

Pancreatic Cancer and Pancreatic Enzyme Replacement Therapy (PERT)

NICE Guidance: Pancreatic Cancer in Adults: diagnosis and management (2018)

- 1.6.1 Offer enteric-coated pancreatin for people with unresectable pancreatic cancer.
- 1.6.2 Consider enteric-coated pancreatin before and after pancreatic cancer resection.

At the Pancreatic Cancer UK Virtual Summit, September 2020, it was suggested that all patients with pancreatic cancer should be offered pancreatic enzyme replacement therapy, regardless of BMI or presence of GI symptoms.¹

Common symptoms of pancreatic enzyme insufficiency include weight loss, bloating, burping, nausea, cramping, early satiety and flatulence, as well as steatorrhea. It is appropriate to start PERT without a diagnosis of pancreatic enzyme insufficiency and see if their symptoms improve.

Pancreatic Enzyme Replacement Therapy has been shown to:²

- ↑ Quality of Life
- ↑ Tolerance to treatments
- ↑ Overall survival time
- ↓ Diarrhoea
- ↓ Pain

Preparations available: Creon, Pancrease, Nutrizym, Pancrex

Initial recommended dose: 75,000 units per meal
25,000 – 50,000 units per snack

25,000 units equates to 25,000 PhEur units lipase: preparations also contain protease and amylase.

- Doses should be increased until symptoms are sufficiently reduced².
- Dose can gradually increase to 150,000-200,000 units with meals/snacks if required³.
- Requirements may also change over time depending on symptoms: adjust accordingly.
- Dose required relates to the fat content of the meal (higher fat content requires higher dose).

Early dietitian support is recommended to complement the enzyme replacement therapy.

A **proton pump inhibitor** can assist the action of PERT and is often co-prescribed.

Tips for taking Pancreatic Enzyme Replacement Therapy

- Encourage patients to titrate the PERT dose to their diet, not the diet to their symptoms: fat restriction can exacerbate malnutrition.
- Take with all meals, snacks, milky drinks & nutritional supplements.
- Swallow capsules whole with a cold drink – If need to open the capsule, mix into slightly acidic soft food or fluid such as apple juice then swallow immediately, without chewing⁴
- Take ½ immediately before eating and ½ during the meal.
- Don't take with hot drinks as heat may inactivate enzymes (Red Whale webinar)³.

All pancreatic enzymes are made from pork products but organisations representing Jewish and Muslim communities have said they are acceptable to use.

Vegetarian enzymes are sold in some health food shops and on-line but are very low doses, expensive and there is no evidence that they are effective.

References

1. Improving Access to Optimal Nutritional Care, Tuesday 22nd September 2020
Slides and recording of the session are accessible at:
<https://www.pancreaticcancer.org.uk/health-professionals/learning-and-development-for-health-professionals/information-and-resources-for-health-professionals/presentations-from-health-professional-events/presentations-from-the-virtual-annual-summit-2020-improving-outcomes-now/>
2. Pancreatic Enzyme Replacement Therapy in Pancreatic Cancer. *Cancers* 2020 Feb;12(2):275
3. Red Whale Free Webinars in Collaboration with MacMillan: Primary Care Guide to Pancreatic Cancer.
4. British National Formulary:
<https://bnf.nice.org.uk/drug/pancreatin.html#directionsForAdministration>

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Visit **Pancreatic Cancer UK** for more information to support your patients with digestive problems and PERT: <https://www.pancreaticcancer.org.uk/diet>