

Peptide-Based Formula 101



Peptide-based formulas, also known as semi-elemental formulas, are enteral nutrition products that contain partially hydrolyzed macronutrient content designed for patients with gastrointestinal (GI) dysfunction and/or those having difficulties absorbing and digesting standard polymeric formulas. These specialized formulas are tailored for patients with:

- Malabsorption*
- Critical illness and/or mechanical ventilation
- Early Enteral Nutrition in critical illness
- Or those transitioning from (or dual feeding with) parenteral nutrition

Like standard formulas, peptide-based formulas are nutritionally complete.

**For example, pancreatitis, short bowel syndrome, chronic diarrhea, Crohn's disease/inflammatory bowel disease, cystic fibrosis, delayed gastric emptying/gastroparesis, malabsorption related to cancer treatment, celiac disease with malabsorption, GI cancer, malnutrition*

*A recent survey sent to 26,000 US dietitians** revealed there is a lack of knowledge among dietitians about peptide-based formulas and instances where it would benefit a patient to start with one.*

***Data on file, 2025*

"Dietitians are typically taught that any patient can tolerate an intact formula and you should automatically start with one. However, there are certain instances when it makes sense to go directly to a specialized formula, and as dietitians, we need to use our best clinical judgment to meet our patients where they are."

Leslie Murray RD, CNSC who serves on the Nutrition Support Team at Duke University Hospital in Durham, NC



Survey respondents highlighted the following factors to prioritize when selecting a peptide-based formula for critically ill patients:

- ✓ **High in protein**, including smaller peptides for more efficient absorption
- ✓ **High percentage of medium chain triglycerides (MCTs)** – a quick, readily available energy source
- ✓ **Low osmolality** to minimize osmotic diarrhea and GI distress
- ✓ **Inclusion of omega-3 fatty acids** to support modulation of proinflammatory mediators in critically ill patients
- ✓ The option to **choose a formula with fiber when needed**

With more than 37 years of successful experience and over 100 clinical studies supporting improved outcomes in patients with GI impairment, Peptamen® is a brand to trust with your critically ill patients.

The Peptamen® range of product meets these needs:

- ✓

The ONLY tube feeding formulas with hydrolyzed 100% whey protein¹
- ✓

Low osmolality
- ✓

EPA + DHA in products for those with severe illness³
- ✓

Widely available at over 500 hospital systems in the US
- ✓

High percentage of medium-chain triglycerides (MCT)²
- ✓

Inclusion of soluble fibers which will support gut barrier function, modulate immune responses, and positively affect the gut microbiome⁴
- ✓

Eligible for insurance coverage



For simple step-by-step decision making for patients with malabsorption:

1. Assess severity of illness
2. Choose calorie density

	Peptamen Intense® VHP	Peptamen AF®	Peptamen® 1.5	Peptamen® 1.0
Severity of illness	High	High	Moderate	Moderate
Calories (per mL)	1.0	1.2	1.5	1.0
Protein (g/L)	92	76	68	40
MCT: LCT	50:50	50:50	70:30	70:30
Osmolality	313	390	585	340
EPA + DHA (g/L)	2	2.4	--	--
Soluble Fiber (g/L)	4	6	0	0



There are plant-based options, too!

Look to **Compleat®** for a plant- and peptide-based tube feeding formula with fruit and vegetable ingredients.



TIP: For patients using **Peptamen® 1.5** or **Peptamen® 1.0** who need the addition of fiber, choose the **PREBIO™** products

References: 1. Savage, Karina et al. "Whey- vs casein-based enteral formula and gastrointestinal function in children with cerebral palsy." JPEN. Journal of parenteral and enteral nutrition vol. 36,1 Suppl (2012): 118S-23S. doi:10.1177/0148607111428139; 2. Jadhav, Harsh B, and Uday S Annapure. "Triglycerides of medium-chain fatty acids: a concise review." Journal of food science and technology vol. 60,8 (2023): 2143-2152. doi:10.1007/s13197-022-05499-w; 3. Liu, Ting et al. "Effects of omega-3 fatty acids on hyper-inflammatory response and clinical outcomes in critically ill patients: a meta-analysis." Intensive & critical care nursing, vol. 92 104228. 19 Sep. 2025. doi:10.1016/j.iccn.2025.104228; 4. McClave, Stephen A et al. "The importance of providing dietary fiber in medical and surgical critical care." Nutrition in clinical practice: official publication of the American Society for Parenteral and Enteral Nutrition vol. 39,3 (2024): 546-556. doi:10.1002/ncp.11092