



***PATIENT
INFORMATION***

**A guide to taking pancreatic enzyme
replacement therapy for cancer
patients.**



Why do I need to take pancreatic enzymes?

If your pancreas has been damaged by disease, or if you have had surgery to this gland you may be unable to produce certain enzymes, which are needed to help you digest your food. These enzymes are called:-

- Lipase which helps to break down fat
- Protease which helps to break down protein
- Amylase which helps break down carbohydrate

If your pancreas is not producing these enzymes you may develop a condition called steatorrhea. This is where your stools (motions) are smelly and have a lot of fat in them. This can make them difficult to flush away. You can also have pains in your abdomen (tummy) after you have eaten certain foods, especially fatty or greasy things.

What are the benefits of taking Creon?

These symptoms can be helped by giving you capsules to take which contain pancreatic enzymes and which help you to absorb your food in the stomach. These capsules are usually called creon and they replace the three enzymes that the pancreas gland would normally produce itself. They also contain small quantities of other enzymes, which our bodies need when we eat a meal.

When should I take creon?

You will need to take creon capsules whenever you eat a meal. It is best to take them just as you start to eat your food as this means that they will be mixed with food in the stomach.

Can I vary the dose of creon ?

Creon capsules are available in different strengths and your doctor or nurse will discuss with you which strength is best for you. However, you are the person who knows your symptoms best so it may be appropriate for you to alter the dose for yourself. Failure to gain weight and persistent loose bowel motions are the main reasons you may need to increase the dose, please discuss this with your dietitian, specialist nurse, hospital clinician or GP.

If you eat a meal that is high in fat (such as fish and chips) you will need to take more capsules. As a general guide three capsules with a meal and two with a snack or nutritional supplement should be adequate.

Can I take too much creon?

No, the creon that your body doesn't need for the digestion (break down) of your food travels through your bowel and is excreted when you have your bowels open. Although you may experience some burning around the anus it is not possible to take too much creon. Take creon whenever you eat. This is important as certain snacks have a lot of fat in them particularly crisps and chocolate.

Do I have to restrict my diet?

No, you do not have to restrict your diet, but you may find that certain foods , especially those with a lot of fat in them, cause your motions to be loose and smelly. If that is the case you may need to take a higher dose of creon. You need to follow a balanced diet that will help you maintain your weight or even put some on. You may wish to read our 'build yourself up' diet sheet.

For how long do I have to take creon?

If you have had surgery to remove your entire pancreas or if it has been damaged by cancer, you will need to take creon for the rest of your life. If you have only had part of pancreas removed, it is possible that as it recovers form surgery, it is able to start producing enough enzymes again and you may be able to reduce or stop the creon. However, if you start to have symptoms such as loose, smelly stools you will need to tell your doctor or nurse. You may have to restart the creon.

What happens if I don't take the creon?

It can be difficult taking the creon capsules with every meal, but if you do not take them your symptoms will continue and may become worse. If you stop taking them for a long time you will not absorb some important vitamins that your body needs (particularly vitamins A, D, E and K) and you may lose weight.

Is there anything I can take instead?

Unfortunately, there is no alternative treatment available which help you to absorb the fats and vitamins from your food.

Are there any side effects?

When you collect the tablets from pharmacy, you will be given a leaflet produced by the manufacturers which will contain information about possible side effects.

The amount of enzymes required varies enormously from patient to patient partly because of the different level of enzymes secreted. There are still some enzymes secreted by the salivary glands, tongue, stomach and small intestine: Also your requirement will be affected by:

1. The amount of food you eat e.g. large meals will require more enzymes than small meals.
2. A meal with a pudding or dessert will require more enzymes
3. The type of food eaten e.g. meals which contain a lot of fat for example: fried fish and chips will require more enzymes than a meal containing boiled potatoes and steamed fish which is much lower in fat.

4. Remember some foods/drinks do not require enzymes e.g. fresh or tinned fruit, jelly, fizzy drinks or squash.
5. You will need to take 1 capsule of enzymes with a milkshake style supplement e.g. Prosure, Ensure Plus and Fortisip and 2-3 capsules with a skandishake. The juice based supplement drinks are fat free and you do not need to take an enzyme capsule with them.

Creon is available in different strengths (10,000 IU, 25,000IU and 40,000 IU). We start patients with the 10,000 IU creon. If you are taking a lot of creon with every meal (6-10 capsules with a meal) then we may organise a higher strength for you.

There are other enzyme preparations available but creon is the one that we tend to use.

If you have any questions about your nutrition or your enzyme dose please contact the oncology dietitian on 01803 654385

Please see overleaf for a sample meal plan using creon

Sample meal plan using 10,000 IU Creon

A guideline only the dose and strength you need to take may be different.

Breakfast

1 slice bacon/sausage/mushrooms/fried egg with toast and butter

Take 3-4 x capsules creon

or

1 bowl weetabix cereal with full cream milk with toast and butter

Take 2-3 x capsules creon

Lunch

1 fried fish in batter and chips with mushy peas

Take 3-4 x capsules creon

1 cod in parsley sauce with mash and butter and carrots

Take 2-3 x capsules creon

Snack Meal

1 x cheese sandwich with crisps

Take 2-3 x capsules creon

Snack

2 x chocolate biscuits and a cup of tea with milk

Take 1-2 x capsules creon

1 x toasted teacake with butter and a cup of coffee with milk

Take 1-2 x capsules creon

1 x fresh fruit

No creon