Pancreatic enzyme replacement therapy

Introduction
Pancreatic enzymes are substances produced by the pancreas to help digest and absorb the food you eat. Pancreatic enzymes break down the fat, carbohydrate and protein in your food into smaller parts so that it can be absorbed by your body.

Common reasons for being prescribed pancreatic enzyme replacement therapy include:
- you have had part of or your entire pancreas removed (pancreatectomy)
- your pancreas is not functioning properly and not producing enough pancreatic enzymes
- there have been changes to the way your body is absorbing nutrients.

Additional signs or symptoms may include:
- Unexplained weight loss
- Pain with eating
- Increased wind

How should I take the capsules / tablets?
- The capsules should be swallowed whole whenever you have a meal, snack or drink that contains fat or protein.
- Take the capsules before, during or immediately after a meal or snack. Or if you are having a large meal, take half the number of capsules halfway through the meal or between the main course and dessert, and the rest of the capsules at the end of your meal.
- If you have trouble swallowing the capsules, you may empty them and take the enclosed beads on a teaspoon of jam or apple sauce, but do not chew the beads. It is important to mix the beads with something acidic, so the enzymes remain stable and don’t start to break down too early.

Signs and symptoms of pancreatic enzyme insufficiency
Pancreatic enzymes are particularly important in breaking down dietary fat. The most common sign of pancreatic enzyme insufficiency is undigested fat in the stools, which often makes them loose, pale, offensive smelling, explosive and difficult to flush.

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Foods that do not require pancreatic enzymes (if eaten on their own)

Any food or drink that contains virtually no protein or fat, including:
- Fresh/dried/canned fruit, jelly, sorbet
- Sweets, e.g. boiled lollies, mints, pastilles, chews, chewing gum, jelly sweets
- Soft drinks, juice, cordial
- Clear soup, Bovril, consommé
- Tea or coffee with a dash of milk and sugar.

How many enzymes do I need to take?

The amount of enzymes you require will depend on your pancreatic function and the amount, type and timing of the food you eat: larger meals may require more enzymes than smaller meals.

A good starting point is 1-2 capsules with each main meal and 1 capsule with each snack. You may need to change the number of capsules taken with meals based on your symptoms.

Your dose

Main meals

Smaller meal or snacks

Examples of when you may require more enzymes:

- Larger meals or meals with dessert
- If you take longer than usual to consume your meal (e.g. buffet, party)
- 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)
  - Milk (full cream), creamy soups, cheesy sauce.

How do I know if I am taking enough?

You should experience a change in stool appearance. It should return to a more normal appearance and colour and flush away easily.
You should not experience pain on eating and should have less wind (bowel gas).
If you are gaining weight, it is a good sign that you are taking enough enzymes to digest and absorb your food.

Important: Do not stop taking the capsules without consulting your doctor. You may need to increase your dose depending on your symptoms. Your Doctor or Dietitian can help you adjust your dose.

**What should I eat?**
A healthy diet is recommended while on pancreatic enzymes. Cutting fat out of your diet is not necessary and not recommended. Aim for small, frequent meals and snacks throughout the day. Avoid alcohol as it can worsen fat malabsorption.

Your Dietitian will advise you on any specific dietary changes you may need.

**How should the enzymes be stored?**
- Store enzymes in a cool dry place.
- Enzymes will deteriorate if kept in a hot place, for example above your fridge or in the car.
- Top up enzyme carriers daily to avoid them deteriorating in hot weather.
- Check the expiry date of enzymes; use them while they still have a good shelf life (e.g. 6 months minimum).
- Always keep the lid tightly sealed on the bottle of enzymes.
- Discard enzymes that are out of date, or if they have changed colour or texture or have been exposed to hot temperatures.

**For further information contact your Dietitian or Nutritionist: __________________________**