

Pancreatic enzyme replacement therapy (PERT)

This resource will help you understand what pancreatic enzyme replacement therapy (PERT) is, why and how to take it.

Why do I need PERT?

- The pancreas produces pancreatic enzymes to digest the food you eat and some fluids you drink. Enzymes break down the fat, protein and carbohydrate in your food into smaller parts which can be absorbed and used by your body.
- PERT are capsules you can take that contain pancreatic enzymes

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 due to conditions such as chronic pancreatitis or cystic fibrosis or cancer

How do I know that I need PERT?

Your doctor will advise if you are required to take PERT.

You may have the following symptoms:

- undigested fat in your stool (poo): loose, pale, greasy, offensive smelling, 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 or protein.
- Because the enzymes break down food, if you take them away from food they will not work.
- Take the capsules during or immediately after a meal or snack.
- If you are having a large meal:
 - 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 or fat, 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, clear broth
- 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. Your doctor will advise on your PERT dose. 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 PERT usually given in Australia is **Creon**.

Creon capsules are available in 3 sizes:

- 10,000 units (of lipase)
- 25,000 units (of lipase)
- 35,000 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 and 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:
 - Fried foods, hot chips, battered fish, fatty meats, beef burgers, Doner kebabs, sausages, pies, pasties, suet pudding, pizza, samosas, pakora, paratha
 - Curries (takeaways) or homemade using oil, ghee or ready prepared sauces
 - Croissants, doughnuts, pastries, baklava, steamed puddings
 - Cheesecakes, ice-cream, dishes made with cream, crumbles, pies
 - Oily dressings, mayo, sauces
 - Chocolate drinks (unless low in fat), chocolate, fudge, toffee (more than 2-3 squares at a time)
 - 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 start to gain weight particularly when you previously have been losing weight unintentionally.

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 do not need to follow a low fat diet
- Limit alcohol as it can reduce the body's ability to break down and use fat

How should the capsules be stored?

- Store the capsules in a cool dry place between 15 - 25°C.
- The enzymes will not work well if kept in a hot place or in the fridge.
- Check the expiry date of capsules and do not use them past this date.
- Always keep the lid sealed on the bottle of capsules.
- After opening use within 6 months.
- Dispose of capsules that are out of date or have changed colour or texture.

Summary

- Take capsules with every meal, snack and drink that has fat or protein.
- 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.

For further information, contact your dietitian or nutritionist: _____