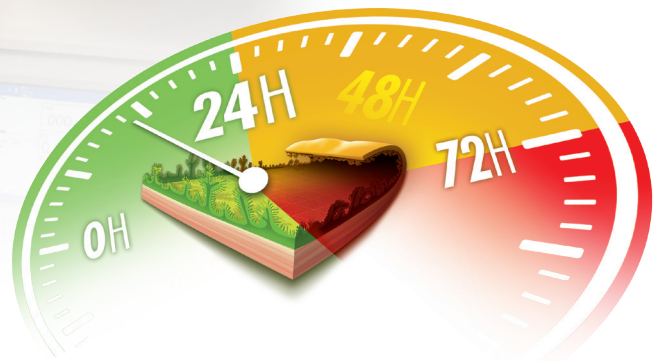


NFACTOR means adequate nutrition for your ICU patients right from the start

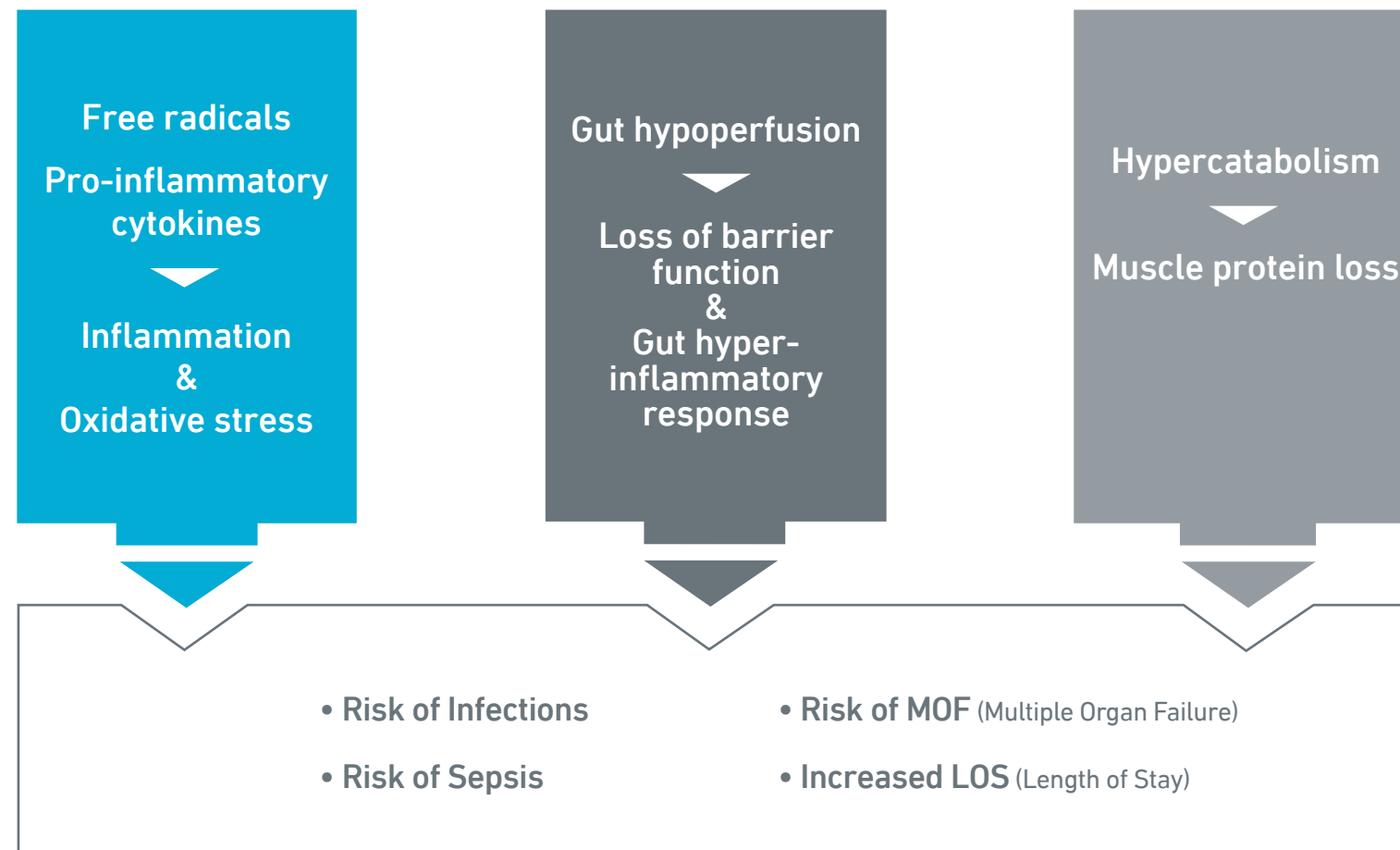


Peptamen[®]

Time is Critical

Enteral nutrition solutions for early and adequate feeding of critically ill patients

Critically ill highly stressed patients



Early enteral nutrition helps to:¹

- Maintain gut integrity
- Modulate stress and the systemic immune response
- Attenuate disease severity

2009 Critical Care Nutrition Guidelines:¹

- Enteral feeding should be started early in haemodynamically stable patients, within the first 24-48 hours following admission ^(Grade C)
- Feeding should be advanced towards goal over the next 48-72 hours ^(Grade E)

Early and adequate enteral nutrition can improve clinical outcomes

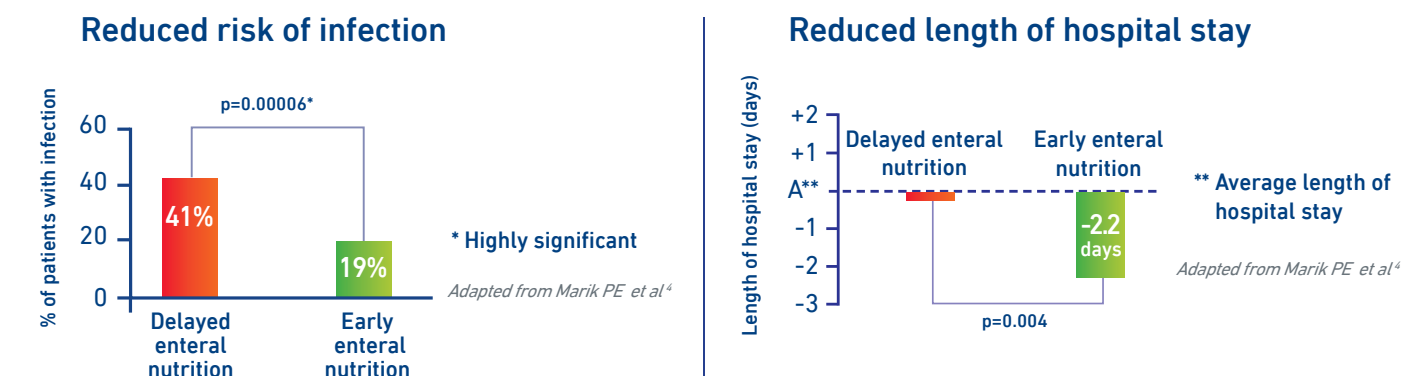
40 to 60% of patients who are eligible for early EN still fail to receive EN within 48 hours of ICU admission²

In an international observational study in 2,772 mechanically ventilated patients in 167 ICUs across 37 countries:³

- Patients received 59.2% of the energy prescribed
- Patients received 56.2% of the protein prescribed

Early vs delayed enteral nutrition is associated with:⁴

- Lower incidence of infections (p=0.00006)
- Reduced length of hospital stay (p=0.004)



Early enteral nutrition provided within 24 hours of injury or ICU admission:⁵

- Significantly reduced mortality (p=0.02)
- Significantly reduced pneumonia (p=0.01)

Increased intake of energy and protein is associated with:³

- Reduction in mortality (p=0.014)
- Increase in ventilator free days by 3.5 days (p=0.003)

³International observational study in 2 772 mechanically ventilated patients in 167 ICUs across 37 countries

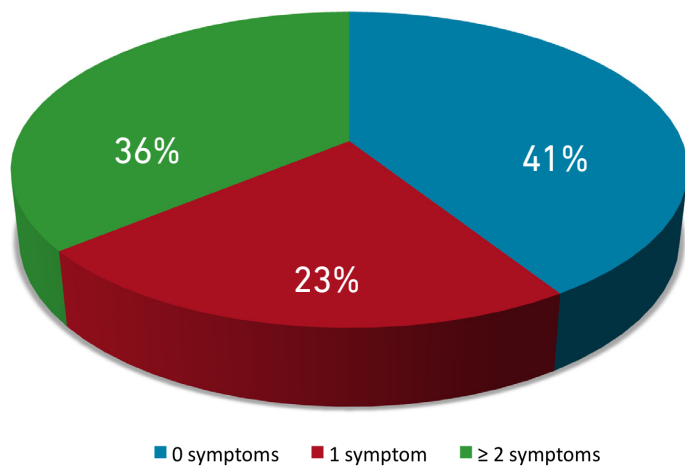
27% of ICU patients account for 74% of ICU patient days and resources⁶

ICU Length of Stay	≤ 3 days	3-7 days	> 7 days
Proportion of all admissions (%)	73	15.9	11
Proportion of ICU days (%)	25.8	21.6	52.6
Proportion of TISS points* (%)	27.7	20.6	51.7

*TISS = Therapeutic Intervention Scoring System, to reflect the consumption of ICU resources.
ICU-LOS group 3-7 consists of patients with ICU-LOS >3 and ≤ 7days

GI symptoms occur frequently in ICU patients⁷

Prevalence of gastrointestinal (GI) symptoms



Adapted from Reintam et al⁷

Mean ICU stay⁷

	ICU LOS (days)
Patients with 0 GI symptoms	2.9
Patients with 1 GI symptom	4.2
Patients with ≥ 2 GI symptoms	>8

Patients with at least two GI complications were older and more severely ill

High Gastric Residual Volume (GRV) and diarrhoea are frequent GI complications in mechanically ventilated patients on EN⁸

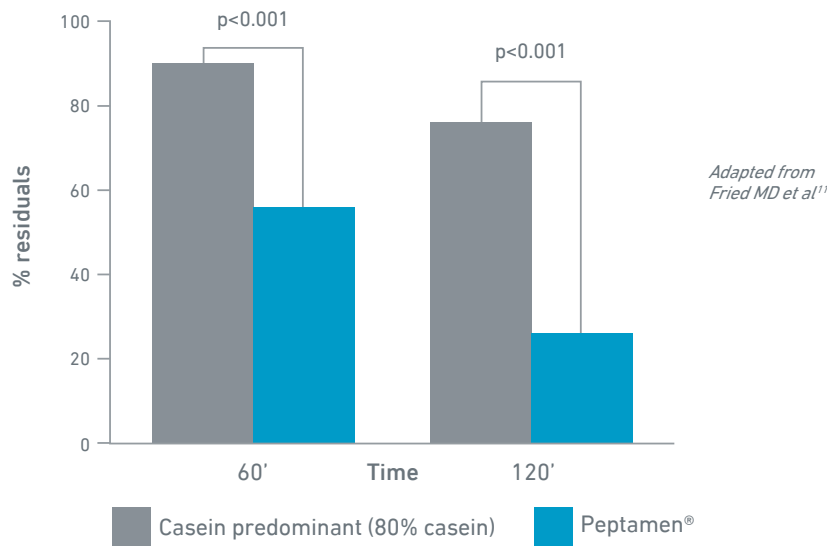
Complications	%
GI complications	47.8-63.6%
High GRV (200ml)	42.4%
High GRV (500ml)	26.8%
Diarrhoea	20%

Peptamen® AF is an advanced formula designed for better tolerance for early enteral nutrition in critically ill patients

Designed for better tolerance for early enteral nutrition

- MCT decreases the potential for fat malabsorption⁹
- Whey protein facilitates gastric emptying to reduce potential for reflux¹⁰⁻¹²
- Peptides can be helpful in managing diarrhoea^{1, 13}
- 1.5 kcal/ml and high protein formulas available for volume restricted patients

Effects of whey-based formulas on gastric emptying time



Advanced lipid blend helps modulate inflammation

Enriched with omega-3 fatty acids to help modulate the inflammatory response by decreasing production of pro-inflammatory cytokines^{14,15}

Low levels of pro-inflammatory omega-6 fatty acids

- Ratio of MCT:LCT (50:50) to help decrease inflammation by reducing dietary load of omega-6 fatty acids¹⁶
- n6:n3 ratio (1.8:1) to beneficially modulate lipid mediator synthesis¹⁶

Tube-feeding intolerance can compromise patients' comfort and outcomes

1: TUBE FEEDING INTOLERANCE

Can be manifested by patient discomfort:

- Feeling of fullness
- Abdominal distension or bloating
- Nausea
- Vomiting
- Diarrhoea

2: FEEDING INTERRUPTIONS

3: INADEQUATE CALORIE AND PROTEIN PROVISIONS

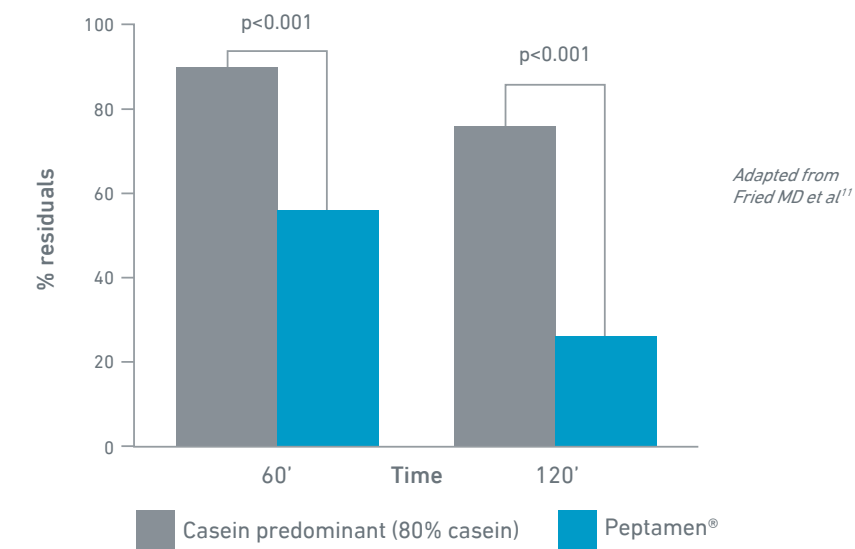
- Reduced Weight
- Reduced Lean Body Mass

Solving tube-feeding intolerance helps to minimise patient discomfort and to support optimal nutrition status

Peptamen®: A specific enteral formula to help promote feeding tolerance

100% Whey protein for faster gastric emptying¹⁰⁻¹²

Effects of whey-based formulas on gastric emptying time



Enhanced gastric emptying helps to:

- Provide relief for:
 - > Abdominal distension
 - > Bloating
 - > Nausea
- Reduce potential for gastric reflux

50-70% of fat as MCT for improved digestion and absorption⁹

- Decreases the potential for fat malabsorption
- Provides readily available energy

Low to moderate osmolarity to support tolerance by limiting contribution to osmotic load

Peptide based formula may help reduce risk of diarrhoea^{1,13}

Peptamen®

Peptamen® can be used for the following patients:

- Early enteral feeding
- Transition from TPN
- Malabsorption
- Diarrhoea management
- Intolerance to standard formula
- Delayed gastric emptying
- Short-bowel syndrome
- Inflammatory bowel disease
- Pancreatitis
- Chyle leaks

Peptamen®: a range of specific enteral formulas designed for better tolerance

- 100% Whey protein to facilitate gastric emptying and reduce reflux¹⁰⁻¹²
- MCT* to decrease potential for fat malabsorption⁹
- Peptides to help manage diarrhoea^{1,13}
- Low osmolarity for improved GI tolerance and reduction in diarrhoea

*Medium Chain Triglycerides

100% Whey protein

100% Whey protein helps support the body's antioxidative defence system.

- Cysteine is the rate-limiting amino acid for the synthesis of glutathione, a principal protective antioxidant mechanism of the cells^{17,18}
- Whey is rich in cysteine and may be effective in maintaining or repleting glutathione status¹⁸

High quality protein:

Type of Protein ^{19,20}	Biological Value	NPU
Whey	100	92%
Casein	80	76%

Biological value: amino acids profile meets or exceeds requirements for essential and non-essential amino acids
Net Protein Utilisation: amount of nitrogen absorbed and retained by the body

The Peptamen® Family - designed for better tolerance



Peptamen® AF

Elevated energy and protein requirements

- 1.5 kcal/ml
- 100% whey protein
- Rich in omega-3 fats (0.36g per 100ml)
- 9.4g protein per 100ml
- 50% of fat as MCT

Osmolarity: 380mOsm/l

Available in 500ml DRIPAC®-flex suitable for tube feeding



Peptamen® HN

Elevated energy and protein requirements

- 1.33 kcal/ml
- 100% whey protein
- 6.6g protein per 100ml
- 70% of fat as MCT

Osmolarity: 350mOsm/l

Available in 500ml DRIPAC®-flex suitable for tube feeding



Peptamen®

Standard energy and protein requirements

- 1 kcal/ml
- 100% whey protein
- 4.0g protein per 100ml
- 70% of fat as MCT

Osmolarity: 200mOsm/l

Available in 500ml DRIPAC®-flex or 1000ml DRIPAC®-flex for tube feeding



Peptamen® Vanilla

Standard energy and protein requirements

- 1 kcal/ml
- 100% whey protein
- 4.0g protein per 100ml
- 67% of fat as MCT

Osmolarity: 280mOsm/l

Available in 4 x 200ml Vanilla Bottles for oral feeding

We believe in the power of nutrition. We call it the **N**FACTOR

Peptamen®

Time is Critical



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