## E-TABLE 68-4 COMPLETE ENTERAL NUTRIENT FORMULAS AND CLINICAL INDICATIONS

| FORMULA TYPE AND CHARACTERISTICS* | CLINICAL INDICATION |
|---|---|
| Intact protein, complex† | Normal intestinal function |
| Hydrolyzed protein/peptides, semi-elemental‡ | Gut mucosal disease, injury |
| High calories, lower protein, lower electrolytes§ | Renal failure |
| High calories, complex§ | Fluid restriction (e.g., cardiac failure) |
| "Immune-modulating" enriched in arginine, glutamine, nucleotides, omega-3 fatty acids, and/or antioxidants‖,¶ | Postoperative, immunosuppressed, severe stress, injury, gut mucosal disease |
| EPA, γ-linolenic acid, and antioxidants# | ARDS |

ARDS, Acute respiratory distress syndrome; EPA, eicosapentanoic acid; MCT, medium-chain triglycerides.

*All formulations are lactose and gluten free, are relatively low in sodium, and provide adequate vitamins and minerals with daily volumes of 1-1.5 L.

†Least expensive; protein sources are intact casein, whey, and/or soy; fat sources are corn, safflower, or soy oils and MCT; carbohydrate sources are maltodextrin, corn syrup, hydrolyzed corn starch, sucrose; caloric density varies from 1 to 2.0 kcal/mL (primarily by increasing fat content); may feature high-protein composition and soluble fiber or prebiotics; osmolality 350-550 mOsm/kg.

‡Protein sources are hydrolyzed casein, soy, and/or whey; may feature more MCT, hydrolyzed corn starch, and sucrose for enhanced digestion and absorption; caloric density is 1 to 1.5 kcal/mL.

§Calorically dense (2.0 kcal/mL); low to moderate protein; low potassium, magnesium, phosphorus, and vitamin A content; higher calcium content.

‖Use in septic or hemodynamically compromised patients is currently controversial.

¶Glutamine is supplied as L-glutamine or glutamine peptides; several randomized, controlled clinical trials show conflicting results regarding decrease in infections with enteral glutamine supplementation; some formulas combine glutamine and other supplements (e.g., enriched in antioxidants, omega-3 fatty acids).

#Several, but not all, randomized, controlled clinical trials show clinical efficacy with this formulation in patients who require mechanical ventilation due to ARDS; formula is not enriched in arginine, glutamine, or nucleotides.