

# WHY BLENDERIZED WHOLE FOOD DIETS

## A Look at Recent Clinical Research

**Conclusions:** Blenderized diets are associated with decreased healthcare use, improved symptom scores, and increased patient satisfaction compared with conventional formulas



### Health Outcomes and Quality of Life Indices of Children Receiving Blenderized Feeds via Enteral Tube

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#### Abstract

**Objective:** To determine whether clinical and patient-reported outcomes differ in children receiving blenderized diets compared with conventional formula.

**Study design:** We conducted a prospective cohort study of 70 children aged 1-18 years receiving blenderized diets vs conventional formula via feeding tube. We assessed rates of hospitalization and visits to the emergency department (ED) at Boston Children's Hospital in 2017 and Likert scale addressing satisfaction with feeding regimen; Pediatric Gastroesophageal Reflux Disease Symptom and Quality of Life Questionnaire; Pediatric Quality of Life Inventory; and Pediatric Quality of Life Inventory Gastrointestinal Symptoms Scale.

**Results:** Participants receiving blenderized diets (n = 42, 60%) did not differ in demographics or comorbid diagnoses from those receiving conventional formula (n = 28, 40%). Rates of total visits to the ED (0.8 ± 1.5 vs 1.4 ± 2.7, P = .05), total admissions (0.8 ± 1.2 vs 1.7 ± 2.3, P = .01), and respiratory-related admissions (0.2 ± 0.5 vs 0.6 ± 0.8, P = .04) per year were significantly lower in participants receiving blenderized diets, and respiratory-related visits to the ED trended toward significance (0.1 ± 0.4 vs 0.4 ± 0.8, P = .08). Compared with those receiving conventional formula, participants on blenderized diets reported greater satisfaction ratings (Likert scale 4.3 ± 1.0 vs 3.3 ± 1.2, P = .001), lower symptom (0.7 ± 0.8 vs 1.2 ± 1.1, P = .03), and total (0.8 ± 0.8 vs 1.2 ± 1.0, P = .02) scores on Pediatric Gastroesophageal Reflux Disease Symptom and Quality of Life Questionnaire, indicating less nausea and vomiting (64.0 ± 22.6 vs 49.0 ± 37.9, P = .02), abdominal pain (65.0 ± 26.8 vs 56.4 ± 33.9, P = .04), diarrhea (87.9 ± 15.5 vs 73.6 ± 26.3, P = .004), and fewer total symptoms (70.2 ± 16.3 vs 62.3 ± 19.6, P = .03).

**Conclusions:** Blenderized diets are associated with decreased healthcare use, improved symptom scores, and increased patient satisfaction compared with conventional formulas.

**Keywords:** blenderized diets; enteral tube feeds; healthcare use; quality of life.



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# HEALTH OUTCOMES AND QUALITY OF LIFE INDICES OF CHILDREN RECEIVING BLENDERIZED FEEDS VIA ENTERAL TUBE

— Journal of Pediatrics, May 2019 —

## ABOUT THE STUDY

### Location:

Aerodigestive Center, Boston Children's Hospital

### Design:

- Prospective Cohort
- N=70 Children (1-18) requiring enteral feeding
- Blenderized diets vs Conventional formula

### End Points:

- Rate of Hospitalization
- Visits to Emergency Department
- Satisfaction with feeding regimen
- Pediatric Gastroesophageal Reflex Symptoms
- Quality of Life Questionnaire
- Pediatric Life Inventory
- Pediatric Quality of Life Gastrointestinal Symptoms

### Investigators:

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## FINDINGS

### Conclusions:

Blenderized diets are associated with decreased healthcare use, improved symptom scores, and increased patient satisfaction compared with conventional formulas

**Results demonstrated superior clinical outcomes in children receiving Blenderized diets.**

### Blenderized Patients had...

- Significantly lower total Emergency Dept. Visits
- Significantly lower Total Hospital Admissions
- Significantly lower Respiratory related admissions/year
- Greater Satisfaction
- Lower Symptom and total scores on PDQoL
- Better Quality of Life

**...and importantly, a significant reduction in Healthcare Usage /overall healthcare system cost.**

To download the full study visit: [www.jpeds.com/article/S0022-3476\(19\)30443-3/fulltext](http://www.jpeds.com/article/S0022-3476(19)30443-3/fulltext)

## BLENDERIZED N=42

N=17



Home-made+  
Conv. base

N=11



Home-made+

N=9



Nourish

N=3



Liquid Hope

N=2



Real Foods  
Blends

## PRODUCTS USED



## CONVENTIONAL N=28

N=16 Elemental

N=10 Std Milk-based

N=02 Multiple Formulas