



NETs and pancreatic enzyme replacement therapy (PERT)

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What is PERT?

- It is a medication that contains enzymes which help breakdown your food.
- The tablets contain
 - Amylase / carbohydrase
 - Protease
 - Lipase
- They help you obtain all the nutrients from your food that you need
- They are made from pig pancreas

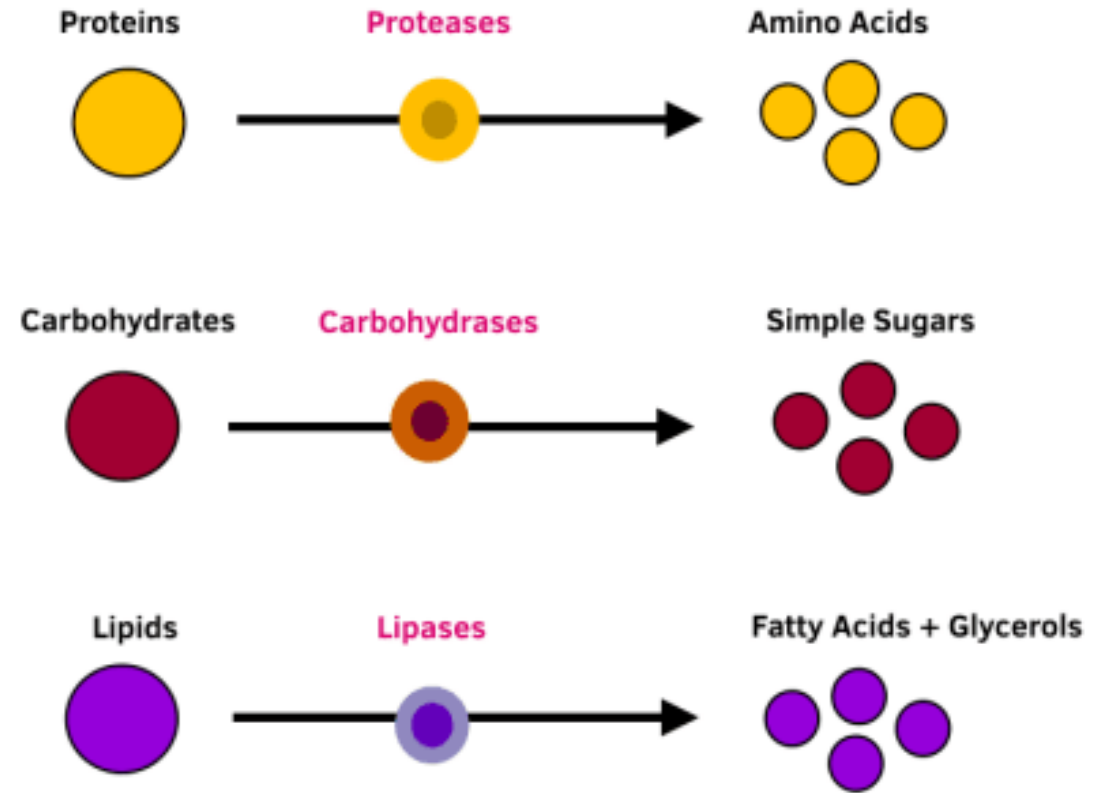


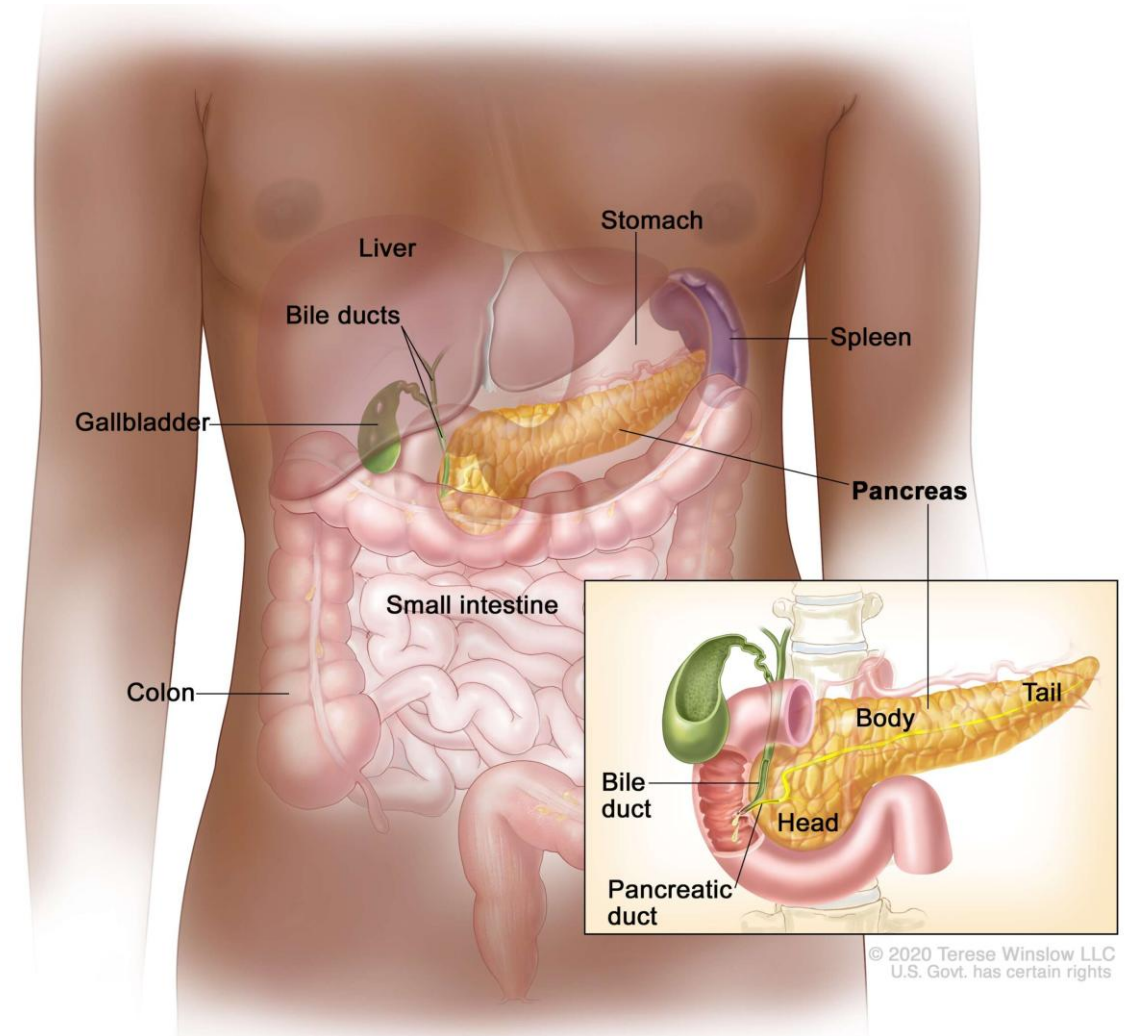
Fig 10. Summary of Digestion.

When might PERT be required for NET patients?

- If you are on an SSA injection
- If you have a pancreatic NET – only occasionally
- If you have had pancreatic surgery
 - Whipples or PPPD
 - Distal pancreatectomy

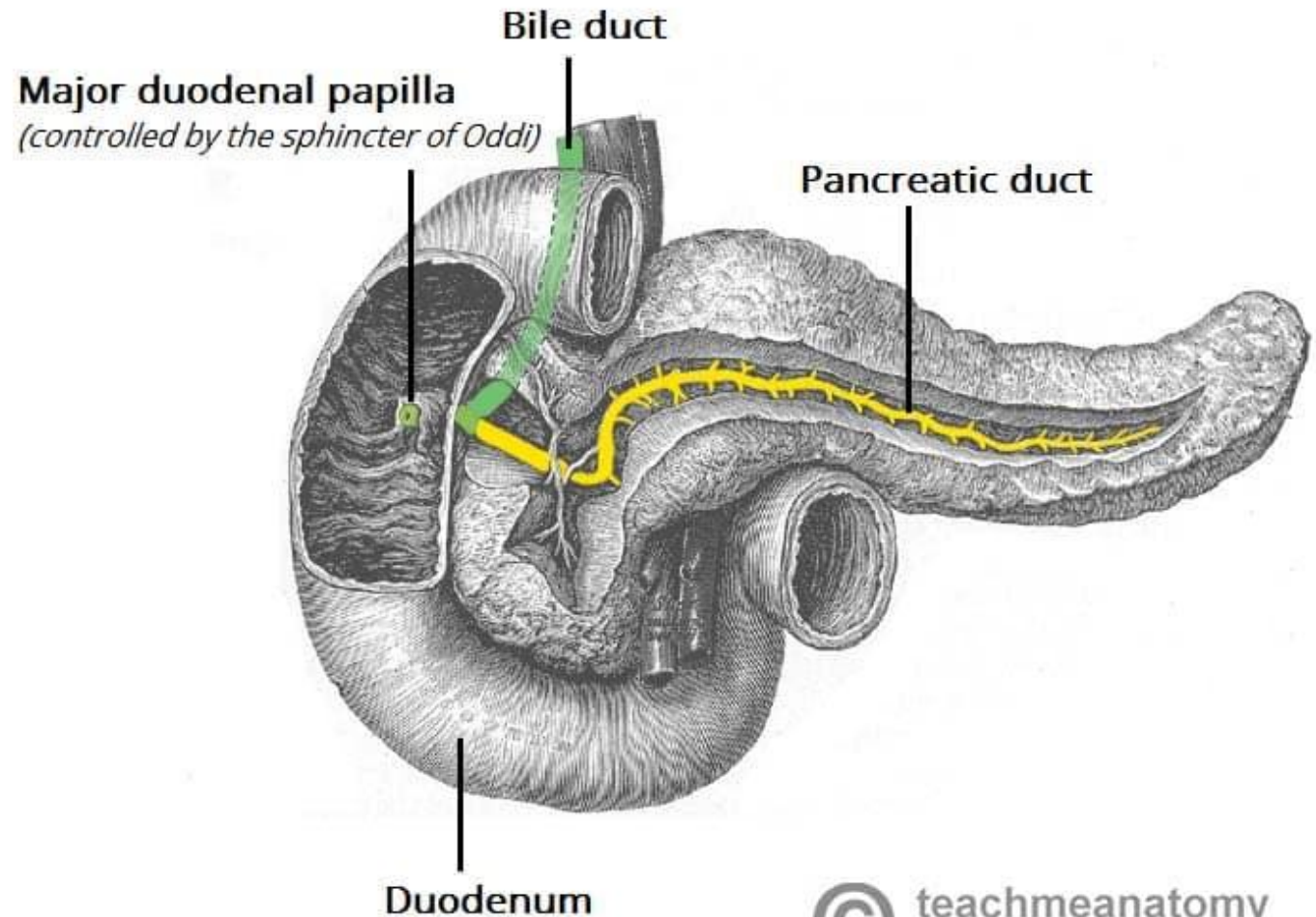
SSA and PERT

- Usually, your pancreas produces enzymes which are combined with the food you eat in your bowel and break it down.
- The somatostatin in the injection binds to receptors on the pancreas and prevent enzyme release.
- There are therefore less enzymes available to breakdown food so enzyme supplements may be required.



Pancreatic NETs

- Occasionally a pNET may obstruct the pancreatic duct
- Enzymes cannot reach the bowel and so food cannot be digested fully

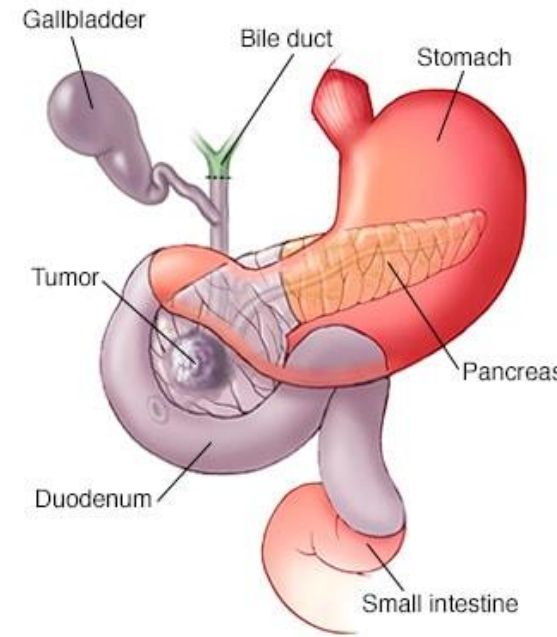


Pancreas surgery

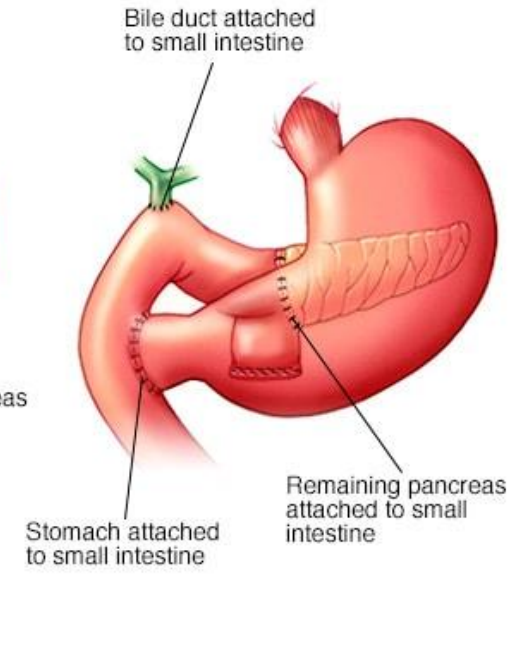
- Part of all of the pancreas is removed
- Less or none of the pancreatic enzymes are produced
- Food is unable or less able to be digested fully

Whipples

Before surgery



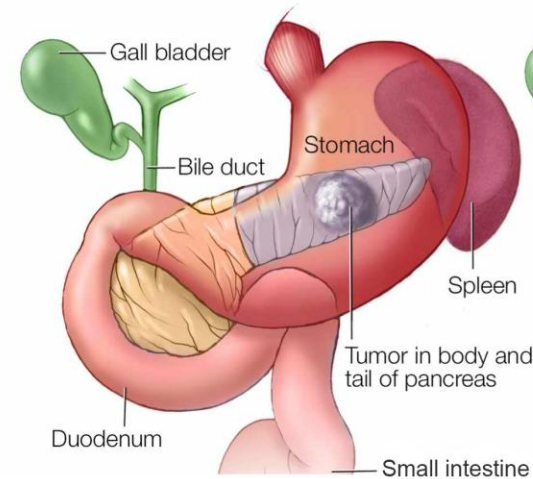
After surgery



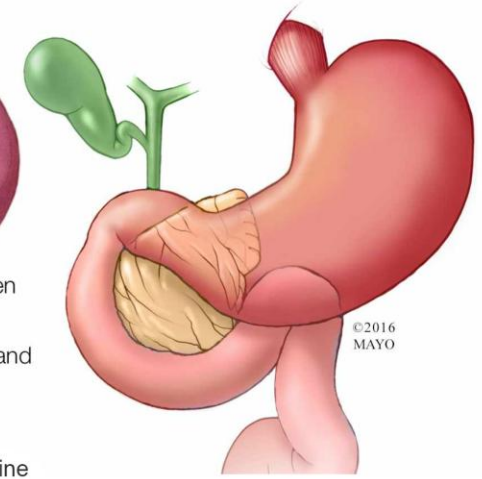
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Distal pancreatectomy

Before surgery



After surgery



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How do I know if I need PERT?



Needed with Whipples, PPPD, total pancreatectomy



For SSA, pNET, distal pancreatectomy

- Although digestion of all nutrients may be affected the most obvious sign is fat in the stool (steatorrhoea)
 - Symptoms are loose, floaty, smelly, oily yellow/orange/grey/cream stools, lots of wind/bloating, abdominal pain
- You may also experience weight loss
- Fat soluble vitamin levels in the blood may be low

How do I get PERT?!

- Currently it can be difficult – worldwide shortage until at least end of 2026.
- New patient guidance April 2025 states 'Everyone should now be able to get the enzymes they need but they might be a different brand.'
- What to do when you have supply
 - Place your prescription request as soon as you have picked up your last prescription. This should give the community pharmacist time to source your medication. Check it has been authorised by your GP.
 - Do not stockpile.
- What to do if you have less than 2 weeks supply left
 - Check with the manufacturers customer support team to see if there is a supply near you: Creon: 0800 8086410, Nutrizym 0800 0902408 (Mon-Fri 9-5).
 - Speak to your GP and Pharmacist about accessing a prescription for one of the imported medications e.g. Pangrol, Kreon
 - If you are struggling to get any in the community phone Mark to ask for hospital prescription but note hospitals are no longer being prioritised.

What dose should I take?

- Starting dose 2/meal and 1/snack or milky drink
- Often needs to increase
- Look for resolution of symptoms
- Max dose: consider other issues if taking >10,000 units/kg/day, this works out at:
 - >20 tablets/day if 50kg
 - >30 tablets/day if 75kg
 - >40 tablets/day if 100kg



How do I take PERT?

- With all nutrition – meals, snacks, milky drinks, nutritional supplements
- Do not need to take with drinks with splash of milk, plain fruit or vegetables
- Spaced throughout the meal
- With a cold drink
- Store under 25deg C
- Sometimes a PPI e.g. omeprazole or lansoprazole can improve action of enzyme tablets.

Thank you



Questions please!

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