



Evidence associates *blenderized whole food formulas with clinical and health economic benefits* compared to plant-based standard formulas

A large retrospective pediatric study associates clinical, healthcare resource utilization and cost benefits with blenderized whole food formula, Compleat® Pediatric Organic Blends, vs. Kate Farms® Pediatric Standard 1.2, which does not contain blenderized whole foods, in post-acute care patients at 84 days post-hospital discharge.^{1,2}

Compleat® Pediatric Organic Blends is associated with:



60%
LESS

GI intolerance symptoms

vs. Kate Farms® Pediatric Standard 1.2
(118 vs. 292 patients with any GI symptoms)

71%
LESS

Mean total number of healthcare visits

vs. Kate Farms® Pediatric Standard 1.2
(28 vs. 96 total visits)

77%
LOWER

Total adjusted costs of healthcare visits

vs. Kate Farms® Pediatric Standard 1.2
(\$222,735 vs. \$965,451)

Choose **Compleat® Pediatric Organic Blends** to support positive **outcomes**. Designed to meet patient requests for blenderized whole food and plant-based options too!

Ask your Nestlé Health Science Sales Representative for samples of Compleat® Pediatric formulas, or visit www.nestlemedicalhub.com/samples



References: 1. Desai A, et al. *J Pediatr Gastroenterol Nutr.* 2022;75(S1):S292.

2. Desai A, et al. *J Pediatr Gastroenterol Nutr.* 2022;75(S1):S293.

Clinical Benefits of Real Food Tube Feeding Formulas Compared to Standard Tube Feeding Formulas in Post-Acute Pediatric Patients

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1. Market Access, Nestlé Health Science, 2. Medical Affairs, Nestlé Health Science, 3. Clarivate Data Analytics & Insights

Introduction:

The prevalence of home enteral nutrition (HEN) as part of post-acute care in the US has increased in recent decades due to its clinical and economic benefits.¹ Healthcare professionals, patients, and caregivers are requesting tube feeding formulas including more real food and recognizable ingredients.^{2,3} Commercially blenderized tube feeding formulas (CBTF) containing a variety of real foods may be suitable for patients with difficulty tolerating standard tube feeding formulas (STD-TF).³

Objectives:

To describe patient characteristics and clinical outcomes among pediatric patients who received CBTF compared to those receiving a plant-based STD-TF formula in post-acute care.

Methods:

This was a retrospective observational study, conducted using data from the Decision Resources Group Real World Evidence Data Repository, which covers 98% of US health plans and includes medical and pharmacy claims. Patients 1-14 years of age, with a prescription of either CBTF (Compleat® Pediatric Organic Blends, Nestlé HealthCare Nutrition, US) or STD-TF (Kate Farms® Pediatric Standard 1.2, Kate Farms Inc., US) between Jan 2018 and Dec 2020 were included. The index date was defined as the date of hospital discharge. GI intolerance symptoms were compared between CBTF and STD-TF group at 84 days post-index.

Patient Characteristics:

The study included 1064 children (42% female; mean age 5.05 years) from all US regions. The most common diagnoses pre-index were diseases of the digestive system (83%), respiratory diseases (80%), and congenital conditions (72%). Mean Charlson Comorbidity Index score was 1.7 among patients with comorbidities.

The most common comorbidities were chronic pulmonary disease (30%), paraplegia and hemiplegia (27%) and cerebrovascular disease (7%). No significant difference in concomitant medication use was observed for GI drugs (anti-diarrheals, anti-emetics, laxatives and others) and anti-infective drugs.

Results:

Significantly fewer patients experienced any GI intolerance symptoms at 84 days post-index while receiving the CBTF formula (25%) than STD-TF (49%) ($p<0.001$). This reduction in GI intolerance was maintained for specific intolerance symptoms including constipation ($p<0.001$), nausea and vomiting ($p<0.001$), abdominal pain ($p<0.001$), diarrhea ($p<0.001$), flatulence ($p=0.005$) and abdominal distension ($p=0.007$) at 84 days post-index (**Table 2**).

Table 2: GI Intolerance Symptoms at 84 Days Post-Index

	CBTF N=469, n (%)	STD-TF N=595, n (%)	p-value†
Any intolerance symptoms	118 (25%)	292 (49%)	<0.001
Intolerance symptoms			
Constipation	68 (14%)	190 (32%)	<0.001
Nausea & vomiting	47 (10%)	129 (22%)	<0.001
Abdominal pain	9 (2%)	51 (9%)	<0.001
Diarrhea	13 (3%)	57 (10%)	<0.001
Flatulence	9 (2%)	31 (5%)	0.005
Abdominal distention	8 (2%)	28 (5%)	0.007
≥3 intolerance symptoms	11 (9%)	58 (20%)	<0.001

Abbreviations: CBTF, commercial blenderized tube feeding formula; STD-TF, standard tube feeding formula
†chi-square test, alpha=0.05 level of significance

Conclusion:

The use of CBTF containing a variety of real foods was well tolerated in pediatric patients compared to STD-TF formulas. Significant reductions in GI intolerance symptoms were observed among children receiving CBTF compared to STD-TF formulas, demonstrating clinical benefits of real food tube feeding formulas in post-acute care patients.

Health Economic Benefits of Real Food Tube Feeding Formulas Compared to Standard Tube Feeding Formulas in Post-Acute Pediatric Patients

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1. Market Access, Nestlé Health Science, 2. Medical Affairs, Nestlé Health Science, 3. Clarivate Data Analytics & Insights

Objectives:

To conduct HCRU and cost analysis of CBTF compared with plant-based STD-TF in post-acute care pediatric patients.

Methods:

This retrospective observational study was conducted using data from the Decision Resources Group Real World Evidence Data Repository, which covers 98% of US health plans and includes medical and pharmacy claims. Patients 1-14 years of age, with a prescription of either CBTF (Compleat® Pediatric Organic Blends, Nestlé HealthCare Nutrition, US) or STD-TF (Kate Farms® Pediatric Standard 1.2, Kate Farms Inc., US) between Jan 2018 and Dec 2020 were included. The index date was defined as the date of hospital discharge. Outcomes were compared at 84 days post-index between the two groups. HCRU and associated costs were compared between the CBTF and STD-TF groups. Costs were adjusted for age, gender, and Charlson comorbidity index (CCI) score.

Patient Characteristics:

The study included 469 patients in the CBTF group (44% female, mean age 5.17 years), and 595 in the STD-TF group (40% female, mean age 4.96 years). There were no statistically significant differences between the two groups regarding mean age or gender. The most common diagnoses were diseases of the digestive system (CBTF 81%, STD-TF 85%), respiratory system (CBTF 78%, STD-TF 82%), and congenital malformations, deformations, and chromosomal abnormalities (CBTF 76%, STD-TF 69%). Fifty-nine percent of patients in the CBTF group had at least one CCI comorbidity compared with 58% of those in the STD-TF group. Of these, 88% in the CBTF group had CCI scores of 1–2 compared with 84% in the STD-TF group; 10% in the CBTF group had CCI scores of 3–4 compared with 12% in the STD-TF group; 1% of patients in the CBTF group had CCI scores ≥5 compared with 4% in the STD-TF group.

Results:

At 84 days post-index, the mean total number of visits (28 visits per CBTF patient vs 96 per STD-TF patient, $p<0.001$), visits to outpatient (18 vs 73, $p<0.001$), inpatient (5 vs 11, $p=0.001$), emergency departments (1 vs 2, $p<0.001$), and other places of service, including assisted living, intermediate care, and unidentified facilities (3 vs 9, $p=0.005$), were significantly lower for the CBTF group compared with the STD-TF group. A significantly higher proportion of patients receiving STD-TF required inpatient visits, emergency department visits, urgent care and visits to other places of care than those receiving CBTF (all $p<0.001$). Most patients in both groups required outpatient visits (100% in the CBTF vs 97% in the STD-TF group). After controlling for age, gender and CCI score, significantly lower adjusted costs attributed to outpatient visits (CBTF \$164,480, STD-TF \$738,567, $p<0.001$), inpatient visits (CBTF \$32,575, STD-TF \$111,702, $p<0.001$), emergency department visits (CBTF \$8,084, STD-TF \$20,127, $p<0.001$), urgent care (CBTF \$4,767, STD-TF \$9,214, $p<0.001$), and other visits (CBTF \$12,829, STD-TF \$85,842, $p<0.001$) were recorded for the CBTF group compared with the STD-TF group.

Conclusion:

A CBTF containing a variety of real food prescribed in post-acute care was associated with fewer visits to healthcare providers and reductions in costs attributed to those visits compared with a plant-based STD-TF. Post-acute care pediatric patients prescribed a CBTF showed lower inpatient, outpatient, urgent care, and other mean visits than those prescribed a plant-based STD-TF. Pediatric patients prescribed CBTF in post-acute care related to significantly lower adjusted costs associated with inpatient visits, outpatient visits, emergency department, urgent care, and other services compared with those prescribed a STD-TF.

References: 1. Mundi MS, et al. *Nutr Clin Prac.* 2017;32(6):799-805. 2. Gramlich L, et al. *Nutrients.* 2018;10(8). 3. Boullata JI, et al. *JPEN J Parenter Enteral Nutr.* 2017;41(1):15-103.



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Choose **Compleat® Pediatric Organic Blends** to support positive outcomes.

Designed to meet patient requests for real food and plant-based options too!



BLENDERIZED WHOLE FOOD FORMULA IS ASSOCIATED WITH CLINICAL, HEALTHCARE RESOURCE UTILIZATION, AND COST BENEFITS IN POST-ACUTE PEDIATRIC PATIENTS

CONTAINS BLENDERIZED WHOLE FOODS

CONTAINS SOLUBLE & INSOLUBLE FIBER TO SUPPORT DIGESTIVE HEALTH

NONE OF THE COMMON FOOD ALLERGENS

	Compleat® PEDIATRIC ORGANIC BLENDS PLANT-BASED (1.2KCAL/ML)	KATE FARMS® PEDIATRIC STANDARD 1.2
	✓	✗
	✓	✗
	✓	✗
	✓	✓

- Approximately 3 cup equivalents of fruits and vegetables per 1000 mL
- Phytonutrients provided from blenderized fruits and vegetables

- Does not contain blenderized whole foods
- Phytonutrients provided from added extracts and concentrates

- Contains only soluble fiber

Compleat® formulas are broadly available for insurance coverage including Medicare, most Medicaid plans including Medi-Cal, and most private insurance plans*

Meet Axel

His family ultimately decided to use Compleat® Pediatric Organic Blends formula *because they loved the blenderized whole foods.*



USE UNDER MEDICAL SUPERVISION

*Individual plan coverage guidelines and documentation requirements apply

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