

HOME TUBE FEEDING WITH A BLENDERIZED DIET: TO BLEND OR NOT TO BLEND

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Blended Formula Worksheet

Food Group	Tip	Goal <small>*Based on 2000 calories</small>	Foods Chosen	Calories
Grains	Aim for at least half as whole grains	6 one-ounce equivalents		
Fruits	Try fresh or frozen fruit; aim for a variety; avoid juice	2 cups		
Vegetables	Cooked or raw veggies; aim for a variety of colors	2 ½ cups		
Protein	Try eggs, fish, poultry, meat, nuts, seeds	5 ½ one-ounce equiv.		
Dairy	Milk and yogurt blend easily; use milk alternatives if needed	3 cups		
Oils/Fats	Choose more unsaturated fats – olive/flax/canola oil, avocado, nuts/seeds, etc.	6 teaspoons		
Total Calories:				

Total Calories/Total Blended Volume (ml or oz) = Calories per milliliter or Calories per ounce

Blenderized Diet Supply List

- Registered Dietitian:**
 - Experience with blended diet preferred
 - Food analysis software
- Record tracking:**
 - Recipes, volumes given, tolerance
 - Scale/sling - weight gain/maintenance
- Food prep facilities:**
 - Sink, counter space, utensils
 - Measuring cups/spoons, scale
 - Sieve and spatula
 - Refrigerator/freezer
 - Clean water supply or bottled water
- Ingredients:**
 - Liquid
 - Whole foods or pureed baby foods
 - Vitamin/mineral supplements
- Blender:**
 - Whole foods: high-power blender (Vitamix, Ninja, etc.)
 - Baby foods/purees: immersion blender
- Containers for storing blends:**
 - Freezer bags, squeeze bottle, storage jars and/or containers
 - Funnel for filling
- Feeding supplies:**
 - Thick blend: bolus extension set, syringes
 - Thin blend: pump, bags
- Cleaning supplies**
 - See *Food safety resources* (next slide)
 - Follow instructions for medical equipment

Blenderized Diet Resources

Support Groups

- Yahoo blenderized diet support group
- Facebook.com/FoodforTubies

Blogs

- youstartwithatube.blogspot.com/
- ainsleyrae.blogspot.com/

Websites & Books

- Feeding Tube Awareness Foundation: feedingtubeawareness.org/blended-diets/
- Real Food for Real People: foodfortubies.org/
- Mealtime Notions: mealtimenotions.com/
- Oley Foundation: oley.org
- Homemade Blended Formula Handbook *by Martha Dunn Klein and Suzanne Evans Morris*
- Complete Tube feeding *by Eric Aadhaar O’Gorman*

Papers & Guidelines

- Blenderized Tube Feed: Suggested Guidelines for Clinicians. Nutrition Issues in Gastroenterology. Dec 2014.
- The Use of Blenderized Tube Feedings: Practice Roundtable. Childhood Obesity and Nutrition. 2009(1).

Food Safety Resources

- Partnership for Food Safety Education: www.fighbac.org
- Federal Food Safety Information: www.foodsafety.gov

Nutrient Analysis Resources

- USDA nutrition guidance: www.choosemyplate.gov
- USDA Diet tracking/analysis: www.supertracker.usda.gov
- USDA Nutrient Database: <http://ndb.nal.usda.gov/ndb/search/list>
- NIH Office of Dietary Supplements: <http://ods.od.nih.gov>

References

- Borghi R, Dutra Araujo T, Airoidi Vieira RI, Theodoro de Souza T, Waitzberg DL. ILSI Task Force on enteral nutrition; estimated composition and costs of blenderized diets. *Nutr Hosp*. 2013;28(6):2033-2038.
- Dunn Klein, M & Evans Morris, S (2007). *Homemade Blended Formula Handbook*. Tucson, Arizona: Mealtime Notions, LLC.
- Escuro AA. Blenderized Tube Feed: Suggested Guidelines for Clinicians. *Nutrition Issues in Gastroenterology*. 2014; 12.
- Hurt RT, Varayil JE, Epp LM, et al. Blenderized Tube Feeding Use in Adult Home Enteral Nutrition Patients: A Cross-Sectional Study. *Nutr Clin Pract*. 2015;30(6):824-829.
- Jalali M, Sabzghabae AM, Badri SS, Soltani HA, Maracy MR. Bacterial contamination of hospital-prepared enteral tube feeding formulas in Isfahan, Iran. *J Res Med Sci*. May 2009;14(3):149-156.
- Johnson TW, Spurlock A, Galloway P. Blenderized formula by gastrostomy tube: a case presentation and review of literature. *Top Clin Nutr*. 2013;28(1):84-92.
- Johnson TW, Spurlock A, Pierce L. Survey Study Assessing Attitudes and Experiences of Pediatric Registered Dietitians Regarding Blended Food by Gastrostomy Tube Feeding. *Nutr Clin Pract*. 2015;30:402-405.
- Mokhalalati JK, Druyan ME, Shott SB, Comer GM. Microbial, nutritional and physical quality of commercial and hospital prepared tube feedings in Saudi Arabia. *Saudi Med J*. Mar 2004;25(3):331-341.

References cont.

- Mortensen M. Blenderized tube feeding: clinical perspectives on homemade tube feeding. PNPG Post: Publ Pediatr Nutr Pract Group. 2006;17(1):1-4.
- Novak P, Wilson KE, Ausderau K, et al. The use of blenderized tube feedings. Childhood Obesity and Nutrition. 2009;1(1): 21-23
- O'Flaherty T., Santoro K., and Pentiuik S. Calculating and Preparing a Pureed-by-Gastrostomy Tube (PBGT) Diet for Pediatric Patients With Retching and Gagging Postfundoplication. ICAN, 2011;3(6):361-364.
- Pediatric Enteral Nutrition Support: Blenderized Formulas. (2012). ADA Nutrition Care Manual. Academy of Nutrition and Dietetics.
- Pentiuik S, O'Flaherty T, Santoro K, et al. Pureed diet by gastrostomy tube diet improves gagging and retching in children with fundoplication. J Parenter Enteral Nutr. 2011;35(3):375-9.
- Sullivan MM, Sorreda-Esguerra P, Santos EE, et al. Bacterial contamination of blenderized whole food and commercial enteral tube feedings in the Philippines. J Hosp Infect. Dec 2001;49(4):268-273.
- Tanchoco CC, Castro CA, Villadolid MF, et al. Enteral feeding in stable chronic obstructive pulmonary disease patients. Respiriology. 2001;6(1):43-50.