

Nutritional intervention should start early in order to avoid long-term impact

Short-term Consequences¹⁻³

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· Poor wound healing

· Weight loss

- . Increased risk of recurrent infections
- · Prolonged length of hospital stay
- · Increased duration of mechanical ventilation
- · Increased risk of readmission
- · Increased risk of stunting Immune dysfunction Reduced physical development
- · Poorer lifelong health

Long-term Consequences3-5

· Reduced cognitive achievements



PEDIATRIC MAI NUTRITION CAN DISPURT CHILDHOOD GROWTH



ESPIGHAN 2010 RECOMMENDATION

Enteral Nutrition (EN)* is indicated in a patient with at least a partially functional gut

riteria for Enteral Nutritional Support

Insufficient Oral Intake
Inability to meet x60-80% of individual requirements for x10 days
Nutrition succort should be initiated in:

Children <1 y: within 3 days of the anticipated lack of oral intake Children <1 y: within 5 days of the anticipated lack of oral intake

Total fooding time in a disabled shill ad to 6 hillion

Inadequate Growth

Children < 2 yr inadequate weight gain for >1 month
Children > 2 yr weight loss or no weight gain for a period of >3 month

Change in weight for age over 2 growth channels on the growth charts

Decrease in height velocity s2 cm/v

ESPOUAN 2010 DECOMMENDATION

Enteral Nutrition (EN)* is indicated in a patient with at least a partially functional

Criteria for Enteral Nutritional Support

- Inability to meet >60-80% of individual requirements for >10 days
 - Nutrition support should be initiated in:

 Children <1 y: within 3 days of the anticipated lack of oral intake
- Total fearing time in a disabled child of to 6 h/Mar

- Children < 2 y: inadequate weight gain for >1 month Children > 2 y: weight loss or no weight gain for a period of >3 month
- Change in weight for age over 2 growth channels on the growth charts
 - ceps skinfolds consistently d5 th percentile for age

crease in height velocity x2 cm/y



TUBE FEEDING IS REQUIRED ACROSS A RANGE OF MEDICAL CONDITIONS ONE OF THE MOST PREVALENT ISSUES IS FEEDING INTOLERANCE

Medical Conditions

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Neurodisabilities Cardiac disease

Prevalence of Feeding Intolerance



Up to 60% in critically ill children



Up to 65% in cystic fibrosis?





Medical Conditions

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Critical Illness/PICU eg cardiac targery acute requiremy taken Cancer

Liver disease Cystic fibrosis Prevalence of Feeding Intolerand



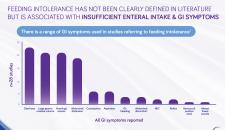


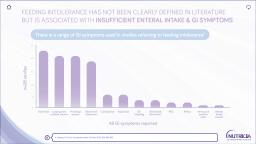












A SIMPLIFIED **2-STEP APPROACH TO CONFIRM FEEDING INTOLERANCE** HAS BEEN DEVELOPED WITH EXPERTS

If one symptom from the 1" column, presents together with one symptom from the 2" column





A SIMPLIFIED 2-STEP APPROACH TO CONFIRM FEEDING INTOLERANCE

If breast milk or whole protein polymeric feed fails, experts recommend a formula which should contain?

















EXPERT RECOMMENDATIONS FOR FEEDING INTOLERANCE?



100% Whey based Extensively Hydrolyzed Protein

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-50% MCTr E -50% LCTr

CARBS

TAILORED & AGE ADAPTED TO SUPPORT TOLERANCE & GROWTH



















- Whey proteins contain a higher proportion of essential amino acids and thus are considered to provide a better quality of protein compared to casein. The use of whey-based formula are associated with: Improved rate of gastric emptying¹⁻⁴
- . Fewer episodes of emesis and Glirefluct

- Protein-energy ratio is in line with WHO recommendations? (ratio 9-115%) for malnourished children
- · Meet increased protein needs . Support catch-up growth & development.











(3)

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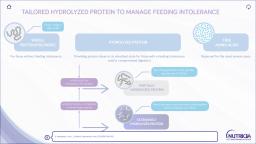


Providing protein closer to its absorbed state for those with a feeding intolerance and/or compromised digestion





Reserved for the most severe cases







SPECIFICALLY TAILORED FAT BLEND TO SUPPORT TOLERANCE

WHILST PROMOTING GUT ADAPTATION IN TUBE-FED INFANTS AND CHILDREN

Optimal balance of fats (~50% MCTs & ~50% LCTs)



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Medium-chain Triglycerides (MCT)

MCTs are easily hydrolyzed and absorbed into the blood stream which offer an advantage in patients with maldigestion and/or malabsorption. 12

Long-chain Triglycerides (LCT)

LCTs play an important role to enhance bowel adaptation? (beneficial effects in particular in patients with inscrinal failure e.g. Short Bowel Syndrome)

Long-chain Polyunsaturated Fatty Acids (LC-PUFAS)

LCTs contain LC-PUFAS which support:

- Immune function (mainly thanks to n-3 LCPs)*
- · introner
 - . Brain development & memory function





SPECIFICALLY TAILORED FAT BLEND TO SUPPORT TOLERANCE

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© SPECIFICALLY TAILORED CARB MIXTURE TO MANAGE FEEDING INTOLERANCE IN TUBE-FED INFANTS AND CHILDREN



Low Lactose

Low level of lactose (< 10g/100ml) so not to induce clinical symptoms for children with primary and

for patients with tolerance issues.

Maltodextrin

Complex carbs (e.g maltodextrin) enhance the feed solubility and reduce the contribution to the feed complaint which is important.





Supporting TOLERANCE & COMPLIANCE





- 94% compliance
- a Improved GI symptoms (diarrhea.voimiting)
- · Minimal interruptions of feed · Meet high energy requirements

- . Increased energy intake by 30%
- · Improved growth (weight, height, · Increased growth velocity
- · Increased nutritional intake

· Improved weight for age Z-score

Peptisorb^{1,2}













NUTRINI PEPTISORB RANGE: EFFECTIVE IN THE MANAGEMENT OF GROWTH & FEEDING INTOLERANCE IN CHILDREN

Supporting GRQWTH · Improved nutritional intake"



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Well tolerated by 86%

· Improved GI tolerance

· Promoted growth in children



• 99% of children met their prescribed volume Reduction in GI symptoms

· 80% achieved nutritional goals

· Increased weight and height Z-scores*













If one symptom from the 1" column, presents together with one symptom from the 2" column









