

## Nutritional Interventions: CLINICAL CONSIDERATIONS

ROUTE	PATIENT CHARACTERISTICS	NUTRITIONAL CONSIDERATIONS
Oral	Alert, normal swallowing mechanics, or normally nourished or mildly malnourished.	Monitor hydration and calories: optimal levels determined by nutritional assessment Calorie-dense foods. Consider nutritional supplements between meals.
Intravenous fluids	Acutely ill, impaired swallowing, decreased oral fluid intake, dehydration. Ability to eat anticipated in <48 hours.	Glucose solutions with electrolytes. Sole source of nutrition limited to <48 hours.
Enteral	Oropharyngeal dysphagia, unsafe to eat (e.g., delirium), severely malnourished; capacity for oral feeding expected to return within days to two weeks; cyclic use needed to augment oral nutrition.	Nasoenteric tube feeding (continuous or intermittent) with lactose-free solutions; either balanced-protein or high protein solutions. Cyclic or continuous infusions. Nasogastric tube not recommended.
Peripheral Parenteral Nutrition	Oral and nasoenteric routes are temporarily (e.g., $\leq 2$ weeks) contraindicated (e.g., small bowel obstruction, acute pancreatitis).	Peripheral intravenous (large bore catheter) infusion with isotonic glucose-electrolyte-lipid solution. Limited capacity to deliver high-calorie nutrition. Observe for hypertriglyceridemia.
Total Parenteral Nutrition	Severely malnourished; enteral route contraindicated (e.g., bowel obstruction, short bowel); hypermetabolic state (e.g., sepsis) while enteral route delivery is not sufficient.	Central intravenous (e.g., subclavian vein) catheter (large bore). Infusion of high-calorie, hypertonic and balanced infusions (protein, amino acid, carbohydrate) is achievable.
Percutaneous Endoscopic Gastrostomy	Severely malnourished; oropharyngeal dysphagia unlikely to resolve soon; oral feeding contraindicated (e.g., stroke); enteral nutrition required for two or more weeks or indefinitely.	Superior to nasoenteric tubes for administering medications (e.g., tablets). No evidence of benefit for severely demented patients.

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