Pancreatic enzyme replacement therapy (PERT)

- The pancreas produces pancreatic enzymes to digest the food you eat. Enzymes break down the fat, protein and carbohydrate in your food into smaller parts which can be taken up and used by your body.
- Pancreatic enzyme replacement therapy (PERT) are capsules you can take that contain pancreatic enzymes.
- This resource will help you understand what PERT is, why and how to take it.

**Why do I need PERT?**

You may need PERT if:
- you have had part of, or your entire pancreas removed (pancreatectomy)
- your pancreas is not working properly and not producing enough enzymes
- you have had a surgery or have a disease that leads to pancreatic enzymes not mixing well with food.

**How do I know that I need PERT?**

You may have the following symptoms:
- undigested fat in your stool (poo): loose, pale, greasy, offensive smell, explosive and difficult to flush
- unexplained weight loss
- pain with eating
- increased wind and bloating

**How should I take the capsules?**

- Swallow the capsules whole whenever you have a meal, snack or drink that contains fat, protein or starch.
- Because the enzymes break down food, if you take them away from food they will not work.
- Take the capsules before, during or immediately after a meal or snack.
- If you are having a large meal:
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- take half the capsules midway through the meal
- take the rest of the capsules at the end of your meal.

If you have trouble swallowing the capsules:

- Open the capsule
- Mix the enclosed beads with 1 teaspoon of jam, apple sauce or other acidic food (so they don't activate in your mouth)
- Do not chew the beads

You do not need PERT if you are eating food/drinks that have no protein/fat/starch, such as:

- Fresh, dried or canned fruit
- Jelly
- Sorbet
- Sweets, e.g. boiled lollies, mints, pastilles, chews, chewing gum, jelly sweets
- Soft drinks, juice, cordial
- Clear soup, consommé
- Tea or coffee with a dash of milk and sugar.

How many capsules do I need to take?

The number of capsules you need will depend on the health of your pancreas and your symptoms. Change the number of capsules you take depending on the amount and type of food you eat. Larger meals including fat may need more capsules than smaller meals. The brand of pancreatic enzymes usually given in Australia is Creon.

Creon capsules are available in 2 sizes:

- 10,000 units (of lipase)
- 25,000 units (of lipase)

A good starting point for adults is:

- Small meal or snack: 1 capsule (25,000 units)
- Main meal: 1-2 capsules (25,000-50,000 units)

You may need to change the number of capsules you take based on your symptoms.

Your doctor or dietitian will help you determine your doses.
Your dose
Main meals: _________________________________

Smaller meal or snacks: ________________________

When would I need more capsules?
• Larger meals or meals with dessert
• High fat meals including:
  o Fried foods, hot chips, battered fish, fatty meats, beef burgers, Doner kebabs, sausages, pies, pasties, suet pudding, pizza, samosas, pakora, paratha
  o Curries (takeaways) or homemade using oil, ghee or ready prepared sauces
  o Croissants, doughnuts, pastries, baklava, steamed puddings
  o Cheesecakes, ice-cream, dishes made with cream, crumbles, pies
  o Oily dressings, mayo, sauces
  o Chocolate drinks (unless low in fat), chocolate, fudge, toffee (more than 2-3 squares at a time)
  o Full fat milk, creamy soups, cheesy sauce.

How do I know if I am taking enough?
• You should see a change in how your stool looks. It should be more formed, less pale, and flush away easily.
• You should not have pain with eating and should have less wind (bowel gas).
• You may gain weight.

Important: Do not stop taking the capsules without speaking to your doctor. Your doctor or dietitian can help you adjust your dose.

Do I need to eat a special diet?
• No; a healthy, balanced diet is recommended.
• You should not cut fat out of your diet
• Avoid alcohol as it can reduce the body’s ability to break down and use fat.

How should the enzymes be stored?
• Store enzymes in a cool dry place (15°C - 25°C).
• Enzymes will not work well if kept in a hot place (e.g. above your fridge or in the car).
• Top up enzyme carriers daily to avoid them losing strength in hot weather.
• Check the expiry date of enzymes and do not use them past this date.
• Always keep the lid sealed on the bottle of enzymes.
• Get rid of enzymes that are out of date, have changed colour or texture, or have been kept in hot temperatures (25°C - 40°C) for more than 30 days.

Summary
• Take capsules with every meal, snack and drink that has fat, protein or starch.
• Spread out your enzyme capsules if eating over a longer period of time.
• Store the capsules in a cool dry place.
• You may need more enzyme capsules with larger or higher fat meals.
• If your symptoms are not improving, you may need to increase your dose. Talk to your doctor or dietitian about this.

Visit [https://www.creon.com/videos](https://www.creon.com/videos) for more information.

For further information, contact your dietitian or nutritionist: ____________________