

Achieve your patient's protein and energy goals with Peptamen® AF

- High protein formula: 25% of calories from protein (47 grams per 500 ml)
- High quality protein source: 100% hydrolyzed whey protein
- Contains MCTs to promote absorption



Delivering 80% of prescribed nutrition will improve patient outcomes²

Try Peptamen® AF on your next ICU patient

Nestlé Health Science
Peptamen® AF

>1.2 g/kg/day

37%

<0.8 g/kg/day

19%

Protein amount (g/kg/day)

Mortality (%)



IMPROVE OUTCOMES

Meeting protein goals higher than 1.2 g/kg/day reduces mortality¹. Try Peptamen® AF, an optimal high protein based formula that can help meet requirements and improve outcomes.

¹Weijls et al. Early high protein intake is associated with low mortality and energy overfeeding with high mortality in non-septic mechanically ventilated critically ill patients. *Critical Care*. 2014;18:701.
²Heyland DK. Critical care nutrition support research: lessons learned from recent trials. *Curr Opin Clin Nutr Metab Care*. 2013;16:176-181.
³Heyland DK et al. *Crit Care Med*. 2011;39:2619-2626.
⁴Dolg G et al. *Intensive Care Med*. 2009;35:2018-2027.
⁵Villel S et al. *Clin Nutr*. 2005;24:502-509.
⁶Heyland DK et al. *J Parenter Enteral Nutr*. 2010;34:675-684.
⁷L. John Hoffer and Bruce R. Bistrian. Energy deficit is clinically relevant for critically ill patients: no. *Intensive Care Med*. 2015;41:339-341.
⁸McClave et al. Guideline 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.). *JPEN J Parenter Enteral Nutr*. 2016 Feb;40(2):159-211. doi: 10.1177/0148607115621963.
⁹ASPEN Obesity: A.S.P.E.N. Clinical guidelines: nutrition support of hospitalized adult patients with obesity. *JPEN J Parenter Enteral Nutr*. 2013 Nov;37(6):714-44. doi: 10.1177/0148607113499374. Epub 2013 Aug 23.
¹⁰Dickerson. Influence of Aging on Nitrogen Accretion During Critical Illness. *JPEN J Parenter Enteral Nutr*. 2015 Mar;39(3):282-290. doi: 10.1177/0148607113506939.
¹¹Evidence-based recommendations for optimal dietary protein intake in older people: a position paper from the PROT-AGE Study Group. *J Am Med Dir Assoc*. 2013 Aug 16;14(8):542-59. Epub 2013 Jul 16.
¹²Fried MD, Khoshoo V, Secker DJ, Gilday DL, Ash JM, Pencharz PB. Decrease in gastric emptying time and episodes of regurgitation in children with spastic quadriplegia fed a whey-based formula. *J Pediatr*. 1992;120:569-72.
¹³Reference Manual for US Whey and Lactose products. US Dairy Export Council June 2008. P. 14. http://usdec.files.cmsplus.com/PDFs/2008ReferenceManuals/Whey_Lactose_Reference_Manual_Complete2_Optimize.pdf. Accessed June 2012. FAO/WHO ad hoc Committee of Experts on Energy and Protein: Requirements and Recommended Intakes. <http://www.fao.org/docrep/010/a1407e/AM07E2B.htm>. Accessed June 2012.

Protein deficits are prevalent in critically ill patients²

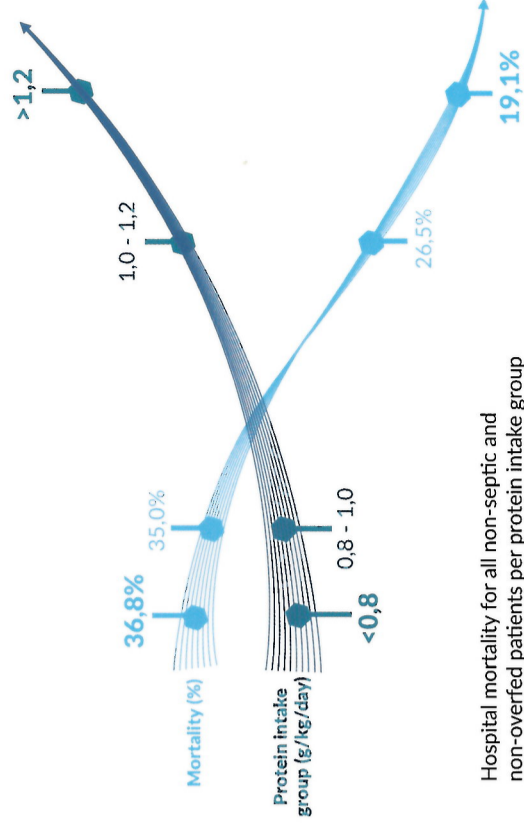
ICU patients receive only 59% of the nutrition prescribed to them³ making caloric and protein deficits prevalent in critically ill patients²

- Inadequate provision of nutrition in ICU patients is associated with increased overall complications, prolonged length of stay (LOS), and increased mortality.^{4,5}
- Deferring enteral nutrition (EN) is far too common: 40% to 60% of eligible patients do not receive EN within 48 hours of admission to the ICU.⁶

Providing 80% of prescribed nutrition improves outcomes²

OPTIMIZE PROTEIN DELIVERY

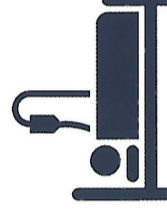
- A protein intake higher than 1.2 g/kg/day is associated with lower mortality¹
- ICU patients need higher amounts of protein⁷



Hospital mortality for all non-septic and non-overfed patients per protein intake group



0.8 g/kg per day
Healthy person's protein needs



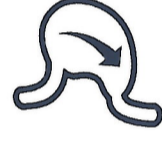
1.5 g/kg per day
ICU patient's protein needs

Evidence	Population	Suggested protein target
ASPEN/SCCM Critical Care Guidelines 2016 ⁸	BMI < 30	1.2-2.0 g/kg/day <i>May be higher in burn/trauma</i>
	BMI 30 - 40	≥ 2.0 g/kg IBW/day
	BMI ≥ 40	Up to 2.5 g/kg IBW/day
ASPEN Obesity Guidelines 2013 ⁹	CRTT*, hemodialysis	Up to 2.5 g/kg/day
Hoffer and Bistrian 2012 ⁷	Hospitalized adults with obesity	2-2.5 g/kg IBW/day
Dickerson et al. 2015 ¹⁰	Most critically ill patients	2-2.5 g/kg/day
PROT-AGE† Position Paper 2014 ¹¹	Trauma patients > 60 years > 65 years with severe illness, injury or marked malnutrition	1.5-2.0 g/kg/day Up to 2.0 g/kg/day

*CRTT = Continuous Renal Replacement Therapy PROT-AGE = "Protein needs with aging" study group

PROVIDE THE RIGHT TYPE OF PROTEIN

- ICU patients need high quality protein such as whey to help promote gastric emptying and easy absorption¹²

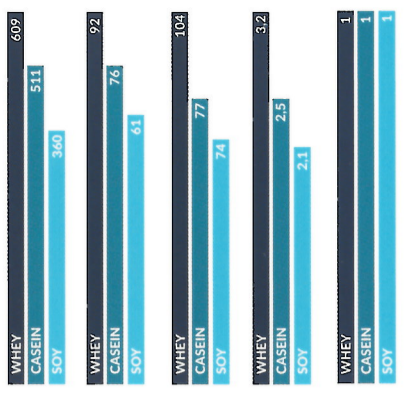


gastric emptying



easy absorption¹²

- Essential Amino Acid Content**
mg of essential amino acids/g protein
- Net Protein Utilization (NPU)**
% Nitrogen retained of Nitrogen ingested
- Biological Value (BV)**
% Nitrogen retained of Nitrogen absorbed
- Protein Efficiency Ratio (PER)**
Weight gain per g Nitrogen consumed
- Protein Digestibility Corrected Amino Acid Scores (PDCAAS)**
Digestibility corrected for essential amino acid content



Protein quality indicators¹³

