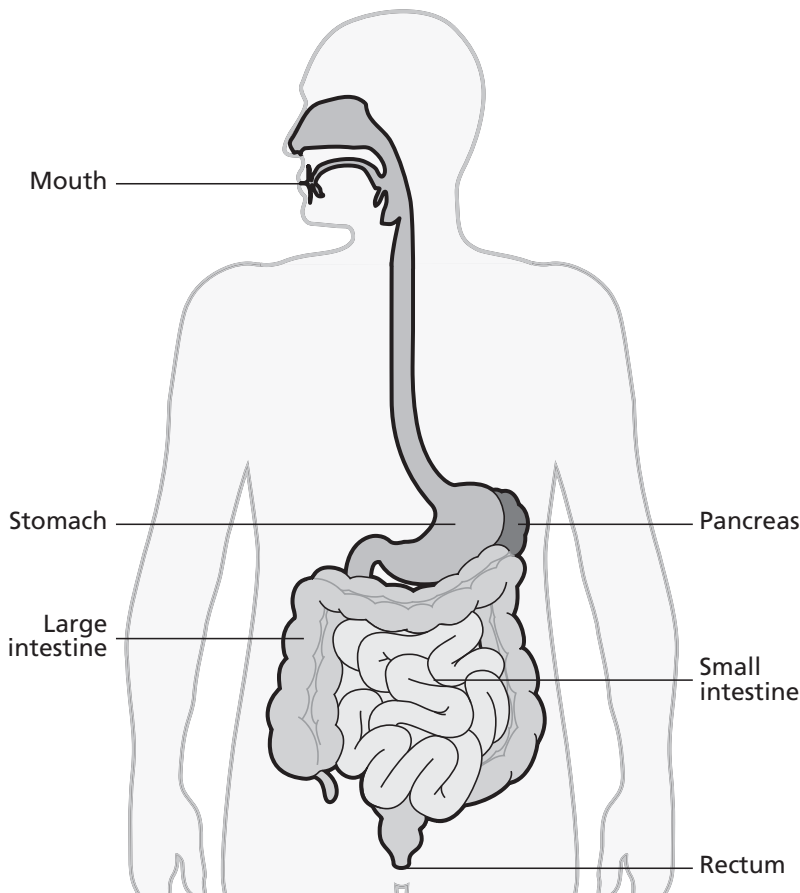




Enzymes in Cystic Fibrosis

Digestive System



What are enzymes?

- Digestive enzymes are made in the **pancreas**. The fat, protein and carbohydrate in food is broken down by the enzymes to release nutrients
- In cystic fibrosis (CF) sticky mucus blocks the passages from the pancreas to the **small intestine** which stops the enzymes working, so the food cannot be digested or absorbed by the body. This is called malabsorption and causes loose or oily stools, wind, stomach ache and poor weight gain

How do enzymes work in CF?

- There are several brands of enzymes which come in a capsule for example, Creon® and Nutrizym®
- Beads inside the capsule contain digestive enzymes. The outer capsule dissolves in the **stomach**. The beads then move along into the small intestine where the coating dissolves releasing the enzymes. Food is then broken down and the nutrients are absorbed by the body

When should enzymes be taken?

- All food and drinks containing fat, including nutritional supplements, require enzymes
- Enzymes need to be in the stomach at the same time as food
- Enzymes should be taken at the start of a meal or snack. If you are unsure how much you will eat or the meal has several courses, the dose can be split
- If you forget to take enzymes at the start of a meal, it is not too late to take them at the end of the meal



Notes

Dietetic Department

Great Ormond Street Hospital for Children NHS Foundation Trust
Great Ormond Street, London WC1N 3JH

Dietitian: _____

Date given: _____

The dietitian can be contacted on 020 7405 9200, ext _____. If the dietitian is not available please leave a message. Your enquiry will be followed up as soon as possible (within 5 working days).

Compiled by the Cystic Fibrosis Team in collaboration with the Child and Family Information Group

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