

Peripheral Parenteral Nutrition

BRIDGING THE GAP



**FRESENIUS
KABI**

caring for life

SURGERY & NUTRITIONAL STATUS

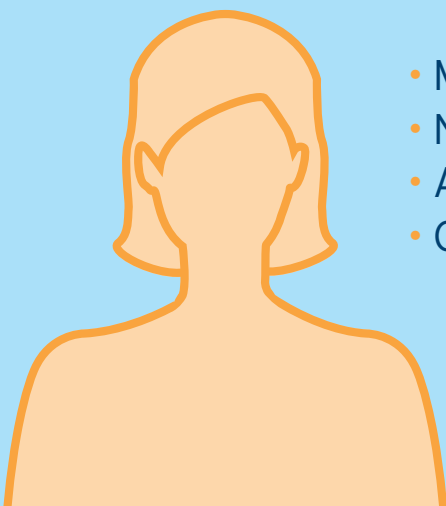
Cancer surgery patients or those undergoing active treatment are at particularly high risk of malnutrition due to^{1,2}

- dysphagia,
- treatment side effects (mucositis, nausea, vomiting).

A poor perioperative nutritional status^{1,3}



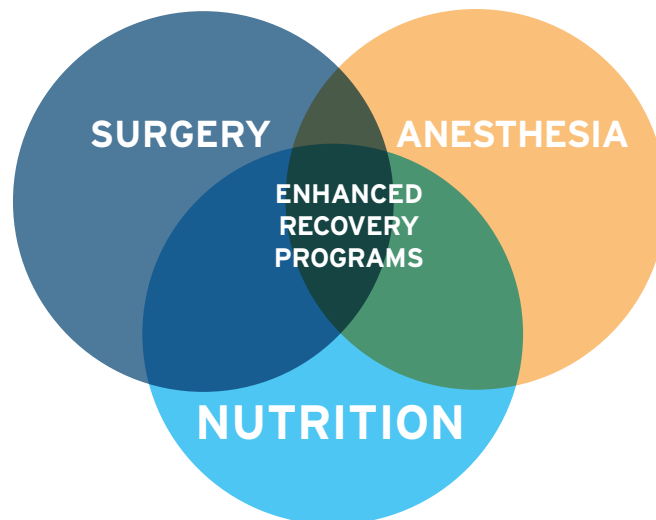
- increases the risk of postoperative complications such as compromised wound healing and increased risk of infections,
- prolongs hospitalization and leads to more frequent re-admissions.



- Mary, 71 years
- Neck cancer
- Admitted for elective surgery
- Good peripheral venous access

ENHANCED RECOVERY PROGRAMS

Multimodal perioperative care pathways to improve major surgical outcomes.^{3:}



Early and adequate feeding of surgical patients is an integral part of all enhanced recovery programs. Perioperative nutrition can¹



- optimize nutritional status,
- improve the immune response,
- support wound healing,
- facilitate recovery.

- Body weight: 42 kilograms, height: 160 cm, Body Mass Index: 16.4
- Lost 4 kilograms since her last check-up due to dysphagia
- Subjective Global Assessment grade C

Pre-existing malnutrition predisposes Mary to a greater risk of postoperative complications

RISKS FOR NUTRITIONAL DEFICITS

Early oral/enteral nutrition often fails during the first week after surgery resulting in a caloric gap due to impaired gastrointestinal function such as:⁴

- postoperative nausea,
- vomiting,
- bloating.

In these patients, supplemental parenteral nutrition can support meeting caloric goals and prevent further development of caloric and protein gaps.⁵

Parenteral nutrition is recommended



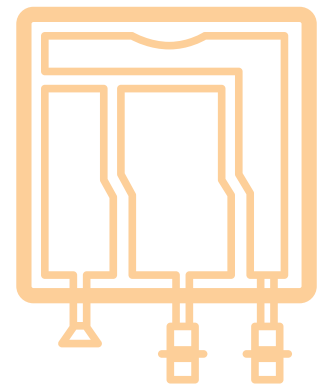
when requirements cannot be met adequately by oral and/or enteral nutrition alone.^{2,5,6}

- Caloric goals: 25 kcal/kilogram body weight/day
- Constant monitoring for refeeding syndrome
- Oral nutrition supplements started before surgery due to dysphagia
- Tube feeding started post-operatively
- Mary developed gastrointestinal disturbances

Mary requires supplemental parenteral nutrition to meet caloric goals

PERIPHERAL PARENTERAL NUTRITION

- Follows enhanced recovery programs' concept of minimizing invasive procedures where possible.⁷
- Allows the delivery of adequate calories without the need for a central catheter.⁷
- Bridges the time to oral or enteral nutrition.⁷
- All-in-one (three-chamber) bags are the preferred delivery method.⁶



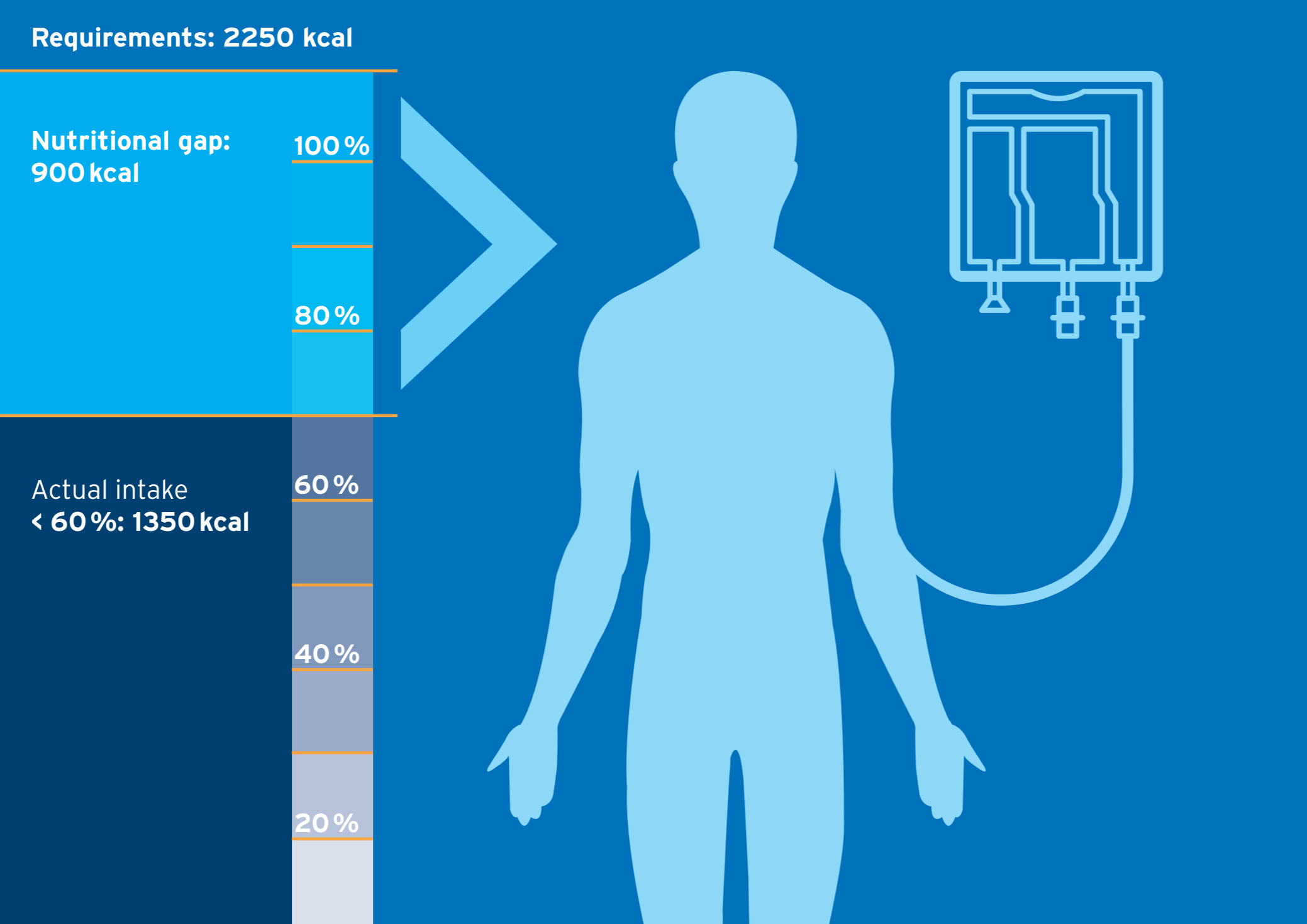
Peripheral Parenteral Nutrition⁷

- can facilitate the timely delivery of perioperative nutritional support,
- offers a safe and effective way to provide optimal perioperative care.

Mary has been prescribed peripheral parenteral nutrition to bridge the caloric gap and safely deliver adequate nutritional support to reduce the risk of post-surgical complications.

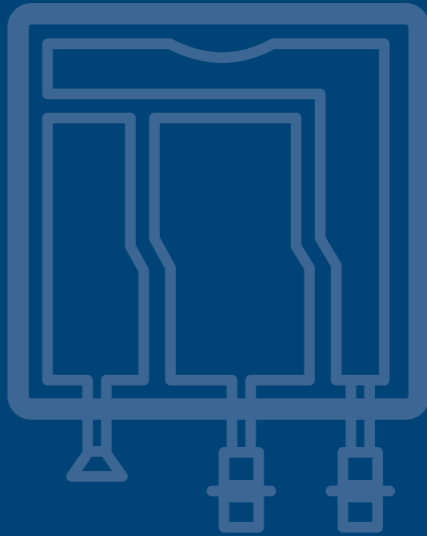
CLOSING THE NUTRITIONAL GAP

Example: Patient 75 kg • 30 kcal/kilogram body weight/day



Peripheral parenteral nutrition to close nutritional gaps

When oral/enteral nutrition is not sufficient:
estimated energy intake < 60% of requirement for more than 1-2 weeks²



KEEP IN MIND

- Malnutrition can negatively affect surgical patients' recovery.^{1,2}
- When early oral/enteral nutrition fails, supplemental parenteral nutrition represents a suitable strategy to meet patient's nutritional requirements.^{2,5,6}
- Parenteral nutrition has proven to reduce the rate of postoperative complications in malnourished patients.⁵
- Peripheral parenteral nutrition offers a safe and effective way to bridge the nutritional gap and provide optimal perioperative care.⁷

References

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