Preparing and Serving Thickened Liquids

The type of thickener is used and whether pre-thickened liquids are used is a matter of facility preference. Which thickener performs the best for individuals with dysphagia? Should a facility purchase pre-thickened liquids or thicken them in the facility? These questions are difficult to answer. Two issues related to thickening of liquids are achieving and maintaining the correct consistency and who in an institution is responsible for thickening of liquids, food service or nursing. These two issues are related because time and temperature can influence the consistency of some thickeners.

One study involved preparing consistent nectar, honey and spoon thick products within National Dysphagia Diet (NDD) guidelines. The study investigators compared pre-thickened beverages with staff-thickened beverages, and discovered that 18% of beverages were not thickened by staff and therefore served at the wrong consistency (Smith). Similar results were obtained by a study by Garcia, et al that examined practices of heath care providers who thicken oral fluids for patients with dysphagia (Garcia). These study results indicate that facilities need to have excellent protocols in place for thickening liquids to assure that all individuals who need thickened liquids actually receive them 100% of the time.

A study done by Adeleye and Rachal compared ready-to-serve thickened beverages (usually referred to a pre-thickened) versus those prepared with powdered thickeners at various temperatures. They discovered that commercially packaged pre-thickened beverages at nectar and honey consistency were significantly more viscous at both 50°F and 68°F compared to their instant food thickened counterparts. In addition, they were also almost always more viscous than the NDD Task Force defined standards for thickened liquids. The instant food thickened counterparts were more frequently within the standards (Adeleye et al).

Preparation and Delivery of Consistency-Modified Diets and Thickened Liquids

Important points to remember about thickening liquids:

- Honey-like or spoon thick liquids prepared using modified food starch may be less flavorful than the original liquid.
- Gel thickeners do not continue to thicken upon refrigeration or over a long period of time, and tend to alter appearance and flavor less than modified food starches.
- Gel thickeners tend to mix better when shaken rather than stirred.
- Gel thickeners may be more expensive than modified food starches.
- Some thickeners become lumpy when added to hot or warm beverages. This is a consideration when selecting a product.

Powdered thickeners vary in their in ease of mixing. Keep trying until you find a product that works well for your facility. Facilities should have protocols in place for thickening liquids to assure that all individuals who need thickened liquids actually receive them all of the time. Each facility should have also have policies and procedures in place to address regarding ordering, preparing, and dispensing of thickened liquids.

Guidelines for Serving Thickened Liquids

All liquids should be thickened to the proper consistency, including soups, water, high-calorie or high-protein liquid supplements, and all other beverages.

The facility will determine whether nursing or food service personnel will thicken the liquids or if pre-thickened products will be used. Unless specified in a doctor's order, patients receiving the Frazier free water protocol should receive all other liquids thickened appropriately.

General Guidelines for Thickened Liquids (6,18,19)

The following consistencies may be ordered based on individual needs:

- **Thin** water, coffee, tea, soda, ices, juices, milk, carbonated beverages, broth or broth based soups, thin tomato juice, gelatin, ice cream, sherbet, sorbet, anything that will liquefy in the mouth within a few seconds (1 to 50 cp).
- **Nectar-like** Fruit nectars such as apricot, peach or pear nectar, maple syrup, eggnog or thick tomato juice; or beverages thickened to nectar consistency (51 to 350 cp).
- Honey-like thickened to honey consistency (351 to 1750 cp).
- **Spoon Thick** thickened to a pudding consistency (>1750 cp).

Note: cp = centipoise, a measurement of the thickness of a liquid.

Examples of each consistency are listed below.							
Thin	Nectar-like	Honey-like	Spoon Thick				
	Nectal-like	попеу-пке	эроон тніск				
Broth, Bouillon	Apricot nectar	Commercial	Commercial product				
Carbonated beverages	Peach nectar	product needed to	needed to achieve				
Coffee or Tea	Pear nectar	achieve desired	desired consistency.				
Gelatin	Vegetable juice	consistency.					
Ice or ice chips							
Ice cream, Frozen yogurt	Commercial	Commercially					
Ices (fruit ices)	thickeners may be	prepared honey-like					
Frozen fruit bars	used to achieve	thick products.					
Juice	nectar-like						
Malts	consistency.						
Milk							
Milkshakes	Commercially						
Nutritional supplements -	prepared nectar-like						
Unless specified by	thickened products.						
manufacturer							
Popsicles™							
Soda							
Soups, Thin broth							
Tomato juice							
Watermelon							

Examples of each consistency are listed below.

Note: Work with the RDN and SLP to assure the correct products under each category. (References for Thickened Liquids: Felt, NDD, BDA diet manual)

Dysphagia Diets and Staff Training

Key points regarding texture modified diets and consistency-altered fluids include:

- Staff that is involved with serving food must be knowledgeable about each person's diet or where to confirm diet orders when food is requested by an individual.
- Staff should be trained to feed and offer fluids according to speech therapy recommendations and physician orders.

• Each facility should have a system is in place to effectively communicate instructions to staff for each individual with special feeding precautions or consistency modifications, and establish appropriate staff monitoring and oversight to assure compliance with special feeding instruction

References for Preparation of Consistency-Modified Diets and Thickened Liquids

- 1. Felt P., Pat, Nutritional Management of Dysphagia in the Health Care Setting. Health Care Caterer, The Official Publication of Healthcare Caterers International, Volume 1, Issue 2, Spring, 2006. Available at http://www.hospitalcaterers.org/publications/hcinewsletters/HCINewsletter_Issue 2.pdf. Accessed May 1, 2012.
- 2. Dorner B. Diet and Nutrition Care Manual: A Comprehensive Nutrition Care Guide. FL: Becky Dorner & Associates Inc.; 2014.
- 3. Smith T, Sun M, Pippin J. Characterizing Process Control of Fluid Viscosities in Nursing Homes. JADA. June 2004, Vol 104, No 6.
- 4. Garcia JM, Chamber E, Clark M, Helverson J, Matta Z. Quality of Care Issues for Dysphagia: modifications involving oral fluids.J Clin Nurs. 2010: 19(11):1618-1624.
- 5. Adeleye B, Rachal C, Comparison of the Rheological Properties of Ready to Serve and Powdered Instant Food-Thickened Beverages at Different Temperatures for Dysphagic Patients, J Am Diet Assoc. 2007;107:1176-1182.
- 6. National Dysphagia Diet Task Force, National Dysphagia Diet: Standardization for Optimal Care, The American Dietetic Association, Chicago, IL. 2002.

Making Consistency-Altered Diets Appealing

During preparation, dysphagia diets should be seasoned to provide maximum flavor. Dysphagia diets should be served on china unless divided dishes or other adaptive devices are needed to enhance independence with eating or requested by the individual. Food should be garnished within allowed texture modifications.

Mechanically altered foods consist of ground meats, soft fruits and vegetables that can be mashed with a fork, and extra gravies and sauces to moisten foods to ease swallowing. In most cases they can be presented nicely on a china plate with garnishes used as appropriate.

Pureed foods are generally cohesive, moist mashed potato or pudding-like consistency for people who cannot tolerate regular or mechanical soft foods. Food is pureed in a food processor to achieve a consistent smooth and easy-to-swallow product. Fluid may be added or commercial thickening agents can be used to assure the proper consistency is achieved.

Pureed food should appear and taste like "real food" (as close to the regular diet as possible), while easing the chewing and swallowing process. Formed pureed foods can be purchased or prepared in-house. Standardized pureed recipes are the first step to assure a product that is consistent in taste, appearance, consistency and nutrient content.

Enhancing Plate Presentation

Appearance of food is important to everyone, but especially for the individual who has a poor appetite and/or decreased sense of sight, smell and taste. A consistency-modified diet can contribute to an unappetizing appearance. Plate presentation must be attractive to encourage food intake. Colors, shapes, arrangement and garnishes can enhance appeal. The goal is to make dysphagia diets delightfully appealing. Here some ideas for enhancing plate presentation for mechanically-altered meals.

Simple Techniques to Create Appeal	ing Pureed Food (Dysphagia 2008)
 Use a spatula to flatten a scoop of pureed meat to make it look like a patty. Use smaller scoops to make meat look like meatballs. Use sauces and gravies over meats and vegetables to garnish. Sprinkle fruits or desserts with colored gelatin powder to add color, or add a dollop of whipped topping to garnish. Use a slurry mixture to create a gelled bread product that looks the same as the regular product, but is the proper consistency for the diet. Layer gelled bread with pureed meat to create the appearance of a sandwich. Layer pureed pasta with pureed meat and sauce to create the appearance of lasagna or spaghetti. 	 Use pastry bags to create special effects such as mixing two different colored vegetables (i.e. peas and carrots) and piping them onto the plate to create eye appealing vegetables. Vary shapes using food molds, soufflés and mousse recipes. Use commercial products such as modified food starches to ease preparation and enhance appearance to make pureed foods look more like their regular counterparts. Use commercial pre-prepared pureed, molded or gelled foods, such as meats, vegetables and bread products to allow for additional variety and a more normal food presentation.

Garnishes Appropriate for Each Level of Dysphagia (BDA diet manual)

Carnisnes Appropriate for Lacin Level of Dyspiragia (DDA diet manual)						
Garnish	Level 3	Level 2	Level 1			
Barbeque sauce	\checkmark	$\sqrt{*}$	$\sqrt{*}$			
Cheese sauce	\checkmark					
Cinnamon sugar, sprinkle	\checkmark	\checkmark	\checkmark			
Cranberry sauce, smooth	\checkmark	\checkmark	√ *			
Cream sauce	\checkmark	$\sqrt{*}$	$\sqrt{*}$			
Gelatin powder, flavored, sprinkle	\checkmark	\checkmark	\checkmark			
Gravy	\checkmark	√ *	$\sqrt{*}$			
Hollandaise sauce	\checkmark	\checkmark	$\sqrt{*}$			
Jelly	\checkmark	\checkmark	$\sqrt{*}$			
Honey	\checkmark	\checkmark	$\sqrt{*}$			
Ketchup, mustard, mayonnaise	\checkmark	$\sqrt{*}$	$\sqrt{*}$			
Maple syrup	\checkmark	\checkmark	√ *			
Parmesan cheese, grated, sprinkle	\checkmark					
Pickle relish	\checkmark	√ *	√*			
Powdered sugar, sugar or brown sugar, sprinkle	\checkmark	√	√*			
Salad dressing	\checkmark	√*	√*			
Syrup: butterscotch, chocolate,	\checkmark	√	√			
strawberry						
Whipped topping	\checkmark	√	\checkmark			

*Must be totally smooth consistency with no lumps or chunks of food particles, herbs or spices. All liquids must be at the ordered thickness.

Note: Presentation ideas may suggest additional foods that may or may not be appropriate for specific therapeutic diets (such as diabetic, carbohydrate or calorie controlled, sodium or fat/cholesterol restrictions). Consult an RDN or NDTR if you are unsure if these food items should be added.

Altered Consistency Item (mechanically altered item)	Garnish
Cole slaw, potato salad	Ground paprika (light sprinkle)
Potato soup	Paprika (light sprinkle)
Fruit	Whipped cream
Desserts	Sprinkle of powdered gelatin or powdered sugar
	Cinnamon sugar
Toast	Cinnamon (ground) sugar (light sprinkle)
Biscuits	Jelly
Muffins	Honey
Pancakes or Waffles	Maple syrup
Peanut butter sandwiches (pureed)	
Spaghetti, Lasagna, or	Parmesan cheese (light sprinkle)
other pasta dishes	
Vegetables	Cheese sauce
	Hollandaise sauce (using pasteurized eggs or dry mix)
Desserts	Pureed smooth fruit or syrup
Ice cream	Chocolate syrup
	Butterscotch sauce
	*Pureed or smooth strawberry sauce (or other fruit
	sauces)
	Powdered sugar/whipped topping
Hot cereals	Brown sugar
	Cinnamon sugar
	Honey
Meats	Gravy, catsup, mustard, mayonnaise, pureed pickle
Sandwiches	relish, pureed pickles, barbeque sauce, smooth gelled
Salads	cranberry sauce, salad dressing as appropriate.
Side garnishes for plate	Pureed fruits or vegetables piped through a pastry bag
	and pressed out into designs such as stars, then frozen
	for later use as a garnish.
	Cranberry sauce piped through a pastry bag.

Dysphagia Food Preparation (2008 Dysphagia manual) **Food Safety**

Consistency-altered diets can be a food safety hazard because additional preparation steps are required after food is cooked. This can increase chances of food becoming contaminated with chemical or physical hazards or by allowing growth of bacteria or viruses in food. Puree foods must be handled carefully to avoid contamination or bacteria growth. It is critical to:

- Use clean, sanitized equipment and surfaces, and clean hands.
- Keep foods out of the temperature danger zone (41° F 135° F).
- Heat hot food to proper internal temperature
- Keep cold foods chilled or refrigerated
- Check all food temperatures to assure proper temperature prior to serving.

For additional information on how to keep foods safe, please refer to the Appendix.

Choosing the Proper Equipment

Consistency altered food should look and taste like the regular food. Pureeing food eliminates the oral preparatory phase and most of the oral phase of swallowing by simulating a ready-to-swallow bolus of food. The primary objectives when preparing pureed diets are producing food that:

- Is easy to swallow
- Is safe to consume
- Is nutritious, and
- Has an appearance, aroma and flavor that encourages eating and enhances the dining experience

The proper equipment will make dysphagia diet preparation much easier. When purchasing equipment, read product descriptions carefully to find those that can multi-task and meet the needs of your commercial kitchen. For food preparation, choose a food processor, rather than a blender if possible. Most blenders are great for liquids, but many do not blend solid foods well. Choose a food processor based on the number of portions of pureed food that you typically prepare. Product manufacturers provide information regarding the correct size to purchase based on your projected volume of portions.

Food Processor

Choose a processor that:

- Can be easily taken apart for cleaning
- Has a heat resistant, cold resistant, and shatterproof bowl
- Is easy to clean with dishwasher-safe parts
- Has a stainless steel cutting blade designed for chopping, grinding, blending and pureeing
- Has a minimum 3 to 5 year full motor warranty, and a minimum 1 year parts and labor warranty
- Has safety features for automatic shut off
- Has a continuous feeding opening that is far from the blade
- Has a see-through lid
- Has replacement parts available
- Meets your criteria for volume of food you prepare

Operating and Maintaining a Food Processor

- Keep the blade sharp.
- Follow the manufacturer's safety guidelines.
- Do not walk away from the machine while it is running.
- Use a start/stop action (pulse) at first to break up the food; then use the continuous feature to puree.
- Do not fill the processing bowl more than 2/3 to 3/4 full.
- Clean (wash, rinse and sanitize) thoroughly and allow to air dry completely. Follow manufacturer's instructions for cleaning and sanitizing.
- Inspect regularly and replace parts as needed.

Food Processor/Blender Combination

These machines perform as two pieces of equipment in one, food processor and blender. They tend to puree foods much more efficiently than a standard food processor.

As with food processors, carefully choose the appropriate size machine for the number of servings of pureed or mechanically altered foods to be prepared.

Some food processor/blender combinations are available for home use. Brand names change, so contact individual manufacturers for more information. For more information on a commercial Robot Coupe combination, visit <u>www.robotcoupeusa.com</u> and look for information on the Blixer®.

Additional Equipment and Small Wares

There are other items that may be helpful for preparing and serving consistency altered foods:

- Pastry bags with various tips can be used to pipe pureed foods to present an eye appealing food design (star tips, etc.).
- Condiment squeeze bottles can be used to hold sauces that simply yet elegantly garnish a plate.
- A potato ricer can be used to make pureed noodles.
- Small steam table pans may be needed to hold consistency altered foods.
- Food molds can help to create formed pureed foods.
- Soufflé cups, side dishes, parfait glasses and individual casseroles can help to create a nice presentation.

Sources for Professional Food Processors:

- Robot Coupe <u>www.robotcoupe.net</u>
- Vita Mix <u>www.vitamix.com</u>
- Waring http://www.waringcommercialproducts.com/

Sources for Home Food Processors:

- Cooking.com www.cooking.com
- Black & Decker, Cuisinart, Kitchen Aid, Krups, and others
- Goodman's www.goodmans.net
- Cuisinart, Kitchen Aid, Presto, and others

Sources for Puree Food Molds

- Dysphagia Diet http://www.dysphagia-diet.com/default.aspx
- Hubert <u>www.hubert.com</u>
- Puree Food Molds http://www.pureefoodmolds.com/

General Guidelines for Successful Pureed Food Preparation

- 1. Use reliable equipment that is clean and sanitized. (See section on equipment.)
- 2. Use high quality, fresh, wholesome food ingredients.
- 3. Use stabilizers as needed to reach the correct consistency. Examples of stabilizers are bread, mashed potato flakes, commercial thickening agents, and fats or oil that are added during preparation.
- 4. Follow safe food handling techniques as outlined on pages_____to ____.
- 5. When pureeing foods that are to be served hot, puree hot food and reheat to $\geq 165^{\circ}$ F after processing.
- 6. Follow the recipe steps and temperature guidelines carefully.
- 7. Taste before serving.
- 8. Present foods attractively, using garnishes and food molds.

Pureed foods should be the consistency of pudding or moist mashed potatoes. They should be nutrient dense, of good quality, and served in appropriate serving sizes. The way to achieve these goals is through the use of standardized recipes. Pureeing food changes its consistency, shape, and sometimes its volume. A change in volume can make it difficult to estimate proper portion sizes. Standardized recipes are essential for successful pureed diet preparation.

The following techniques will provide tips for successful pureeing of different food groups.

Meat

Some meats are easier to puree than others due to differences in muscle fibers, amount of fat and the moisture content. The appearance of the pureed meat product can affect whether or not it is consumed. Poorly prepared pureed meats may appear watery and unappetizing.

Techniques to enhance the flavor and palatability of the meat products include:

- Weigh meat products before pureeing to ensure the appropriate protein portion for each individual.
- Puree meats that are to be served hot while they are hot.
- Place in food processor and puree with a start and stop action (pulse) to achieve a pastelike consistency.
- Add one-third of liquid indicated in recipe and puree.
- Add stabilizer and puree until smooth.
- Add additional liquid in small amounts, pureeing after each addition until mashed potato consistency is achieved.
- Heat to minimum cooking temperature, which varies depending on the type of meat.
- Hold and serve at > 135° F

Meats that tend to be stringy may benefit from grinding prior to pureeing. Very dry products puree better by adding one teaspoon of fat per serving.

Fish tends to be dry. Adding a small amount of lemon juice and mayonnaise or tartar sauce can add moisture.

The amount of stabilizer added to meat products varies. A breaded meat requires less stabilizer than meat that is not breaded. Stabilizers should never be added in an amount that alters the taste of the finished product.

Serving Suggestions:

- Serve in a puree mold or muffin-pan shape.
- Serve with a gravy or white sauce.
- Try a mousse or a soufflé.
- Changing the shape of the pureed meat may improve appearance and acceptance.
- Avoid bowls and scoop dishes unless needed for independence with eating.

Starches

Starches puree better when hot. Puree noodles alone (not with other items such as spaghetti sauce, beef cubes, etc.). The accompanying entrée products should be pureed and served as appropriate for the item, similar to how the regular product is served. For example, serve sauce over spaghetti or pureed beef stroganoff over pureed noodles.

Pureed rice is more difficult and tends to become like paste. If necessary substitute quick cooking cream of rice cereal seasoned with margarine and prepared with a broth or bouillon. Serve with margarine, gravy, or sauce.

Breads

A commercially prepared product mix or formed puree will probably provide the most consistent and attractive bread product. The following is a list of manufacturers who offer pureed bread products and many alternative recipes to go with them.

- Darlington Farms <u>www.darlingtonfarms.com</u>
- Dysphagia Diet http://www.dysphagia-diet.com/p-822-resource-pureed-bread-mix.aspx
- Hormel <u>http://www.hormelhealthlabs.com/</u>
- Lyons Magnus http://www.lyonsmagnus.com/
- Nestle <u>http://www.nestle-nutrition.com/Public/Default.aspx</u>
- Rubicon Foods http://www.rubiconfoods.com/

Vegetables

Vegetable preparation varies depending on the part of the plant that is being used. The root, tubers, and seed vegetables contain more carbohydrate than leaves, stems and flowers which have greater water content. As a result, it is difficult to have one basic recipe that applies to all vegetables.

Using one-half slice of bread per vegetable serving as a stabilizer is one way to assure enough servings of breads/grains in the diet. Bread also maintains the taste and appearance of the vegetables better than other stabilizers.

Procedure:

- 1. Measure number of servings.
- 2. Drain well if canned, save juice and use to puree.
- 3. Cook frozen vegetables. Vegetables must be tender enough to puree successfully.
- 4. Place in food processor up to two-thirds full.
- 5. Add melted margarine and puree.
- 6. Add stabilizer as needed and puree.

- 7. Add liquid gradually (about one-third total amount), pureeing after each addition until a mashed potato consistency is achieved. Full amount of liquid may not be necessary to achieve the desired consistency.
- 8. Heat to serving temperature of at least 135° F.
- 9. Hold at <u>></u> 135° F.

Vegetables should be bright in color. Loss of flavor and aroma and decreased palatability will result when vegetables are pureed and retained at cooking temperatures too long.

Fruits

Fruits have a high water content and a varied carbohydrate content. Some products are very fluid once pureed, and require the addition of a stabilizer. Unflavored gelatin works well and creates the opportunity to change the shape of the product into gelatin fruit squares or gelatin fruit cubes.

Thicker consistency fruits can be further thickened by adding one tablespoon of *instant* baby rice cereal per serving. More than one tablespoon can adversely affect the taste.

Pureed bananas will easily discolor. Lemon juice will reduce this effect. Orange juice is not a good substitute for lemon juice because it is not as acidic, and will not retard the enzymatic reaction that causes discoloration. If the banana is a little tart, add a small amount of sugar (1/2 teaspoon per serving) to the product.

General Information on Puree Recipe Development

The following are guidelines can assist in recipe development for any pureed food item:

- 1. Measure number of servings needed
- 2. Drain well and reserve liquids
- 3. Puree with melted margarine if required in recipe
- 4. Gradually add 1/3 of liquid in recipe and puree
- 5. Add stabilizer as needed
- 6. Add additional liquid gradually and puree after each addition. Full amount of liquid may not be needed to achieve desired consistency
- 7. Measure end product
- 8. Divide by the number of original recipe servings
- 9. Hold at appropriate hot or cold temperature.

Examples

Example #1	Example #2
After pureeing 8 regular portions, the product volume is 1 quart (32 oz) plus 1 cup (8 oz); total volume 40 oz 40 oz ÷ 8 servings equals 5 oz servings	 10 servings of regular food resulting in pureed volume equal to: 1 quart = 32 oz 32 oz ÷ 10 servings equals 3.2 oz servings
#8 Scoop = 8 Tablespoons (1/2 cup) = 4-5 oz Use #8 Scoop	#10 Scoop = 6 Tablespoons (3/8 cup) = 3-4 oz Use #10 Scoop

Recipe Scoop Sizes

Size	Capacity (oz)	Size	Capacity (oz)	Size	Capacity (oz)
8	4 (1/2 c)	20	2	50	5/8
10	3 3/4	24	1 3/4	60	9/16
12	3 1/4	30	1 1/4	70	31/64
16	2 3/4	40	7/8	100	3/8

Recipes

The following kitchen-tested recipes are intended as a guide. The end product may be affected by the food, temperature, and manner of cooking, method or equipment used to puree. Refer to sections for puree food preparation and recipe development. The majority of recipes reflect the Dysphagia Level 1 (Pureed) diet because this is the most challenging diet. *Each recipe includes suggestions for levels 1, 2 and 3 Dysphagia diets.*

The recipes provided in this book originated from: Dorner, Becky and Buccheim, Janice, *Puree Pizzazz*, Becky Dorner & Associates, Akron, OH, 1989-1997. The recipes have been updated numerous times over the years to reflect the needs of the National Dysphagia Diets Levels 1 to 3.

Recipe Portions and Scoop Sizes

FOOD	PORTIO	<u>N S#</u>
BASICS Casserole Fruit Meat Meat	6 oz 1/2 c 2 oz 3 oz	# 6 # 12 # 8 # 6
Meat mousse Meat soufflé Vegetables	6 oz 6 oz 1/2 c	# 0 6 ozs # 6 # 8
MEAT & MEAT SUBSTITUTE	S	
Beef patty Baked chicken Chicken patty Chicken patty or strips Cottage cheese Ham Fish Kielbasa Kielbasa Meat balls Meat balls Roast beef Roast beef Roast pork Sausage Swiss steak or baked steak	3 oz 3 oz 2 oz 3 oz 1/2 c 2 oz 3 oz 2 oz	# 6 # 8 # 10 # 8 # 10 # 10 # 10 # 10 # 10 # 10 2 #20 3 #24 # 8 # 6 # 8 # 16 # 8
Tuna salad Turkey Veal patty Veal patty	1/2 c 2 oz 2 oz 3 oz	# 6 # 10 # 12 # 8
SALADS Coleslaw Macaroni Salad Pasta Salad Pickled Beets Potato Salad Shredded Lettuce Three Bean Salad Tossed Salad	1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c	# 8 # 10 # 10 # 10 # 8 # 20 # 12 # 20
DESSERTS Apple Crisp Apple Pie, Dutch Brownie, Frosted Cheese Cake Cherry Pie (two crust) Chocolate Cream Pie (Fresh) Cookies (one) Cupcake, Frosted	1/2 c 5 oz sl 2.5 oz 2.25 oz 4 oz 6 oz 1.7 oz 1	# 10 # 8 # 16 # 12 # 8 # 16 # 16
SANDWICHES BBQ Roast Beef Chicken Salad Sandwich Ham Sandwich Hot Dog with Bun Lunch Meat Salad Sandwich Roast Beef Sandwich. Tuna Salad Sandwich Turkey Sandwich	Meat Portio 3 oz 1/2 c 2 oz 2 oz 1/2 c 3 oz 1/2 c 2 oz	n #6 #8 #8 #6 #6 #6 #8

FOOD	PORTION	<u>IS#</u>
BREAKFAST ITEMS Hard Boiled Egg with Toast Scrambled Eggs & Toast Coffee Cake Danish (fruit filled) Glazed Doughnut French Toast Pancakes Waffles	1/1 1/1 2x2" 2 oz 2.25 oz 2 sl 2 2	# 8 # 8 # 12 # 12 # 12 # 6 # 6 # 6
STARCHES Baked Beans Cornbread Macaroni & Cheese Muffin Noodles Spaghetti Noodles Stuffing (Bread Dressing)	1/2 c 2x2" 1/2 c 2.5 oz 1/2 c 1/2 c 1/2 c	# 8 # 16 # 10 # 10 # 8 # 10 # 12
VEGETABLES Beets Broccoli Brussels Sprouts Carrots Green Beans Parsley Potatoes Peas Spinach Yam or Sweet Potatoes	1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c 1/2 c	# 8 # 8 # 10 # 8 # 10 # 8 # 8 # 8 # 8
FRUITS Apricots Banana Cantaloupe Cherries, Royal Ann Fruit Salad Grapefruit Sections Mandarin Oranges Mixed Fruit (Fruit Cocktail) Peaches Pears Pineapple Prunes, Stewed Strawberries Watermelon	1/3 c 1/2 fruit 1/2 c 1/2 c	# 16 # 12 # 12 # 12 # 10 # 10 # 10 # 12 # 12 # 10 # 10 # 10
SAUCES/GRAVIES Brown Sauce Cheese Sauce Curry Sauce Gravy Herbed Butter Sauce Hollandaise Sauce Mustard Sauce Sweet & Sour Sauce White Sauce	1 oz 1 oz 1 oz 1 oz 1 oz 1 oz 1 oz 1 oz	

Basics: Casserole

Level 1 (6 oz portion)	Servings					
Ingredients	1 5 10 15 20 Cust Serv					
Casserole, Cooked or Baked	6 oz	1 7/8# (30 oz)	3-3/4# (60 oz)	5 3/4# (90 oz)	7 1/2# (120 oz)	
**Gravy or Broth	1 T	1/3 c (5 T)	2/3 c (10 T)	1 c (15 T)	1 1/4 c (20 T)	

Serving Size: #6 Scoop

Directions:

- 1. Measure freshly cooked/baked casserole portions, drained of liquid.
- 2. Puree well. Add liquid gradually to achieve appropriate consistency. (The addition of liquid may not be necessary, depending product composition.) Be sure it is pureed until completely smooth.
- 3. Heat to serving temperature (minimum of 165° F). Hold at $\geq 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2 and 3: May have regular, moist, easy to chew casseroles (Level 2 without rice, corn, peas) as long as meat and other pieces are < 1/2" in size.

Presentation:

Serve in individual casserole dishes. Garnish as appropriate depending on the type of casserole.

*Nutritional Information	:
Calories	187
Protein, gm	15
CHO, gm	13
Total fat, gm	7
Na, mg	702
Vit C, mg	10

*Nutritional values are estimates and will vary depending on ingredients in casserole

Basics: Meat

2 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Meat, Cooked	2 oz	10 oz	1 1/4 # (20 oz)	1 7/8# (30 oz)	2 1/2# (40 oz)	
** Broth	3 T	1 c	1 3/4 c	2 3/4 c	3 3/4 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: #8 Scoop

Directions:

- 1. Start with fully cooked, tender pieces of meat. Internal cooking temperature should be a minimum of 165° F. Trim all visible fat, de-bone, and remove skin from poultry.
- 2. Choose appropriate portion size. Weigh cooked meat portion and place into processor bowl. Puree well.
- 3. Add one-half of broth and puree.
- 4. Add bread and puree.
- 5. Add small amounts of liquid, blending after each addition until moist mashed potato consistency is achieved. Be sure it is pureed until completely smooth.
- 6. Heat to serving temperature (minimum of 165° F). Hold at $\geq 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy over top. Level 1: May be scooped out onto plate and then flattened to look like a patty. Also see meat section for presentation ideas

*Nutritional Information:	
Calories	135
Protein, gm	18
CHO, gm	6
Total fat, gm	3
Na, mg	357
Vit C, mg	0

Basics: Meat

3 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Meat, Cooked	3 oz	15 oz	1 7/8# (30 oz)	2 7/8# (45 oz)	3 3/4# (60 oz)	
**Broth	1/4 c	1 1/4c	2 1/2 c	3 3/4 c	5 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: #6 Scoop

Directions:

- 1. Start with fully cooked, tender pieces of meat. Internal cooking temperature should be a minimum of 165° F. Trim all visible fat, de-bone, and remove skin from poultry.
- 2. Choose appropriate portion size. Weigh cooked meat portion and place into processor bowl. Puree well.
- 3. Add one-half of broth and puree.
- 4. Add bread and puree.
- 5. Add small amounts of liquid, blending after each addition until moist mashed potato consistency is achieved. Be sure it is pureed until completely smooth.
- 6. Heat to serving temperature (minimum of 165° F). Hold at $\geq 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy over top. Level 1: May be scooped out onto plate and then flattened to look like a patty. Also see meat section for presentation ideas for each specific type of meat.

*Nutritional Information:	
Calories	184
Protein, gm	26
CHO, gm	7
Total fat, gm	5
Na, mg	457
Vit C, mg	0

Basics: Meat Mousse

Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Meat, Cooked & Chopped Cold Water	1/2 c 2 T	2 1/2 c 2/3 c	5 c 1 1/4 c	7 1/2 c 2 c	10 c 2 1/2 c	
Gelatin	1 1/4 tsp	2 T + 1/4 tsp	1/4 c + 1/2 tsp	6 T + 3/4 tsp	1/2 c + 1 tsp	
**Hot Water	1/3 c	1 2/3 c	3 1/3 c	5 c	6 2/3 c	
Mayonnaise	1 T	1/3 c	2/3 c	1 c	1 1/3 c	
***Salt	1/8 tsp	5/8 tsp	1 1/4 tsp	2 tsp	2 1/2 tsp	
+ Seasoning	1/4–1/2 tsp	1 1/4 – 2 1/2 tsp	2 1/2 – 5 tsp	4 – 7 1/2 tsp	5 – 10 tsp	

Serving Size: 6 oz – Pour into individual serving cups or loaf pan and slice to 6 ounce servings.

Directions:

- 1. Measure meat and mayonnaise and place in processor bowl.
- 2. Puree chopped meat with mayonnaise.
- 3. Sprinkle gelatin over cold water.
- 4. Add hot water to gelatin mixture; stir until dissolved.
- 5. Add salt, seasoning, and gelatin mixture to pureed meat.
- 6. Puree this mixture. Be sure it is pureed until completely smooth.
- 7. Pour into individual serving cups or loaf pan.
- 8. Chill to \leq 41° F, and hold at \leq 41° F for service.

***Add salt only to turkey, chicken or beef. (Do not add salt to meats that are already salty such as ham or sausage.)

+ Suggested seasonings: Horseradish, prepared mustard, catsup, pickle relish, etc.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Presentation:

Put mayonnaise, salad dressing or other condiments on top. be served over pureed or gelled bread to form a sandwich effect. Slice into pieces.

*Nutritional Information:	
Calories	214
Protein, gm	19
CHO, gm	0
Total fat, gm	15
Na, mg	424
Vit C, mg	0

Basics: Meat Soufflé

Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Meat, Cooked	2 oz	10 oz	20 oz	30 oz	40 oz	
Margarine	2 tsp	3 T & 1 tsp	6 T & 2 tsp	2/3 c	3/4 c & 1 1/3 T	
Flour (All Purpose)	1 tsp	1 T & 2 tsp	3 T & 1 tsp	5 T	6 T & 2 tsp	
Salt	Dash	3/8 tsp	3/4 tsp	1 1/8 tsp	1 1/2 tsp	
White Pepper	Dash	1/8 tsp	1/4 tsp	3/8 tsp	1/2 tsp	
**Meat Stock	2 1/4 tsp	1/4 c	1/2 c	3/4 c	1 c	
Milk	1/3 c	1 1/2 c	3 c	4 1/2 c	6 c	
Egg Yolks	1	2	4	6	8	
Bread Crumbs	Rounded 1 1/2 T	Rounded 1/3 c	Rounded 2/3 c	Rounded 1 c	Rounded 1 1/3 c	
Egg Whites	1	3	6	9	12	

Serving Size: #6 Scoop (6 oz Serving)

Directions:

- 1. Measure cooked meat and place in processor bowl. Puree cooked meat and set aside.
- 2. Melt margarine over low heat, add flour and blend together to form a roux.
- 3. Add meat stock and milk, stirring constantly until sauce is thickened and smooth.
- 4. Meat egg yolks, add small amount of sauce to egg yolks blending well.
- 5. Add this mixture to remaining sauce and blend well. Be sure it is pureed until completely smooth.
- 6. Add pureed meat to the sauce mixture.
- 7. Beat egg whites until stiff and fold into meat mixture.
- 8. Pour mixture into greased pans or individual molds.
- Bake in hot-water-bath for 50 minutes in 350° oven. Internal temperature should be a minimum of 165° F for a minimum of 15 seconds. Hold at ≥135° F for service.

**Use water with salty meats such as ham or sausage.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Presentation:

If baked in pans, slice and serve with a gravy or sauce.

If baked in individual molds, cool slightly, then loosen from mold, using hot water bath if needed. Serve on plate with gravy or sauce.

*Nutritional Information:	
Calories	258
Protein, gm	24
CHO, gm	14
Total fat, gm	11
Na, mg	463
Vit C, mg	0

Basics: Vegetables

Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Vegetables, Cooked & Drained	1/2 c	2 1/2 c	5 c	7 1/2 c	10 c	
Margarine, Melted	1/2 T	2 1/2 T	5 T	7 1/2 T (1/2 c)	10 T (2/3 c)	
**Vegetable Liquid or Juice	2 T	2/3 c	1 1/4 c	1 3/4 c	2 1/2 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: #8 Scoop

Directions:

- 1. Cook vegetables as appropriate. Drain vegetables well, reserve liquid.
- 2. Measure vegetables and place in processor bowl.
- 3. Add melted margarine and blend.
- 4. Add one-half vegetable liquid allowed; blend.
- 5. Add bread and blend.
- 6. Add additional vegetable liquid slowly, blending after each addition to moist mashed potato consistency. Be sure it is pureed until completely smooth.
- 7. Heat to serving temperature (minimum of 165° F). Hold at $\leq 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have soft cooked, easily mashed with a fork. No raw vegetables, cooked asparagus, broccoli, Brussels sprouts, or fibrous, tough vegetables, cabbage, corn, peas, potato skins, French fried or fried potatoes.

Level 3: May have cooked, tender, chopped (if needed) vegetables. May have shredded lettuce. No potato skins, corn, raw vegetables. No tough vegetables.

Presentation For Level 1:

Pureed vegetables can be piped onto the plate for a pleasant effect. Two complimentary vegetables can be swirled, piped or scooped for an interesting presentation.

*Nutritional Information:	
Calories	143
Protein, gm	4
CHO, gm	19
Total fat, gm	6
Na, mg	275
Vit C, mg	11

Basics: Fruit

Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Drained Fruit	1/2 c	2 1/2 c	5 c	7 1/2 c	10 c	

Serving Size: #12 Scoop

Directions:

- 1. Drain fruit well and measure portions. Place in processor bowl.
- 2. Blenderize until smooth consistency. Be sure it is pureed until completely smooth.
- 3. Portion and chill to 41° F prior to serving.

Note: Fruits with high water content may need added ingredients such as rice flakes, gelatin powder or commercial thickeners to achieve the appropriate thickness. See specific recipes for each fruit.

Tips for Pureeing Fruit

- Fibrous fruits such as pineapple may be difficult to puree. Use a strainer if needed to assure a smooth consistency.
- Ripe bananas may be thoroughly mashed instead of pureed. Be sure there are no lumps.
- Some fruits may discolor upon standing or refrigeration. It is best to serve them immediately.
- Fruits with a high water content (watermelon, cantaloupe, honeydew, melon, oranges, grapefruit, grapes) do not puree to an appropriate consistency. A commercial thickening agent may be added to achieve a pudding-like consistency.

Level 2 and 3: May have soft canned or cooked fruits; soft, ripe bananas. Fruits may be fork mashable or pieces < 1/2".

Level 3: May have soft, peeled fruits such as peaches, berries, nectarines, kiwi, melon (without seeds). Fruits may be chopped if needed.

Presentation:

Serve in separate dishes. Garnish with sprinkle of gelatin or piped whipped cream.

*Nutritional Information:	
Calories	57
Protein, gm	0
CHO, gm	15
Total fat, gm	0
Na, mg	5
Vit C, mg	4
_	

Meat: Beef Patty

Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Beef Patty, Cooked	3 oz	15 oz	30 oz	45 oz	60 oz	
**Beef Broth	1/4 c	1 1/4 c	2 1/2 c	3 3/4 c	5 c	
	1/2	2 1/2	5	7 1/2	10	
Bread	slice	slices	slices	slices	slices	
			1 T &	2 T &	3 T &	
Margarine	1 /2 tsp	2 1/2 tsp	2 tsp	1 1/2 tsp	1 tsp	

Serving Size: #6 Scoop

Directions:

- 1. Measure meat and place in processor bowl.
- 2. Blend beef patty with margarine.
- 3. Add bread. Blend until smooth.
- 4. Gradually add beef broth. Puree until desired consistency is achieved. Be sure it is pureed until completely smooth.
- 5. Heat to serving temperature (minimum of 165° F). Hold at > 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May serve moist, soft, ground beef patty chopped to less than 1/4" cubes and moistened with gravy or sauce.

Level 3: May serve moist, tender, soft, ground beef patty moistened with gravy or sauce.

Presentation:

Garnish with condiments as appropriate (catsup, mustard, mayonnaise, etc.) Serve with gravy or sauce. Level 1: Scoop onto plate. Flatten with spatula to simulate a meat patty.

*Nutritional Information:	
Calories	286
Protein, gm	22
CHO, gm	7
Total fat, gm	18
Na, mg	490
Vit C, mg	0

Meat: Chicken, Baked

3 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Chicken, Cooked	3 oz	15 oz	30 oz	45 oz	60 oz	
**Chicken Broth	1/4 c	1 1/4 c	2 1/2 c	3 3/4 c	5 c	
	1/2	2 1/2	5	7 1/2	10	
Bread	slice	slices	slices	slices	slices	

Serving Size: #8 Scoop

Directions:

- 1. Weigh cooked chicken, place in processor bowl and puree.
- 2. Add bread and one-half of the broth allowed. Puree until well blended.
- 3. Gradually add remaining broth until moist mashed potato consistency is reached. Be sure it is pureed until completely smooth.
- 4. Heat to serving temperature (minimum of 165° F). Hold at > 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Variation: Chicken gravy may be substituted for chicken broth.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Garnish with gravy and a sprinkle of paprika. Serve with gravy or sauce. Level 1: Meat may be shaped to look like a chicken leg or breast.

*Nutritional Information:	
Calories	174
Protein, gm	16
CHO, gm	7
Total fat, gm	4
Na, mg	457
Vit C, mg	0

Meat: Chicken Patty

2 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Chicken Patty, Baked	2 oz	10 oz	20 oz	30 oz	40 oz	
Bread	1/4 slice	1 1/4 slices	2 1/2 slices	3 3/4 slices	5 slices	
**Water	4 1/2 T	1 1/3 c	2 3/4 c	4 1/4 c	5 1/2 c	

Serving Size: #10 Scoop

Directions:

- 1. Weigh cooked portions of chicken and place in processor bowl. Blend until lightly flaked.
- 2. Add bread and blend.
- 3. Gradually add required fluid, blending after each addition until product is consistency of mashed potatoes. Be sure it is pureed until completely smooth.
- 4. Heat to serving temperature (minimum of 165° F). Hold at $\geq 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with hot gravy or sauce. **Level 1:** For patties, scoop onto plate and flatten to simulate a patty. May be served on pureed or gelled bread.

*Nutritional Information:	
Calories	254
Protein, gm	16
CHO, gm	11
Total fat, gm	13
Na, mg	275
Vit C, mg	0

Meat: Chicken Patty

3 oz Portion Level - 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Chicken Patty, Baked	3 oz	15 oz	30 oz	45 oz	60 oz	
	1/3	1 2/3	3 1/3	5	6 2/3	
Bread	slice	slices	slices	slices	slices	
**Chicken Broth	5 T	1 1/2c	3 c	4 1/2 c	6 c	

Serving Size: #8 Scoop

Directions:

- 1. Weigh cooked portions of chicken and place in processor bowl. Blend until lightly flaked.
- 2. Add bread and blend.
- 3. Gradually add required fluid, blending after each addition until product is consistency of mashed potatoes.
- 4. Heat to serving temperature (minimum of 165° F).

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with hot gravy or sauce. **Level 1:** For patties, scoop onto plate and flatten to simulate a patty. May be served on pureed or gelled bread.

*Nutritional Information:	
Calories	381
Protein, gm	24
CHO, gm	17
Total fat, gm	20
Na, mg	413
Vit C, mg	0

Meat: Cottage Cheese

Level 1 (1/2 cup)	Servings						
Ingredients	1	1 5 10 15 20 Custom Serving					
Cottage Cheese	¹ ∕2 C	2 ½ c	5 c	7 ½ c	10 c		

Serving Size: #10 Scoop (Rounded)

Directions:

- 1. Measure servings of cottage cheese and place in processor bowl.
- 2. Puree until smooth. Be sure it is pureed until completely smooth.
- 3. Chill to $\leq 41^{\circ}$ F and hold at $\leq 41^{\circ}$ F for service.

Level 2, 3: May have regular cottage cheese.

Presentation:

Serve on cold plate or separate dish. Or sprinkle with colored gelatin powder for a garnish. Level 1: May be served with pureed piped fruit for color.

*Nutritional Information:	
Calories	102
Protein, gm	15
CHO, gm	4
Total fat, gm	2
Na, mg	459
Vit C, mg	0
-	

Meat: Fish

Level 1 (3 oz. portion)	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Fish, Lightly Breaded, Baked	3 oz	15 oz	30 oz	45 oz	60 oz	
Lemon Juice	1/4 tsp	1 1/4 tsp	2 1/2 tsp	3 3/4 tsp	1 2/3 tsp	
**Water, Warm	3 T	1 c	1 3/4 c	2 3/4 c	3 3/4 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: #8 Scoop

Directions:

- 1. Measure baked fish and place in processor bowl.
- 2. Puree fish with lemon juice.
- 3. Add bread with water and blend.
- 4. Blend until smooth. Be sure it is pureed until completely smooth.
- 5. Heat to 165° F. Hold at < 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Garnish with tarter sauce or lemon juice. Level 1: Scoop onto plate. Spread out to simulate filet of fish.

*Nutritional Information:	
Calories	175
Protein, gm	18
CHO, gm	11
Total fat, gm	6
Na, mg	214
Vit C, mg	2

Meat: Ham

Level 1 (2 oz. portion)	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Ham, Pre-cooked	2 oz	10 oz	20 oz	30 oz	40 oz	
	1/2	2 1/2	5		10	
Sliced Bread	slice	slices	slices	7 1/2 slices	slices	
**Water	1/4 c	1 1/4 c	2 1/2 c	3 3/4 c	5 c	

Serving Size: #10 Scoop

Directions:

- 1. Measure ham and place in processor bowl.
- 2. Grind ham.
- 3. Add other ingredients.
- 4. Puree well. Be sure it is pureed until completely smooth.
- May be served hot (heat to minimum of 165° F) or cold (chill to below 41° F). Hold at ≥ 135° F for hot service or 41° F for cold service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:
Garnish with mustard and mayonnaise.
Scoop onto plate.
Use back of spoon to spread pureed ham
onto plate and flatten to resemble sliced
ham.
May be served cold on top of gelled or
pureed bread and made to resemble a
sandwich.

*Nutritional Information:	
Calories	124
Protein, gm	15
CHO, gm	6
Total fat, gm	3
Na, mg	816
Vit C, mg	0

Meat: Kielbasa

2 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Kielbasa,						
Cooked with skin removed	2 oz	10 oz	20 oz	30 oz	40 oz	
	1/2	2 1/2	5	7 1/2	10	
Bread	slice	slices	slices	slices	slices	
**Water	1 1/2 T	1/2 c	1 c	1 1/3 c	1 3/4 c	

Serving Size: #12 Scoop

Directions:

- 1. Remove skin from kielbasa and weigh amount to be pureed.
- 2. Measure appropriate amount of kielbasa and place in processor bowl.
- 3. Tear bread into pieces.
- 4. Add bread to kielbasa and puree.
- 5. Add water gradually; puree after each addition.
- 6. Puree until appropriate consistency has been achieved. Be sure it is pureed until completely smooth.
- 7. Heat to 165° F. Hold at $\ge 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more of less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, with skin removed, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and with skin removed, well moistened with gravy or sauce.

Presentation:

Serve with sauce or gravy. Level 1: Use large pipe tip on pastry bag to pipe out and simulate kielbasa.

*Nutritional Information:	
Calories	202
Protein, gm	8
CHO, gm	8
Total fat, gm	15
Na, mg	649
Vit C, mg	11

Meat: Kielbasa

3 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Kielbasa,						
Cooked with skin removed	3 oz	15 oz	30 oz	45 oz	60 oz	
	1/2	2 1/2	5	7 1/2	10	
Bread	slice	slices	slices	slices	slices	
**Water	2 T	2 /3 c	1 1/4 c	1 3/4 c	2 1/2 c	

Serving Size: #10 Scoop

Directions:

- 1. Remove skin from kielbasa and weigh amount to be pureed.
- 2. Measure appropriate amount of kielbasa and place in processor bowl.
- 3. Tear bread into pieces.
- 4. Add bread to kielbasa and puree.
- 5. Add water gradually; puree after each addition.
- 6. Puree until appropriate consistency has been achieved. Be sure it is pureed until completely smooth.
- 7. Heat to 165° F. Hold at $\geq 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more of less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, with skin removed, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and with skin removed, well moistened with gravy or sauce.

Presentation:

Serve with sauce or gravy. Level 1: Use large pipe tip on pastry bag to pipe out and simulate kielbasa.

*Nutritional Information:	
Calories	286
Protein, gm	12
CHO, gm	16
Total fat, gm	22
Na, mg	942
Vit C, mg	17

Meat: Meatballs

2 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Meatballs, Cooked	2 oz	10 oz	20 oz	30 oz	40 oz	
**Water	3 T	1 c	2 c	2 3/4 c	3 3/4 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: 2 - #20 Scoops

Directions:

- 1. Measure meatball portions, place in processor bowl, and puree meatballs.
- 2. Add bread and one-half of the water allowed. Puree.
- 3. Gradually add remaining water. Puree after each addition of water until proper consistency has been reached. Be sure it is pureed until completely smooth.
- 4. Heat to minimum temperature of 165° F. Hold at \geq 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Levels 2, 3: May have regular moist meatballs served with sauce or gravy. May wish to cut to less than 1/4".

Presentation:	*Nutr
Meatballs may also be served with gravy.	Calor
Level 1:	Prote
Serve over pureed noodles.	CHO,
Scoop meatballs on top and serve with	Total
sauce to simulate spaghetti and	Na, m
meatballs or Swedish meatballs.	Vit C,
Serve over pureed noodles.	

*Nutritional Information:	
Calories	148
Protein, gm	10
CHO, gm	8
Total Fat, gm	8
Na, mg	801
Vit C, mg	0

Meat: Meatballs

3 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Meat Balls, Cooked	3 oz	15 oz	30 oz	45 oz	60 oz	
**Water	3 1/2 T	1 c	2 c	3 1/4 c	4 1/3 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: 2 - #24 Scoops

Directions:

- 1. Measure meatball portions, place in processor bowl, and puree meatballs.
- 2. Add bread and one-half of the water allowed. Puree.
- 3. Gradually add remaining water. Puree after each addition of water until proper consistency has been reached. Be sure it is pureed until completely smooth.
- 4. Heat to minimum temperature of 165° F. Hold at $\ge 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Levels 2, 3: May have regular moist meatballs served with sauce or gravy. May wish to cut to less than 1/4".

Presentation:

Meatballs may also be served with gravy. Level 1: Serve over pureed noodles. Scoop meatballs on top and serve with sauce to simulate spaghetti and meatballs or Swedish meatballs.

*Nutritional Information:	
Calories	205
Protein, gm	14
CHO, gm	9
Total fat, gm	11
Na, mg	1170
Vit C, mg	0
-	

Meat: Roast Beef with Broth

2 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Roast Beef, Cooked	2 oz	10 oz	20 oz	30 oz	40 oz	
**Broth or Gravy	4 1/2 T	1 1/3 c	2 3/4 c	4 1/4 c	5 1/2 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: #8 Scoop

Directions:

- 1. Weigh meat portions, place in processor bowl, and puree to paste consistency.
- 2. Add warm broth or gravy and puree.
- 3. Add bread to mixture and puree.
- 4. Gradually add warm broth or gravy, pureeing after each addition until appropriate consistency is achieved. Be sure it is pureed until completely smooth.
- 5. Heat to minimum temperature of 165 ° F. Hold at \geq 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy. Level 1: Flatten to simulate slices of roast beef. May also be served over pureed or gelled bread and topped with gravy to simulate an open faced roast beef sandwich.

*Nutritional Information:	
Calories	143
Protein, gm	18
CHO, gm	7
Total fat, gm	5
Na, mg	480
Vit C, mg	0

Meat: Roast Beef with Broth

3 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Roast Beef, Cooked	3 oz	15 oz	30 oz	45 oz	60 oz	
**Gravy	3T	1 c	1 3/4 c	2 3/4 c	3 3/4 c	
**Water or Broth	2 T	2/3 c	1 1/4 c	1 3/4 c	2 1/2 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: #6 Scoop

Directions:

- 1. Weigh meat portions, place in processor bowl, and puree to paste consistency.
- 2. Add warm gravy and puree.
- 3. Add bread to mixture and puree.
- 4. Gradually add warm water or broth, pureeing after each addition until appropriate consistency is achieved. Be sure it is pureed until completely smooth.
- 5. Heat to minimum temperature of 165° F. Hold at $\ge 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy.

Flatten to simulate slices of roast beef. May also be served over pureed or gelled bread and topped with gravy to simulate an open faced roast beef sandwich.

*Nutritional Information:	
Calories	313
Protein, gm	26
CHO, gm	12
Total fat, gm	16
Na, mg	341
Vit C, mg	0

Meat: Roast Pork

3 oz Portion - Level 1	SERVINGS					
Ingredients	1	5	10	15	20	Custom Serving
Roast Pork, Cooked	3 oz	15 oz	30 oz	45 oz	60 oz	
**Broth	1/4 c	1 1/4 c	2 1/2 c	3 3/4 c	5 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	

Serving Size: #8 Scoop

Directions:

- 1. Measure proper portions of roast pork and place in processor bowl.
- 2. Grind meat.
- 3. Add remaining ingredients, alternating broth and bread and processing in between.
- 4. Puree well until appropriate consistency is achieved. Be sure it is pureed until completely smooth.
- 5. Heat to a minimum of 165° F. Hold at \geq 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy. Level 1: Flatten to simulate slice of pork.

*Nutritional Information:	
Calories	270
Protein, gm	29
CHO, gm	7
Total fat, gm	13
Na, mg	466
Vit C, mg	0
-	

Meat: Sausage

2 oz Portion - Level 1, 2	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Sausage, Cooked (if links, use skinless)	2 oz	10 oz	20 oz	30 oz	40 oz	
**Chicken Broth or Water	2 1/2 T	3/4 c	1 1/2 c	2 1/3 c	3 c	
	1/2	2 1/2	.5	7 1/2	10	
Bread	slice	slices	slices	slices	slices	

Serving Size: #16 Scoop

Directions:

- 1. Measure proper portion, place in processor bowl, and puree cooked sausage.
- 2. Add bread and one-half of chicken broth or water and puree.
- 3. Add remaining broth gradually, pureeing after each addition to achieve appropriate consistency. Be sure it is pureed until completely smooth.
- 4. Heat to a minimum of 165° F. Hold at $\geq 135^{\circ}$ F for service.

Note: If product tastes salty, substitute low sodium broth or water for liquid in this recipe.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 3: Remove skin or use skinless. Serve soft cooked, tender, chopped, ground or shredded and well moistened.

Presentation:
Serve with gravy.
Level 1:
Pipe through large pastry tip to simulate
sausage links.
Or scoop onto plate and flatten to simulate
patty.

*Nutritional Information:	
Calories	231
Protein, gm	13
CHO, gm	7
Total fat, gm	16
Na, mg	834
Vit C, mg	1

Meat: Swiss Steak or Baked Steak

3 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Steak, Cooked	3 oz	15 oz	30 oz	45 oz	60 oz	
	1/2	2 1/2	5	7 1/2	10	
Bread	slice	slices	slices	slices	slices	
	3 T +					
**Beef Broth	1 tsp	1 cup	1 3/4 c	3 c	4 c	
		1 T +	3 T +	1/4 c +	1/3 c +	
Margarine, Melted	1 tsp	2 tsp	1 tsp	1 T	1 T	

Serving Size: #8 Scoop

Directions:

- 1. Measure appropriate portion of meat and place in processor bowl.
- 2. Grind steak.
- 3. Blend with bread, broth and margarine.
- 4. Blend until smooth. Be sure it is pureed until completely smooth.
- 5. Heat to a minimum temperature of 165° F. Hold at \geq 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy. Level 1: Flatten or shape to simulate original product.

*Nutritional Information:	
Calories	416
Protein, gm	22
CHO, gm	6
Total Fat, gm	32
Na, mg	1240
Vit C, mg	0
-	

Meat: Tuna Salad

Level 1 (1/2 cup portion)	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Tuna Salad, Prepared	1/2 c	2 1/2 c	5 c	7 1/2 c	10 c	
Mayonnaise	2 T	2/3 c	1 1/4 c	2 c	2 1/2 c	
**Milk	1 T	1/3 c	2/3 c	1 c	1 1/4 c	
Bread	1/2 slice	2 1/2 slices	5 slices	7 1/2 slices	10 slices	
Salt	Dash	1/4 tsp Rounded	1/2 tsp Rounded	1 tsp	1 1/4 tsp	
Pepper	Dash	Dash	1/8 tsp	1/8 tsp	1/4 tsp	

Serving Size: #6 Scoop

Directions:

- 1. Measure appropriate amount of tuna salad and place in processor bowl.
- 2. Puree tuna salad with mayonnaise and milk.
- 3. Add bread and puree again.
- 4. Add salt and pepper to taste.
- 5. Puree well. Be sure it is pureed until completely smooth.
- 6. Chill tuna to less than or equal to 41° F. Hold at $\leq 41^{\circ}$ for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have moist tuna salad with no large chunks or raw vegetables. **Level 3:** May have regular moist tuna salad with no large chinks and no hard vegetable.

Presentation:

Sprinkle with paprika. May be served as a salad. Level 1: Or serve on top of gelled or pureed bread to simulate a sandwich.

*Nutritional Information:	
Calories	414
Protein, gm	17
CHO, gm	11
Total fat, gm	33
Na, mg	1014
Vit C, mg	1

Meat: Turkey

2 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Turkey Breast, Cooked	2 oz	10 oz	20 oz	30 oz	40 oz	
**Chicken Broth	1/4 c	1 1/4 c	2 1/2 c	3 3/4 c	5 c	
	1/2	2 1/2	5	7 1/2	10	
Bread	slice	slices	slices	slices	slices	

Serving Size: #10 Scoop

Directions:

- 1. Measure proper portion of turkey breast and place in processor bowl.
- 2. Grind turkey in food processor.
- 3. Add half of chicken broth and puree.
- 4. Add bread and puree.
- 5. Add additional chicken broth and puree until appropriate consistency is achieved. Be sure it is pureed until completely smooth.
- 6. Heat to minimum temperature of 165° F. Hold at \geq 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy. Level 1: Flatten to simulate sliced turkey. May also be served over gelled or pureed bread with gravy to simulate an openfaced sandwich.

*Nutritional Information:				
Calories	174			
Protein, gm	27			
CHO, gm	7			
Total Fat, gm	3			
Na, mg	457			
Vit C, mg	0			

Meat: Veal Patty

2 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Veal Patty, Cooked	2 oz	10 oz	20 oz	30 oz	40 oz	
**Water or Chicken Broth	2 T	2/3 c	1 1/4 c	1 3/4 c	2 1/2 c	
Bread	1/4 slice	1 1/4 slices	2 1/2 slices	3 3/4 slices	5 slices	

Serving Size: #12 Scoop

Directions:

- 1. Weigh cooked veal patty servings and place in processor bowl.
- 2. Puree meat product.
- 3. Add bread and one-half water or chicken broth. Puree.
- 4. May need to reduce the bread amount if using breaded product.
- 5. Gradually add remaining water until desired consistency has been achieved. Be sure it is pureed until completely smooth.
- 6. Heat to minimum temperature of 165° F. Hold at $\geq 135^{\circ}$ F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:				
Serve with sauce or gravy.				
Level 1:				
Scoop onto plate to simulate a patty.				
May also be served with pureed noodles				
and tomato sauce to simulate veal				
parmesan (sprinkle lightly with				
parmesan cheese.)				

*Nutritional Information:			
Calories	139		
Protein, gm	16		
CHO, gm	3		
Total fat, gm	6		
Na, mg	70		
Vit C, mg	0		

Meat: Veal Patty

3 oz Portion - Level 1	Servings					
Ingredients	1	5	10	15	20	Custom Serving
Veal Patty, Baked	3 oz	15 oz	30 oz	45 oz	60 oz	
**Water or Chicken Broth	2 1/2 T	3/4 c	1 1/2 c	2 1/3 c	3 c	
Bread	1/4 slice	1 1/4 slices	2 1/2 slices	3 3/4 slices	5 slices	

Serving Size: #8 Scoop

Directions:

- 1. Weigh cooked veal patty servings and place in processor bowl.
- 2. Puree meat product.
- 3. Add bread and one-half water or chicken broth. Puree.
- 4. May need to reduce the bread amount if using breaded product.
- 5. Gradually add remaining water until desired consistency has been achieved. Be sure it is pureed until completely smooth.
- 6. Heat to minimum temperature of 165° F. Hold at \geq 135° F for service.

**Fluid amount has been adjusted to nearest even measure. Slightly more or less fluid may be required to achieve a moist mashed potato or pudding consistency.

Level 2: May have tender, moist cooked and chopped or ground to less than 1/4" cubes, moistened with gravy or sauce.

Level 3: May have soft cooked, tender, chopped, ground, or shredded and well moistened with gravy or sauce.

Presentation:

Serve with gravy or sauce. Level 1: Scoop onto plate to simulate a patty. May also be served with pureed noodles and tomato sauce to simulate veal parmesan. (Sprinkle lightly with parmesan cheese.)

*Nutritional Information:				
Calories	200			
Protein, gm	23			
CHO, gm	3			
Total fat, gm	9			
Na, mg	89			
Vit C, mg	0			

Resources: Products for Dysphagia and Oral Nutritional Supplements

Sources of Products for People with Dysphagia

- Darlington Farms (pureed bread and bakery mix)
 <u>http://www.darlingtonfarms.com</u>
- Dysphagia Supplies Direct
 <u>http://www.dysphagiasupplies.com/pre_thickened_liquids.html</u>
- Hormel Health Labs
 <u>www.hormelhealthlabs.com</u>
- Lyons Magnus
 <u>www.lyonsmagnus.com</u>
- Nestle Nutrition
 <u>http://www.nestlehealthscience.com/</u>
- Nutra Balance
 <u>www.nutra-balance-products.com</u>
- Precision Foods
 <u>www.precisionfoods.com</u>
- Rubicon Foods
 <u>http://rubiconfoodsco.com/</u>
- Simply Thick www.simplythick.com
- Thickit
 <u>http://www.thickitretail.com/</u>

In addition to the companies above, there may be house brands of thickened liquids, thickeners, and other dysphagia food products available from your food service supplier.

Sources of Oral Nutritional Supplements

- Abbott Nutrition
 <u>http://abbottnutrition.com/</u>
- Hormel Health Labs
 www.hormelhealthlabs.com
- Lyons Magnus
 <u>www.lyonsmagnus.com</u>
- Nestle Nutrition
 <u>http://www.nestlehealthscience.com/</u>
- Nutricia <u>http://www.pro-stat.com/</u>