim.
High-sided; cut out edge	Higher side (1-1/4 inch) around the plate that tapers to a 1/2-inch edge. The sloping edge allows for easier access if lifting the utensil over the plate edge is a challenge.

Figure 4: Utensil Chart

UTENSIL	USE
Weighted, plus options: • Coated/uncoated spoon • Plain/rocker knife	4 oz. - 7 oz. each with the added weight in the handle end. Used to stabilize hands with tremors or for weak grip strength.
Built-up handle, plus options: • Contoured • Soft foam-like • Ribbed and firm • Smooth and firm	"Fat" handles for those with a weak grip; shaft may be straight or bendable.
Coated spoon	Plastic coating on the spoon bowl to increase thickness and protect lips and teeth. Not recommended for heavy biters; coating needs to be inspected for punctures.
Rocker knife, plus options: • Standard handle • Built-up handle • Serrated or non-serrated • "T" handle	Knife blade cuts by a rocking motion versus the typical sawing motion. Decreases wrist strain and requires minimal arm strength.
Bendable	Shaft can be bent to the right or left; eases self-feeding with limited range of motion. Or, protects someone feeding an individual from being bit.
Textured spoons	For children with oral sensory issues.
Maroon spoons	Narrow, shallow spoons for use with poor lip closure, oral hypersensitivity, or tongue thrust. Not recommended for heavy bite reflex.
Utensil holder or strap/ universal cuff	Not just for the feeding utensil but also for toothbrush, hair brush, pen/pencil, and razor. These Velcro hook and loop closures have a pocket and a D-ring thumb loop that allows for handling any number of items. These are used for people with limited grip strength.
Utensil tubing	Cut-to-length foam tubing enables building up handles on any number of items in addition to feeding utensils. The tubing material can be smooth or textured.

temperature sensitivities. Built-up handles make utensils easier to grip and hang on to. And, bendable utensils compensate for the lack of range of motion. The Utensil Chart lists the many options. Fork, spoon, soup spoon, and knife are all available and they may be sized for adult, youth, or child. Utensil shafts are typically stainless steel and most will be dishwasher safe. This has not been an all-inclusive listing of adaptive feeding tools, so don't be surprised to see other items in use. Keep in mind that sometimes a bowl works better than a plate. And, sometimes a handled cup works better than a bowl. Likewise, a spoon might be easier to eat with than a fork. If someone needs a straw for drinking, then staff should make sure a straw is always provided with any beverage. Before buying a special dish, look around at what you have and see if it might be adapted for use. Be sure to train kitchen staff and feeding assistants about the importance of using the proper special "tool" for the specific individual. They should not necessarily replace something ad hoc; for example, interchanging a one-handle weighted bottom cup for a two-handle non-weighted cup is likely not a good idea. Not providing the right tool may interfere with selffeeding and could certainly frustrate the individual. Be sure the kitchen knows to not dispose of these special adaptive items, as they can be expensive—especially when you are replacing them needlessly.

If you are looking for an inservice idea for the kitchen, invite your occupational therapist to discuss the different adaptive devices, especially the ones used most often in your facility. It can be an interesting discovery to learn about someone else's "tools of the trade" and the importance of using the right "tool" for the job. ▫

Debbie Zwiefelhofer, RD, LD is the President for Nutrition Affairs LLC, Minneapolis, MN. Visit www.NutritionAffairs.com or contact her at dznutrition@yahoo.com