

# Dietetic Management of Pancreatic Cancer

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# Aims and Objectives

- To understand the nutritional challenges facing pancreatic cancer patients.
- To understand where to signpost patients for further support and evidence based advice.



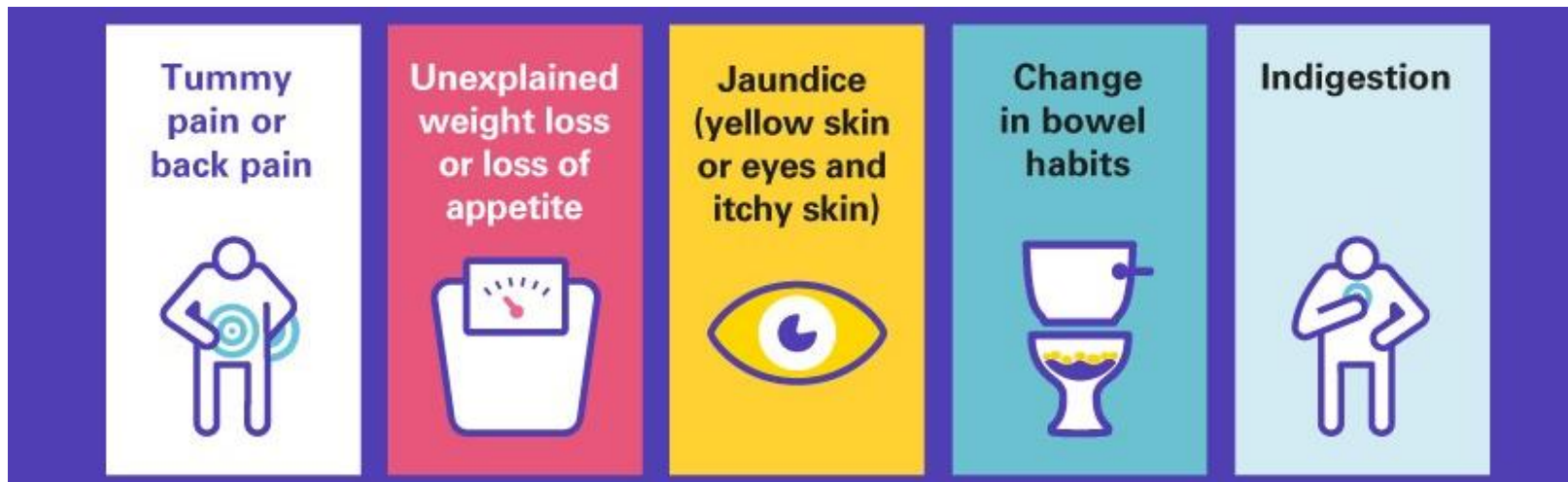
# Malnutrition in Pancreatic Cancer

# What is malnutrition

- ‘Malnutrition is an imbalance of energy, protein and other nutrients which causes adverse effects on body shape, size, composition and function and clinical outcome.’ (BAPEN, 2020).
- Malnutrition leads to:
  - Longer and more frequent hospital stays
  - Increased risk of complications of cancer treatments
  - Reduced quality of life
  - Increased number of infections
  - Increased morbidity + mortality (better prognosis if weight is stable!).

# Why are pancreatic cancer patients so at risk?

- Over 80% pancreatic cancer patients will have reported weight loss at diagnosis.
- Symptoms of pancreatic cancer have a significant impact on appetite.
- The cancer affects the pancreas ability to produce digestive enzymes.
- The cancer can result in diabetes

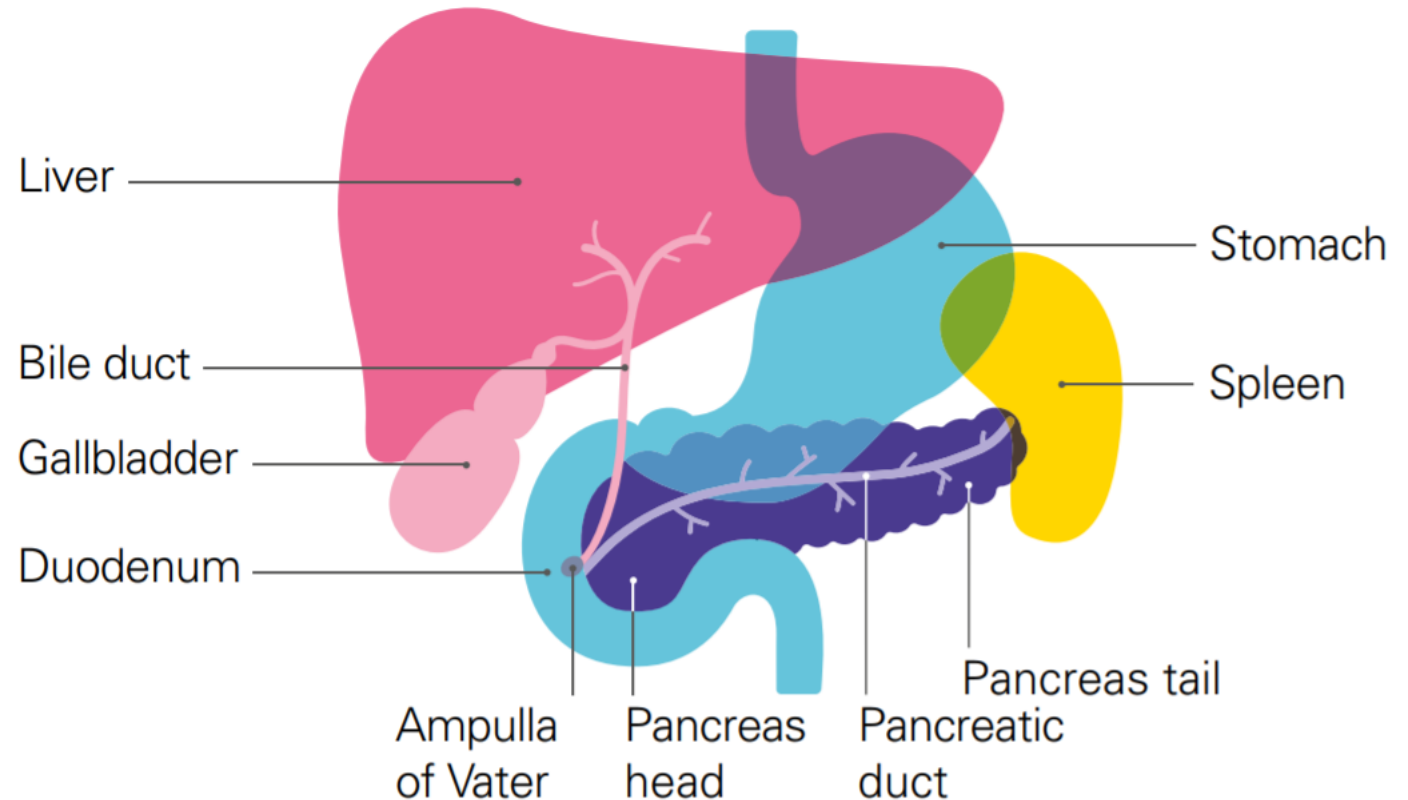


# Diabetes and Pancreatic Cancer

- Pancreatic cancer can (not always) prevent or reduce the pancreas ability to make and release insulin and glucagon.
- In patients who already have diabetes it can make their diabetes more difficult to control.
- All patients with diabetes should have access to a dietitian.

# Duodenal Obstruction

- The tumour can block the duodenum, preventing food, fluid and digestive juices from moving from the stomach to the duodenum and onwards.
- This can be managed with a duodenal stent



# Pancreatic Exocrine Insufficiency (PEI)

- Pancreatic cancer inhibits the ability of the pancreas to produce and/or deliver pancreatic enzymes into the small bowel, which assist digestion and absorption of fat, carbohydrates and proteins.

Early Symptoms	Late Symptoms
Pain	Steatorrhoea
Bloating	Weight loss
Increased wind/flatulence	
Pale and/or bulky stools	
Increased frequency/urgency of stools	

# Pancreatic Enzyme Replacement Therapy (PERT)

# What is PERT

- PERT are capsules which replace the enzymes the pancreas would normally produce.
- Different brands of enzymes are available in the UK:
  - Creon<sup>®</sup>
  - Pancrease<sup>®</sup>
  - Nutrizym<sup>®</sup>
  - Pancrex<sup>®</sup>.
- When taken correctly PERT increases quality of life, improves digestive symptoms, reduces weight loss and increases tolerance to treatments.

# How to support patients with use of PERT

- All patients with inoperable pancreatic cancer (and many operable patients) should be prescribed PERT.
- But only 54.5% of pancreatic cancer patients are prescribed PERT.
- Many of those prescribed PERT are not supported to take it correctly or in a sufficient dose.



# PERT: Common Mistakes

- Not understanding when to take it
- Not understanding why to take it
- Taking too little (can't take too much!)
- Struggling to swallow capsules
- Not storing capsules correctly
- Forgetting to take the capsules



# How to support patients with changes in appetite

# Common causes of reduced appetite

- Abdominal pain
- Nausea and/or Vomiting
- Acid reflux or indigestion
- Steatorrhoea
- Constipation
- Taste Changes
- Early satiety (feeling full quickly)
- Fatigue
- Low mood

# First Line Advice

- Check PERT is prescribed and being taken correctly
- Dispel any myths about needing to follow a low fat diet
- Ensure bowels are opening well
- Encourage little and often and high calorie, high protein advice
- Cold foods which don't smell can help with nausea and vomiting
- New flavours/foods or even foods which previously disliked can help with taste changes
- People with metallic tastes should avoid metal cutlery
- Support the whole family

Where to signpost patients to for further support

# Dispelling the myths about diets for cancer

- Numerous diets on the internet which claim to 'cure cancer'.
- There is no evidence base to support the use of any 'diet' in the treatment of cancer.
- Any patient wishing to follow a specific 'diet' should be given enough information to make an informed decision.
- All patients should be offered a referral to a dietitian.



# Websites

- <https://www.pancreaticcancer.org.uk/information/managing-symptoms-and-side-effects/diet-and-pancreatic-cancer/>
- <https://www.wcrf-uk.org/uk/health-advice-and-support/eat-well-during-cancer>
- <https://www.cancerresearchuk.org/about-cancer/pancreatic-cancer/living-with/diet>
- <https://www.bda.uk.com/food-health/food-facts/all-food-fact-sheets.html>
- <https://www.ndr-uk.org/topics-hub/oncology-and-palliative-care>
- <https://www.macmillan.org.uk/cancer-information-and-support/impacts-of-cancer/eating-problems>
- <https://www.bda.uk.com/uploads/assets/bf431192-6587-4bae-aca1fed2ee07c6d5/Myth-Busting-06072020.pdf>
- <https://www.mskcc.org/cancer-care/diagnosis-treatment/symptom-management/integrative-medicine/herbs>

# References and Further Reading

- NICE Guideline: Pancreatic cancer in adults: diagnosis and management. <https://www.nice.org.uk/guidance/ng85>
- Arends J, et al., ESPEN guidelines on nutrition in cancer patients, Clinical Nutrition (2016), <http://dx.doi.org/10.1016/j.clnu.2016.07.015>
- Basile, D, et al., (2019). The IMPACT study: early loss of skeletal muscle mass in advanced pancreatic cancer patients. Journal of Cachexia, Sarcopenia and Muscle, 10(2), pp.368-377.
- Gooden, H.M., White, K.J. Pancreatic cancer and supportive care—pancreatic exocrine insufficiency negatively impacts on quality of life. *Support Care Cancer* **21**, 1835–1841 (2013). <https://doi.org/10.1007/s00520-013-1729-3>
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# Questions