Government of **Western Australia**
North Metropolitan Health Service
Sir Charles Gairdner Osborne Park Health Care Group

Dietary complexities in GI cancer surgical care

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Overview

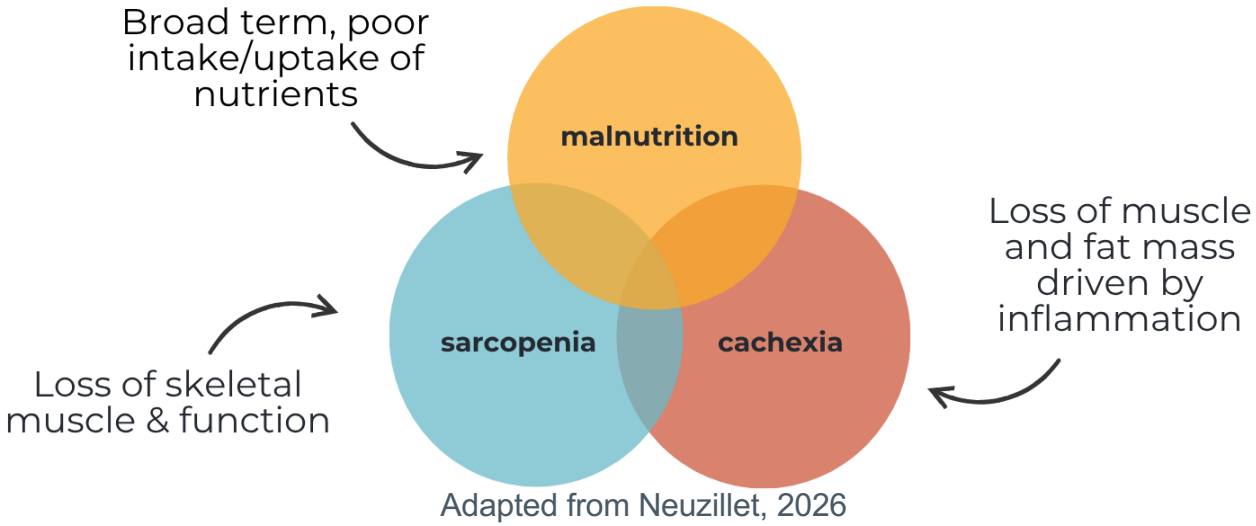
- Malnutrition and sarcopenia in GI surgical patients
- Pre-surgery nutrition goals and challenges
- Prehabilitation Dietetics
- Post-surgery nutrition challenges
- Pancreatic Enzyme Insufficiency and Replacement Therapy
- Practical nutrition strategies for cancer nurses

Malnutrition in GI Cancer Surgery

- Risk factor for: (McShane et al., 2025, Weimann et al., 2025)
  - Increased mortality
  - Development of surgical complications
  - Increased hospital length of stay
  - Poor quality of life
  - Treatment-related toxicities

- NOURISH Study (Deftereos et al., 2021)
  - 42% of patients were malnourished at time of surgical resection

Sarcopenia & Sarcopenic Obesity



Adapted from Neuzillet, 2026

Patients in a higher BMI can still be at risk of muscle loss, which can impact clinical outcomes

(Barazzoni et al., 2026, Weimann et al., 2025)

Pre-Surgery Nutrition Challenges

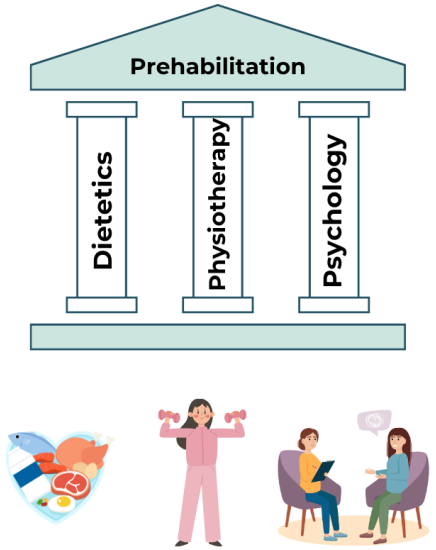
- Loss of appetite
- Early satiety
- Nausea
- Bowel changes
- Pancreatic exocrine insufficiency
- Physical obstructions and dysphagia

- Occur because of neoadjuvant treatment, or the cancer itself
- Impact eating and absorption, leading to a decline in nutrition status (McShane et al., 2025)

Prehabilitation Dietetics

- Individualised, early nutrition support
- Goals:
  - Prevent or treat malnutrition
  - Preserve muscle mass
  - Optimise surgical recovery
  - Support tolerance of treatment

- **Refer early to the dietitian**



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Neuzillet, 2026

Prehabilitation Dietetics
Pre-surgery Nutrition Strategies

High Energy, High Protein diet

Oral nutrition supplements

Small frequent meals

Maximise intake when feeling best

Eating by the clock

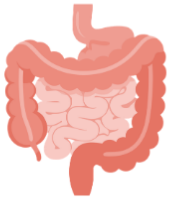
Your encouragement helps patients adhere to recommendations

Post Surgery
Nutrition Challenges

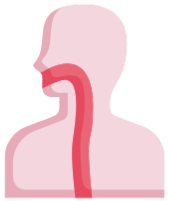
- Stress response of surgical process
- Irreversible changes in gastrointestinal anatomy
- Diet limitations + diet texture progression
- Simultaneously recovering from surgery while preparing for adjuvant treatment

Post Surgery
Nutrition Challenges - Continued

General/Lower GI
Abdominal pain
Bowel changes
High output stoma
Fatigue

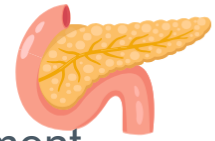


Oesophagectomy
Reflux
Swallowing difficulty
Vomiting



Gastrectomy
Reduced gastric volume
Micronutrient malabsorption
Dumping syndrome

Pancreatectomy
Pancreatic exocrine insufficiency
Difficult BSL management



Pancreatic Exocrine Insufficiency (PEI)

Pancreas fails to produce or release enough enzymes into the duodenum, causing malabsorption of food

Symptoms

Steatorrhea
Abdominal pain
Cramping
Weight loss
Fat-soluble vitamin deficiencies

(Pezzilli et al., 2020)

Pancreatic Enzyme Replacement Therapy (PERT)

- Taken **at the same time** as all main meals, snacks and nutrition supplements

- **Look out for**:
  - Incorrect timing and dosage
  - Ongoing symptoms of PEI

Post Surgery
Nutrition Interventions

Individualised strategies based on type of surgery and barriers to intake

Ongoing nutrition counselling and diet education

Practical Strategies for Cancer Nurses

- Early referrals to the dietitian or Prehabilitation services
- Encouraging adherence to diet recommendations
- Guidance/monitoring of PERT
- Regular weight monitoring

Conclusion

- Malnutrition and sarcopenia significantly impact surgical outcomes
- Nutrition impact symptoms before and after surgery can severely reduce intake and absorption
- Dietetic input is essential to individualise nutrition care across the surgical journey
- You play a vital role in early identification and monitoring of malnutrition, as well as supporting nutrition strategies

Thank you

References

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