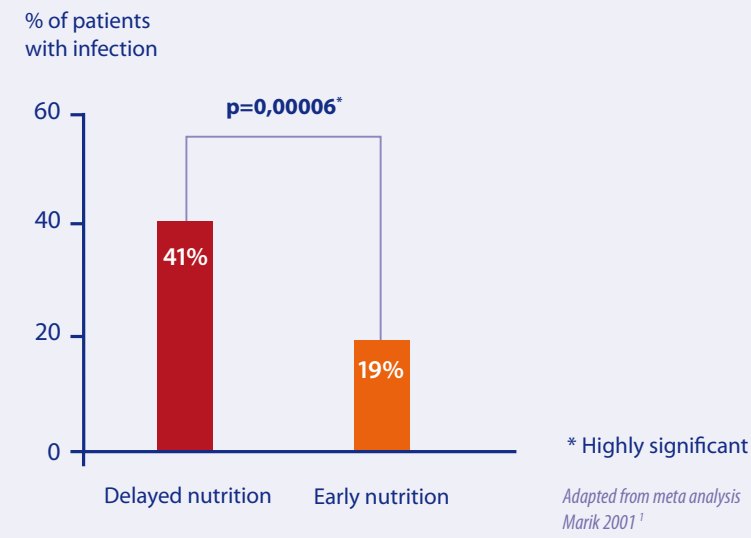


► Designed for better tolerance

for early enteral nutrition

Early enteral nutrition has been shown to improve clinical outcomes in critically ill patients¹:

- Reduced mean length of stay in hospital by 2.2 days
- Reduced the risk of infection



Designed for tolerance:

Whey proteins facilitate gastric emptying to reduce potential for reflux^{2,3,4}

MCT decreases the potential for fat malabsorption⁵

Peptide can be helpful to manage diarrhoea⁶

1.5 kcal/mL & high protein for volume restricted patients

► Nestlé Nutrition solutions for critically ill patients

New

PEPTAMEN® AF

Advanced formula designed for early nutrition in critically ill patients:



- omega-3 fatty acids to help manage inflammation^{1,2}
- whey protein to support the body's antioxidative defences^{3,4}
- high protein to help maintain lean body mass⁵

- 95 g protein/L
- 1.5 kcal/mL
- 11.6 g fish oils/L
- 4.3 g omega-3 F.A./L
- 100% whey peptides
- 50% of fat as MCT
- 380 mOsm/L

Indications: Critically ill patients: Sepsis, ARDS, Trauma and Burns

Product Description: Enteral nutrition pouch, 500 mL

Usage: 1-2 pouches per day adjusted to nutritional needs and tolerance of the patient

PEPTAMEN® HN

- 66 g Protein /L
- 1.33 kcal/mL
- 100% whey peptides
- 70% of fat as MCT
- 390 mOsm/L



PEPTAMEN®

- 40 g Protein/L
- 1.0 kcal/mL
- 100% whey peptides
- 70% of fat as MCT
- 200 mOsm/L



Peptamen®
—AF—

INFLAMMATION & OXIDATIVE STRESS



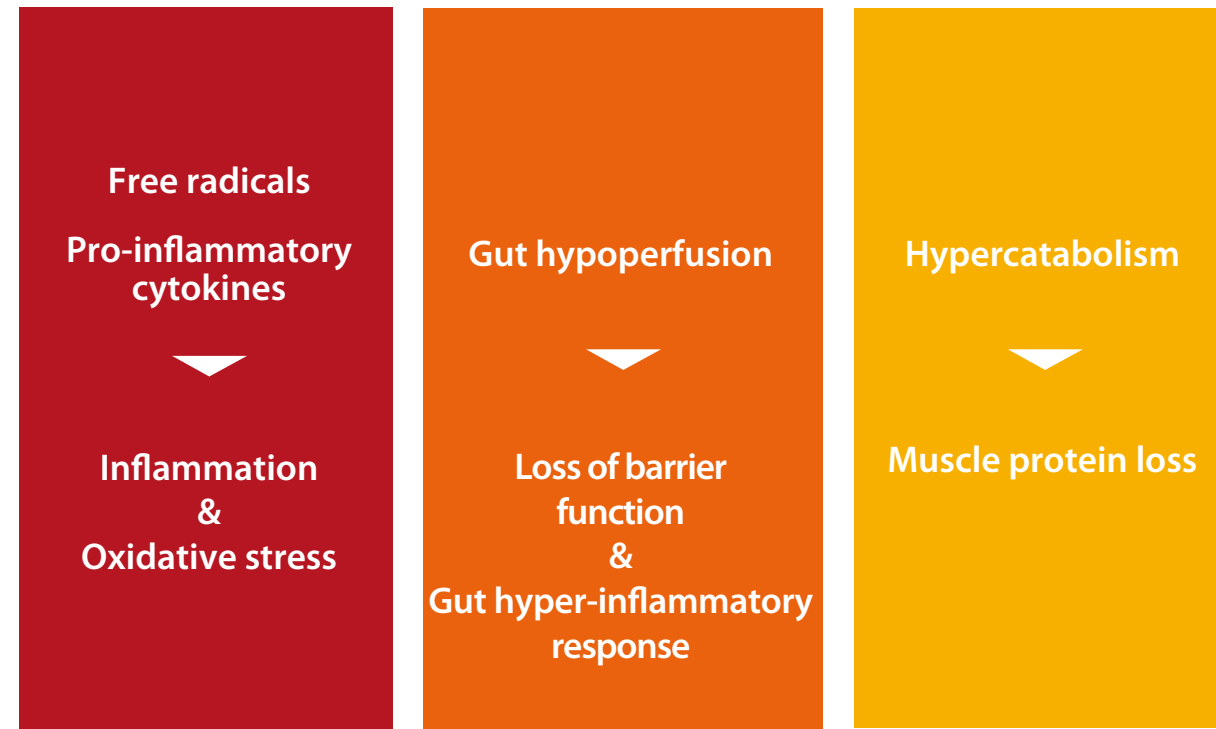
Get it under
Control

To help manage the cascade of complications

1- Marik PE and Zaloga GP. Early enteral nutrition in acutely ill patients: A systematic review. *Crit Care Med* 2001, 29:2264-2270. 2- Khoshoo V et al. Incidence of Gastroesophageal Reflux with Whey- and Casein-Based Formulas in Infants and in Children with Severe Neurological Impairment. *J Pediatr Gastroenterol Nutr*. 1996, 22:48-55. 3- Fried MD et al. Decrease in gastric emptying time and episodes of regurgitation in children with spastic quadriplegia fed a whey-based formula. *J Pediatr*. 1992, 120:569-572. 4- Khoshoo V and Brown S. Gastric emptying of two whey-based formulas of different energy density and its clinical implication in children with volume intolerance. *Eur J Clin Nutr*. 2002, 56:1-3. 5- R.H. Rolandelli, J.R. Ulrich. Lipids and Enteral Nutrition. In: *Clinical Nutrition: Enteral and tube feeding*. J.L. Rombeau, R.H. Rolandelli, W.B. Saunders Company, 1997. 6- S. A. McClave et al. Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) *Journal of Parenteral and Enteral Nutrition*, Vol. 33, No. 3, May/June 2009.

1- Calder P. n-3 Fatty acids, inflammation, and immunity—Relevance to postsurgical and critically ill patients. *Lipids*. 2004, 12:1147-1161. 2- Mayer K, Seeger W. Fish oil in critical illness. *Curr Opin in Clinical Nutrition and Metab Care*. 2008, 11:121-127. 3- Bounous G. et al. The antioxidant system. *Anticancer Research* 2003, 23: 1411-1416. 4- Rowe B. et al. effect of whey-and casein-based diets on glutathione and cysteine metabolism in ICU patients. *J Am Nutr* 1994; 3(5): 535 (Abstract). 5- S. A. McClave et al. Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) *Journal of Parenteral and Enteral Nutrition*, Vol. 33, No. 3, May/June 2009.

CRITICALLY ILL HIGHLY STRESSED PATIENTS



- Risk of Infections
- Risk of Sepsis
- Risk of MOF
- Increase LOS

Early specific enteral nutrition may help manage the cascade of potential complications

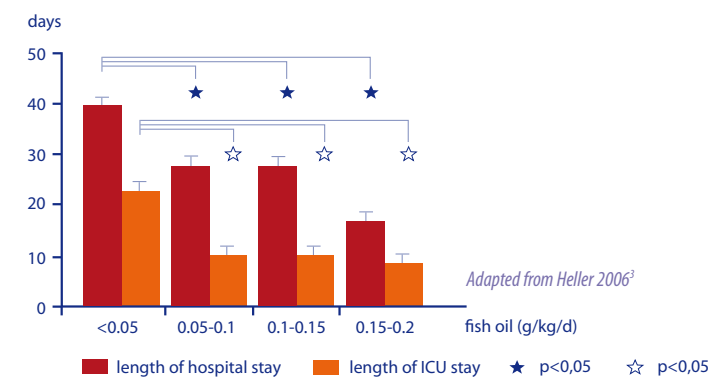
PEPTAMEN® AF is an advanced enteral nutrition formula designed to help manage INFLAMMATION & OXIDATIVE STRESS in critically ill patients

▶ 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 (TNF- α , IL-6)^{1,2}

Omega 3 FA: 4.3 g/L - Fish oils: 11.6 g/L

Clinical study with parenteral omega-3 lipids in 661 ICU patients has shown reduced hospital and ICU length of stay³



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 acids⁴

n6:n3 ratio (1.8:1) to beneficially modulate lipid mediator synthesis⁴

SCCM Guidelines 2009⁵: "Patients with ARDS and severe acute lung injury should be placed on an enteral formulation characterized by an anti-inflammatory lipid profile (i.e. n-3 fish oils, borage oil) and antioxidants."

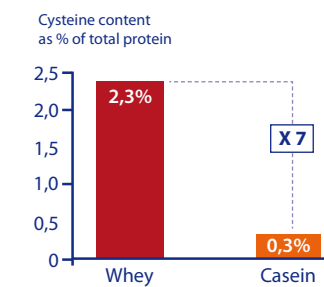
▶ 100% Whey Protein to help manage **oxidative stress** and **catabolism**

- In the critical care setting, protein appears to be a key macronutrient for supporting immune function, maintaining lean body mass and wound healing¹
- SCCM Guidelines 2009¹: 1.2 - 2 g protein/kg actual body weight per day

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 cell^{2,3}

Whey is rich in cysteine and may be effective in maintaining or repleting glutathione status³



High protein to help manage catabolism

High protein: 25% TEI

High quality protein:

| Type of Protein ^{4,5} | 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 Utilization: amount of nitrogen absorbed and retained by the body

1 - Calder P. n-3 Fatty acids, inflammation, and immunity—Relevance to postsurgical and critically ill patients. *Lipids*. 2004, 12:1147-1161. 2 - Mayer K, Seeger W. Fish oil in critical illness. *Curr Opin in Clinical Nutrition and Metab Care*. 2008, 11:121-127. 3 - Heller AR, Rossler S, Litz RJ et al. Omega-3 fatty acids improve the diagnosis-related clinical outcome. *Crit Care Med* 2006, 34:972-979. 4 - Mizock BA. Nutritional support in acute lung injury and acute respiratory distress syndrome. *Nutr. Clin Pract* 2001, 16:319-328. 5 - S. A. McClave et al. Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) *Journal of Parenteral and Enteral Nutrition*, Vol. 33, No. 3, May/June 2009.

1 - S. A. McClave et al. Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) *Journal of Parenteral and Enteral Nutrition*, Vol. 33, No. 3, May/June 2009. 2 - Bounous G. et al. The antioxidant system. *Anticancer Research* 2003, 23: 1411-1416. 3 - Rowe B. et al. Effect of whey- and casein-based diets on glutathione and cysteine metabolism in ICU patients. *J Am Nutr* 1994; 3(5): 535 (Abstract). 4 - Protein Quality Evaluation. Report of the Joint FAO/WHO Consultation, 1990. 5 - Protein Quality Evaluation. Report of the Joint FAO/WHO Consultation, 1991.