

# 2<sup>nd</sup> annual Nutricia Blenderized Tube Feeding *MASTERCLASS*

September 18<sup>th</sup> 2025



*AI-generated image*

# Navigating the Nuts and Bolts of Applying a Culinary Approach to Tube Feeding

**September 18, 2025**



**Caroline Weeks,  
PA-C, MPAS, RDN**

Pediatric Registered Dietitian and  
Physician Associate

- ❑ Nutricia North America, Consultant
- ❑ Midwest Dairy, Medical Nutrition Consultant
- ❑ Beaba, Medical Nutrition Consultant
- ❑ Suavinex, Medical Nutrition Consultant

*None pose any conflict of interest for this  
CE-eligible presentation*

*The opinions reflected in this presentation are those of the  
speakers and independent of Nutricia North America*

# Learning Objectives

- Participants in this activity will learn to:
  - Acknowledge the benefits and outcomes of blenderized tube feeding, according to the literature.
  - Discover practical tips to get started with real food for tube feeding at home.

# Pre-Lecture Questions to Ponder...

1. How confident are you with the use of Blenderized Tube Feeding (BTF)?
  - Rate on a scale of 1-10
    - 10= extremely confident, 1 = not confident, new to learning
2. A strong culinary background is needed to succeed with Home BTF.
  - True or False
3. What are some important factors to consider in deciding whether or not a patient is a good candidate for home BTF?
  - a) Level of caregiver support
  - b) Complex medical needs and comorbidities
  - c) Fluid restriction
  - d) Ability to engage in safe food handling practices
  - e) All of the above

# What is Home Blenderized Tube Feeding?

- BTF: blending a variety of whole foods from all food groups to a consistency that can be delivered through a gastrostomy feeding tube.
  - Homemade BTF
  - Commercial alternative
  - Mixed method
- Selection of food type, portion, and cooking method is clinically supervised.



# Tube Feeding Historical Timeline



**1950s &  
before**

Blending food into enteral access device was the norm.

**Risk of microbial contamination posed concern**

**1970-1900s**

Introduction of commercial formulas  
Specialized formulas

**2000s**

Exponential growth in market

**Present**

Renaissance of BTF, more parent and clinician interest







# “Keep Up or Get Left Behind”

- Patients are using BTF (whether they tell you or not)
  - ▣ One prospective, cross-sectional study demonstrated that as many as 55.5% of adult patients receiving home enteral nutrition (HEN) used BTF<sup>1</sup>.
- American Society for Parenteral and Enteral Nutrition (ASPEN) published Practice Recommendations in 2023

DOI: 10.1002/ncp.11055

## CONSENSUS STATEMENT

### **Blenderized tube feedings: Practice recommendations from the American Society for Parenteral and Enteral Nutrition**

Lisa Epp RDN<sup>1</sup> | Allison Blackmer PharmD<sup>2</sup>  | April Church MS, RD<sup>3</sup>  |  
Ivy Ford RD<sup>4</sup> | Brandee Grenda MS, RD<sup>5</sup> | Cara Larimer RD<sup>6</sup>  |  
Joanna Lewis-Ayalloore MS, RD<sup>7</sup> | Ainsley Malone MS, RD<sup>2</sup>  |  
Linda Pataki MS, RD<sup>8</sup> | Gina Rempel MD<sup>9</sup> | Vita Washington MS<sup>10</sup> |  
The ASPEN Enteral Nutrition Committee

<sup>1</sup>Division of Endocrinology, Diabetes, Metabolism and Nutrition, Mayo Clinic, Rochester, Minnesota, USA

<sup>2</sup>The American Society for Parenteral and Enteral Nutrition, Silver Spring, Maryland, USA

<sup>3</sup>Asante Rogue Regional Medical Center, Medford, Oregon, USA

<sup>4</sup>Clinical Nutrition, Tibor Rubin Veterans Affairs Medical Center, Long Beach, California

<sup>5</sup>Clinical Nutrition Services, Morrison Healthcare at Atrium Health Navicent, Charlotte, North Carolina, USA

<sup>6</sup>Moog Medical Device, Salt Lake City, Utah, USA

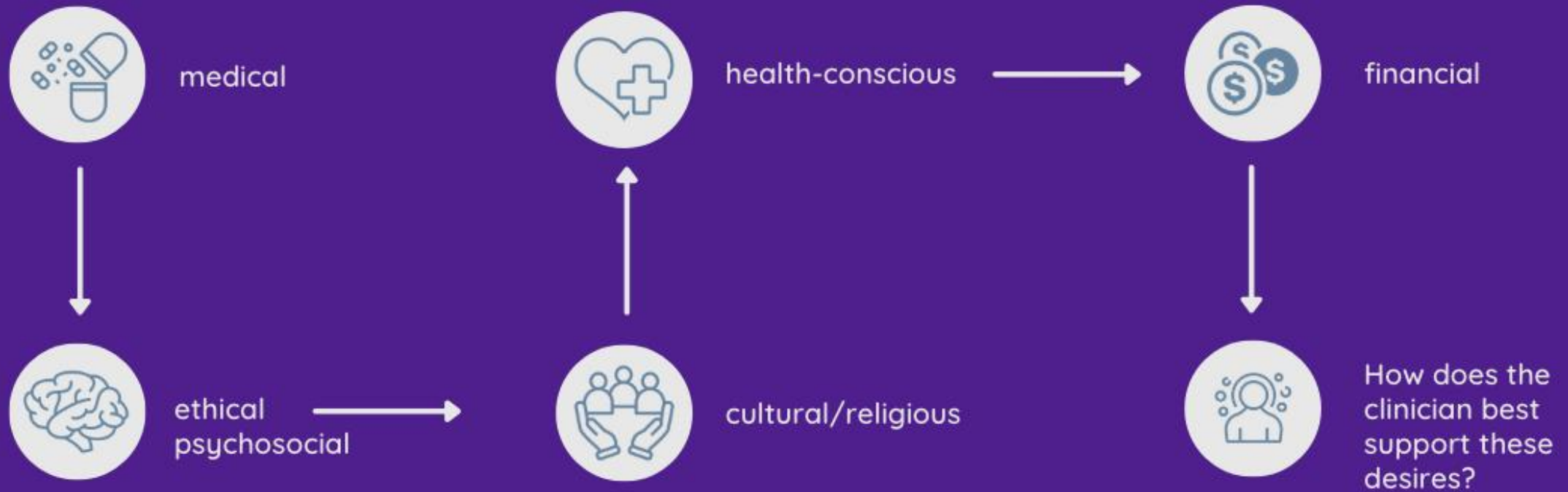
<sup>7</sup>Clinical Nutrition Services, Tampa General Hospital, Tampa, Florida, USA

<sup>8</sup>Clinical Nutrition, Houston Methodist Hospital, Houston, Texas, USA

<sup>9</sup>Department of Pediatrics & Child Health, Max Rady College of Medicine, University of Manitoba, Winnipeg, Manitoba, Canada



# Why Do People Eat The Way They Do?



# Pros to Home BTF<sup>1-3</sup>

- ❑ Increased gut microbiome diversity
- ❑ Reported reduced incidence in gagging/retching
- ❑ Improved bowel regularity
- ❑ Improved growth and weight gain
- ❑ Decreased hospitalizations
- ❑ Reported increase in caregiver feelings of nurturing

- ❑ Study: “*Blenderized food tube feeding in very young pediatric patients with special healthcare needs*”<sup>1</sup>
  - ▣ N=34 pediatric patients with multiple chronic conditions
    - genetic, gastrointestinal (GI), cardiac, etc.
  - ▣ Home BTF resulted in
    - Increased oral intake
    - Decreased GI medication use
    - Reduced adverse GI symptoms
    - Improved scores for weight, length and weight for length



# Pros to Home BTF

- ❑ Clinical research indicates BTF is a safe and relatively low-cost intervention to improve health outcomes
  
- ❑ One 2019 study<sup>1</sup> showed that BTF yielded:
  - 43% reduction in ED visits
  - 53% reduction in hospital admissions
  - 67% reduction in respiratory related admissions

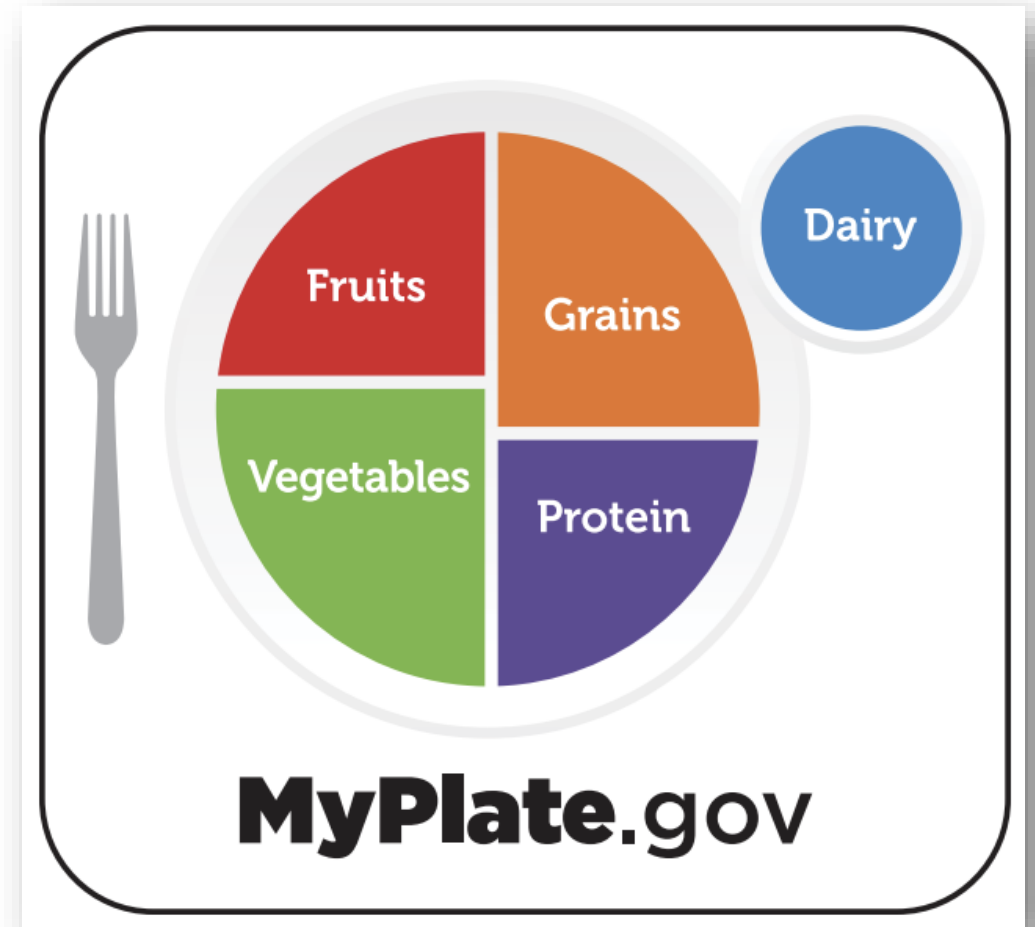


# A Closer Look at Cost

- Gallagher, et al. (2018)<sup>1</sup>
  - 17 pediatric patients with short gut safely/successfully transitioned from cont. hydrolyzed tube feeding to less expensive BTF
  - Reduced used of acid suppressive agents = \$ savings
  
- Schmidt, et al. (2019)<sup>2</sup>
  - 118 post-stroke adult patients in ICU randomized to receive commercially blended formula vs standard
  - Significantly reduced incidence of diarrhea in intervention group
  - Reduced observation period by 15 days

# Determining the Recipe

- ❑ RDN to conduct baseline nutrition assessment
  - ▣ calorie, protein, fluid recs, MVI needs, medications, weight, height
- ❑ Nutrient analysis software may be helpful
- ❑ MyPlate diet pattern as starting point



# 500 Calorie “Base”

**Starch**

**1/2 cup**

**Yogurt, reduced fat**

**1/4 cup**

**Milk 1%**

**6 oz**

**Oil, (ex. flaxseed, canola, soybean, walnut)**

**2 tsp**

**Fruit - C/F/F apple, banana, pear, mandarin**

**1/2 cup**

**Veg - C/F/F broccoli, carrot, green bean**

**1/2 cup**

**Protein - cooked chicken, turkey, beef, fish, tofu**

**1/2 cup**



# Preparation

- ❑ Food safety guidelines for food preparation
  - ▣ This is a key education point
- ❑ Use of a powerful blender is recommended
  - ▣ Average recommended time is 3-6 minutes
  - ▣ Use of a non-commercial blender may result in longer blend times
- ❑ Particle size will vary significantly
  - ▣ Recommended to gauge viscosity of BTF via the International Dysphasia Diet Standardisation Initiative (IDDSI) flow test
    - Syringe bolus compatible up to “very thick”
    - Gravity feeds no more than “slightly thick”
- ❑ Baby food can help achieve desired consistency



- ❑ **Large-bore gravity bags or pouches**
- ❑ **Straight extension sets (right angle may clog)**
- ❑ **Syringe bolus feeding is the preferred method**
  - ▣ O-ring syringes are generally the most well-liked
- ❑ **Direct relationship between BTF thickness and required force/hang time**
  - ▣ May pose challenges to malnourished patients
- ❑ **Homemade BTF hang time must be no longer than 2 hours**



# Let's Get Blending!

A Look at Home BTF in Action &  
Sample Recipes





# Home BTF Demonstration



- High calorie berry smoothie the entire family can enjoy!
  - 350 mL of blended food
  - 465 calories
  - (1.3 kcal/mL)

# Pumpkin Pie Spiced Smoothie

## Ingredients:

- ▣ ¼ cup pumpkin puree
- ▣ ½ banana
- ▣ ¼ cup Greek yogurt (full fat)
- ▣ 2 Tbsp chopped pecan
- ▣ 2 Tbsp maple syrup (can sub)
- ▣ 1 cup whole milk
- ▣ ¼ tsp pumpkin pie spice
- ▣ ¼ tsp cinnamon/clove



## Notes:

- ▣ Vibrant color to yield greater intake/appeal
- ▣ Adding spices for flavor and functional benefit
- ▣ Unripe banana increases resistant starch content

**420 mL volume**

**Approx. 460 calories  
(1.1 kcal/mL), 15 g protein**

# High Calorie Curried Chicken Salad

## □ Ingredients:

- 4 oz chicken, cooked
- ¼ cup green apple peeled, chopped
- ¼ cup dried raisins
- 2 Tbsp green onion, chopped
- 2 Tbsp almond slivers
- ¼ cup full fat cottage cheese
- 2 Tbsp oil of choice
- ½ Tbsp yellow curry
- 1 cup bone broth of choice

## □ Notes:

- Add ingredients to a blender and blend on high for 2-3 minutes
- Key: more time than you think!
- A strainer may also be used

**555 mL volume, approx. 825 calories (1.5 kcal/mL), 60 g protein**



# Troubleshooting Clogging

- ❑ The type of blender can make all the difference!
  - ▣ Medical discounts exist
- ❑ You'll need to blend longer than you think!
  - ▣ At least 2-3 minutes continuous
- ❑ Warmer meals may clog less





# One Family, One Meal

- I'm a huge believer in the "one family one meal rule."
- Think: *How can a patient's normal family staples be adapted?*
- **Examples:**
  - Thanksgiving dinner (eg, turkey, stuffing, mashed potatoes, green beans, whole milk)
  - Summer picnic (eg, pasta salad with fruit, or ice cream float)
  - Warm and "Fally" harvest soups

# Home BTF Through A Culinary Lens

- Focus on flavor & variety
- Rotate ingredients based on seasonality
- Explore different seasonings and herbs
- Cultural consideration



# References

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# Questions for Caroline!

*Thank  
You!*



**Caroline Weeks,  
PA-C, MPAS, RDN**

Pediatric Registered Dietitian and  
Physician Associate

# Easy Ways to Enhance Your Enteral Plan with Whole Food-Based Tube Feeding

September 18, 2025



**Hilarie Geurink, RD, CSP**

Owner and founder of  
Blended Tube Feeding™

- Nutricia North America, Consultant
- Functional Formularies, Consultant
- Medcare Products, Affiliate
- Tink's Tonic, Affiliate

*None pose any conflict of interest for this  
CE-eligible presentation*

*The opinions reflected in this presentation are those of the  
speakers and independent of Nutricia North America*

- Participants in this activity will learn to:
  - Review simple strategies to add homemade and commercially prepared blended diets to your patients' feeding plan.
  - Evaluate a patient case study incorporating blended food with formula feeds.



# How We Typically Approach Tube Feeding

- ❑ Keep things consistent and trackable
- ❑ Use nutritionally complete formula
- ❑ Limit changes to avoid complications



**Most people don't eat the same meal every day.  
Why should we expect that of tube-fed individuals?**

- Meals change daily
- Home-cooked, takeout, convenience options, frozen meals, & snacks
- Variety is normal AND beneficial

**People using feeding tubes are no different**

# When Tube Feeding Feels Too Rigid

One conventional formula, one schedule...

- ❑ Families feel boxed in
- ❑ Meals lack flexibility
- ❑ Potential gastrointestinal issues
- ❑ Miss out on the benefits of a varied, whole food diet

# Benefits of Real Food for Tube Feeding<sup>1</sup>

- ❑ Families report fewer digestive issues with blenderized tube feeding (BTF)
- ❑ Thicker blends may reduce reflux
- ❑ Dietary diversity
- ❑ Feels personal, empowering, and connected

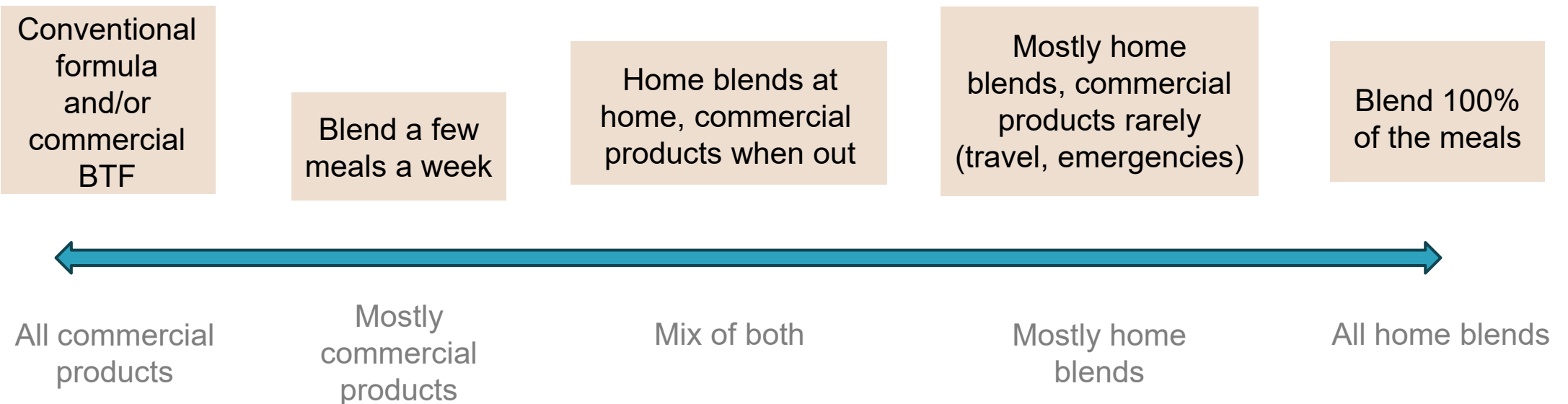


# Why Variety Matters





# Flexibility in Tube Feeding



# Enhancing Tube Feeding in Practice

## Start with one meal

- ❑ Formula feed = 400 Calories
- ❑ Create balanced meal from real food = 400 calories
- ❑ Choosing calorie dense foods will make meal size smaller





# Enhancing Tube Feeding in Practice

## Use recipes with equal calories

- ❑ Recipes with calorie/volume listed
- ❑ Calorie concentration like formula
- ❑ Recipe books and online resources



## Start with commercial blended products

- Simpler to get started, may improve intolerance issues without extra work
- 100% real food with a variety of meal choices vs real food-based



# What This Looks Like in Real Life

## CASE STUDY



- Born at 25 weeks
- Tube fed since birth, primarily breast milk + infant formula for first year
- Struggled to tolerate toddler formula; he was vomiting and losing weight
- Family told blends are “too dangerous to make at home”



# What This Looks Like in Real Life

## CASE STUDY

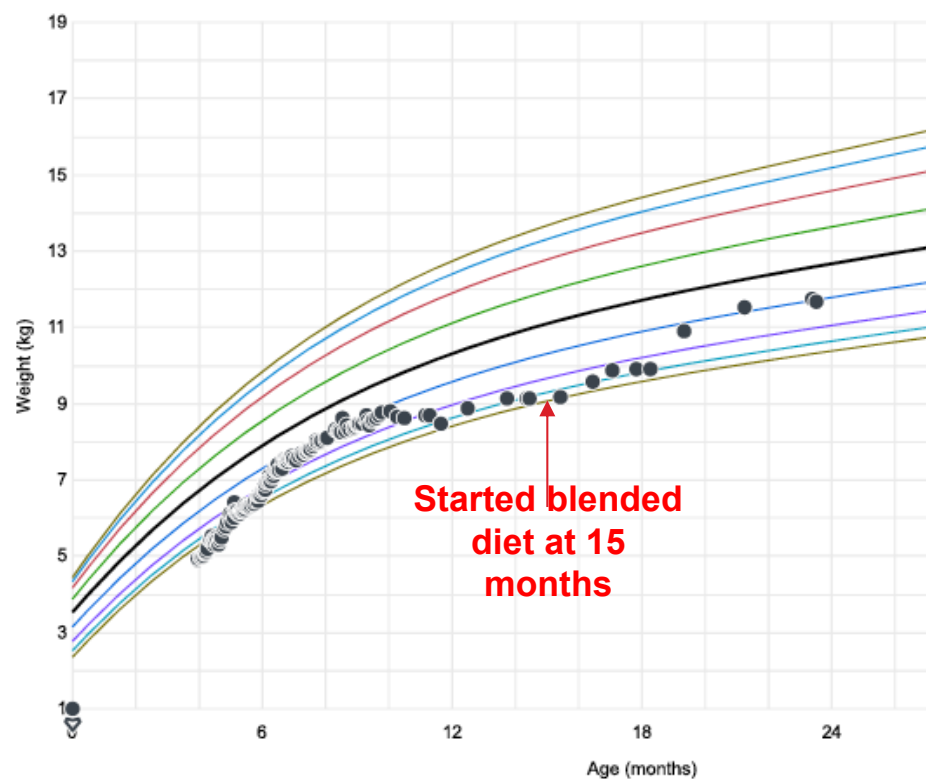
1. Calorie-matched recipes
  2. Combination of home blends and plant-based standard formula
- ✓ Avoided re-hospitalization during cold/flu season
  - ✓ Bowel movements regulated + no more vomiting
  - ✓ Improvement in growth
  - ✓ Family mealtimes feel connected and more “normal”



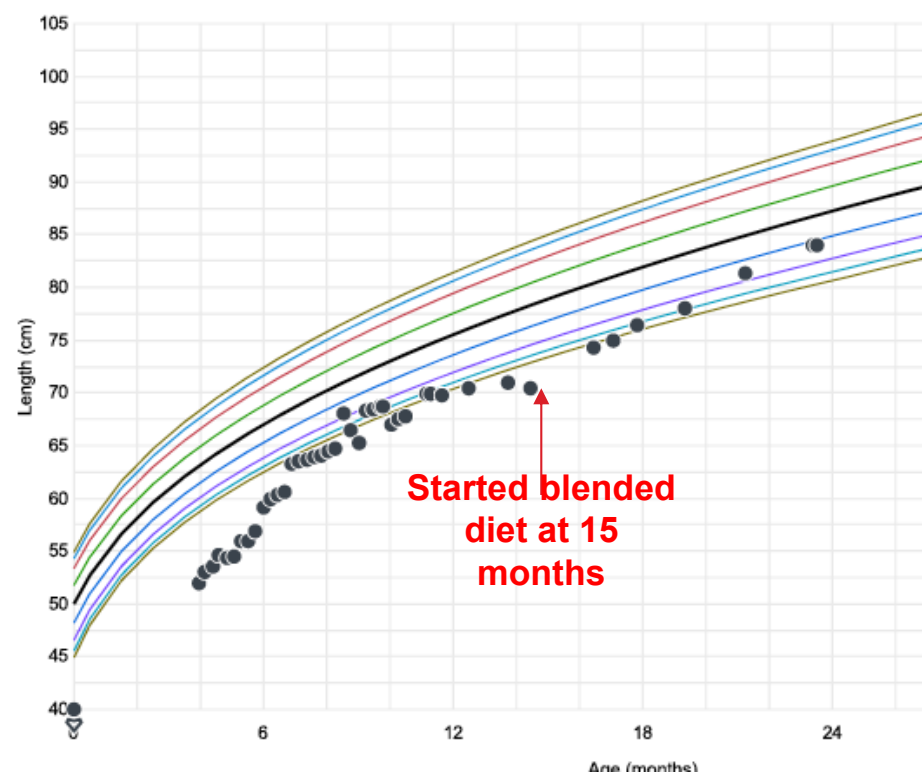
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# What This Looks Like in Real Life

**Growth Chart: United States**  
Weight-for-age Percentiles (Boys, birth to 36 months)



**Growth Chart: United States**  
Length-for-age Percentiles (Boys, birth to 36 months)



What if we assessed nutrition for people with feeding tubes like we do for oral eaters?

- ❑ Monitor growth
- ❑ Assess intake and look for nutrient gaps
- ❑ Consider medical conditions and medications
- ❑ Lab work as needed

**Tube feeding can be flexible, personal, and manageable.  
And it doesn't have to be all or nothing.**

- ✓ Less burnout
- ✓ Easier to adapt to life changes
- ✓ May improve digestive intolerance issues
- ✓ Can be more sustainable for families long term

# Resource Tools to Use in Practice

Scan QR codes to access helpful practice tools from the American Society for Parenteral and Enteral Nutrition (ASPEN)

## Blenderized Tube Feeding Podcast



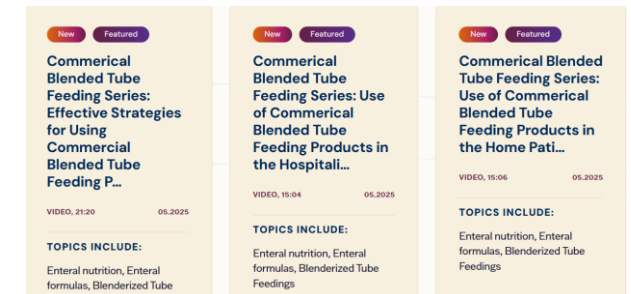
SCAN TO LISTEN

## Healthcare Professional Practice Tool, BTF Practice Recommendations, Sections 1 and 4



SCAN TO ACCESS

## Blenderized Tube Feeding Videos



SCAN TO WATCH



1. Hron B., et al. Health Outcomes and Quality of Life Indices of Children Receiving Blenderized Feeds via Enteral Tube. *J Pediatr.* 2019;211:139-145.
2. Epp L., et al. Use of Blenderized Tube Feeding in Adult and Pediatric Home Enteral Nutrition Patients. *Nutr Clin Pract.* 2017;32:201-205

# Questions for Hilarie!

Thank  
You!



**Hilarie Geurink, RD, CSP**

Owner and founder of  
Blended Tube Feeding™



**Let's hear from  
Tameka, the  
mother of a  
tube-fed child!**





# Dive Deep Into a Real Story About Real Food for Tube Feeding

September 18, 2025



**Tameka Diaz**

Mother of a  
tube-fed child

- Nutricia North America, Consultant

*None pose any conflict of interest for this  
CE-eligible presentation*

*The opinions reflected in this presentation are those of the  
speakers and independent of Nutricia North America*

# Learning Objectives

- Participants in this activity will learn to:
  - Understand the patient journey of transitioning to blenderized tube feeding.
  - Illustrate a family's experience with blenderized diets, with a story told directly by their caregiver.

# Evely's Story 🥕





# Evely's Story 🥕







# THIS CONCLUDES THE MASTERCLASS



# Thank you for attending



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