

# Patient information

## CT Colonography Scan ( CTC )

This leaflet aims to answer your questions about having a CT Colonography scan. It explains the benefits, risks and alternatives, as well as what you can expect when you come to the hospital for your scan.

It is very important that you read all of the instructions and follow the preparation. The closer you can follow the instructions the more accurate the test will be.

If you have any further questions, please speak to the doctor, nurse or radiographer caring for you or contact us on the appropriate telephone number below, Monday to Friday, 9am – 5pm:

**Eastbourne DGH Appointments: Tel: 0300 131 4662/ 0300 131 4794**

**Conquest Hospital Appointments: Tel: 0300 131 5146/ 0300 131 5141**

### What is a CT Colonography Scan?

CT Colonography (also called CT virtual colonoscopy) involves a computerised tomography (CT) scanner taking 3D images of your large bowel (colon). You will have scans in two or three positions: on your back, side or front. Before we do the scans we need to expand your bowel with carbon dioxide. We put the gas through a small thin tube that is put in to your rectum (bottom).

By obtaining these images the doctors can then look at the images for polyps and signs of cancer.

#### 1 Mouth

Food and liquid enter the body through the mouth. Chewing breaks down the food.

#### 2 Oesophagus

Carries the food and liquid to the stomach for digestion.

#### 3 Stomach

Stores and breaks down the food into a liquid mixture before slowly releasing it into the small bowel.

#### 4 Liver

Produces bile, which helps the body absorb fat from food.

#### 5 Gallbladder

Stores bile until the body needs it.

#### 6 Pancreas

Produces enzymes (substances that speed up chemical reactions) that help the body digest fat, protein and carbohydrates (starchy foods).

#### 7 Small bowel

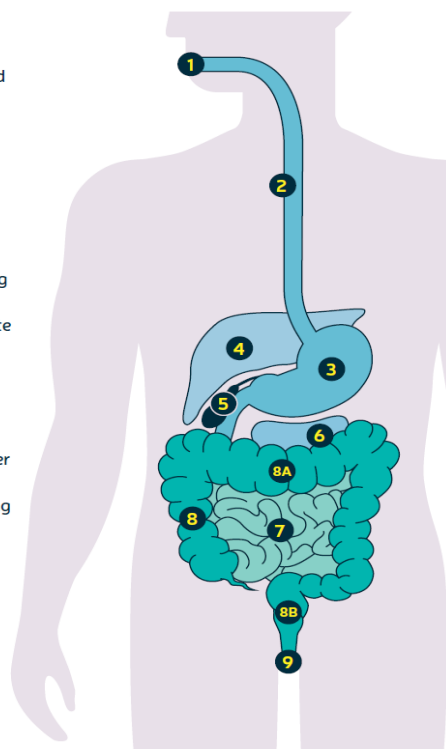
Breaks the food down even further, absorbing the nutrients into the body. Undigested waste moves into the colon.

#### 8 Large bowel

Made up of the colon (8A) and rectum (8B). The body absorbs water from the undigested waste as it moves along the colon towards the rectum. Waste (poo) is stored in the rectum until it passes out of the body.

#### 9 Anus

Poo passes through the anus as it leaves the body.



### What are the alternatives?

Other tests include a colonoscopy. Currently, a CT Colonography has been considered as the most appropriate test for you or may be part of a range of examinations needed to get a diagnosis. Other tests include a colonoscopy. If you have any questions regarding what the most fitting test for you is, please speak to your referring doctor to explain to you the available options.

## What are the symptoms that have led to me having this procedure?

The major reason for carrying out CT Colonography is to look for polyps or cancers in the colon or rectum. Polyps are small growths on the inside of your bowel. They are usually harmless but some polyps can develop into cancer.

CT Colonography can be used if you have symptoms such as changes in your bowel habit, weight loss, and blood in your faeces (stools) or you have had blood tests which show you may be iron deficient anaemia (which may be caused by bleeding in the bowel) . It can also be used to screen people who are at risk of developing bowel cancer, which can include a family history of bowel cancer, personal history of cancer of the colon, rectum, ovary, endometrium, or breast and a history of benign polyps in the colon. Age and lifestyle can also affect the risk of developing colon cancer.

CT Colonography is often used in people who are too frail to have a colonoscopy, or if there are other reasons why a colonoscopy would not be suitable.

## How do I prepare for a CT Colonography?

**You must inform your doctor and contact the Radiology department if you have ever had an allergic reaction to x-ray contrast or any bowel preparations.**

To give us a clear view of any small changes in your bowel your bowel needs to be carefully prepared the day before the procedure.

You will need to:

- If you are taking IRON TABLETS please stop taking them 7 days before your scan.

The day before the procedure

- drink the Gastrografin we have provided. Gastrografin is a contrast medium (dye) which contains iodine and helps to make your scan pictures clearer. It also acts as a laxative to clear your bowel of faeces (poo).
- follow the low fibre and low fat diet suggest at the end of the leaflet.

Gastrografin may cause diarrhoea, so it is important that you drink plenty of fluids to avoid becoming dehydrated. Please make sure you are near a toilet once you have started taking your bowel preparation

If you are a patient with diabetes, please stop any rapid acting medication after 4pm the day before your test. If you are on long acting or basal insulin, please continue with this. If you monitor your glucose levels continue to do so. Please discuss with the radiographer if you have any concerns and contact your diabetes nurse if you have question regarding your medication.

- If there is any chance that you may be pregnant please notify the department on the above number. If you take oral contraceptives, the effects of the laxative may reduce the effect of the contraceptive. Continue taking the oral contraceptives but use other contraceptive precautions for the remainder of your cycle.

## What happens during the CT Colonography scan?

- We will explain the test and answer any questions and will confirm your consent. Please let the Radiographer know if you have had any problems with the bowel preparation.
- You will be asked to change out of your clothes. You will be given a gown and disposable underwear to wear for the examination.
- You may have a cannula inserted into one of the veins in your arm for the contrast dye and/or muscle relaxant called Buscopan (to relax the muscles of the large bowel and reduce movement).
- Once you are ready and positioned on the CT scanner table, you will be asked (or helped) to turn on to your right side and a short, thin flexible tube will be placed into your back passage by the Radiographer or Trained Radiology Assistant.
- You may be given a muscle relaxant injected via the cannula to avoid bowel spasm, which will make the examination more comfortable for you. Despite the muscle relaxant, you may feel some bloating and mild discomfort in your abdomen. Not all patients can have this muscle relaxant, this will depend on other medical conditions which we will question you about before the scan.
- Gas (carbon dioxide) will be gently introduced into your bowel through the tube in your back passage. This is done at a controlled rate by a machine specifically designed for this purpose.
- Once the Radiographer is satisfied with the amount of gas in your large bowel, the CT scan will be taken with you lying on your back. You may also be given an iodine based contrast via the cannula during this scan.
- The radiographer will ask you to turn over into the next position (this may be onto your front or side) and they will repeat the scan. They will then check the quality of the images. Occasionally, we may need further scans to look more closely at an area that has not shown up clearly.
- At the end of the scan, we gently remove the tube from your bottom and ask you to go to the toilet before getting dressed.
- The whole investigation takes no more than 30 minutes.

## What happens after the Scan?

You will be offered a drink and a biscuit before you leave as you will have been following a restricted diet for the day prior to the scan.

We will ask you to wait in the department for a short time after the procedure. This is to make sure that you feel well enough to leave and to ensure that you have not had any adverse reactions, in particular to the injected contrast. If you have been given muscle relaxant you may experience some blurred vision which should not last longer than 30 minutes. If you are driving home please make sure your vision is normal before you leave the department.

You may experience some wind and further diarrhoea for the rest of the day. We recommend that you stay close to a toilet. You can eat normally after the procedure and you should drink plenty of fluids. If you feel your condition has worsened then you should seek medical advice from your GP or attend A&E.

## How do I get the results of my scan?

A radiologist (a specialist X-Ray consultant) will review your scan and send a report to the doctor that referred you. An appointment will then be arranged for you to discuss the results. Please allow two weeks for the results to be sent to your referring doctor

## Are there any risks?

- **Radiation dose**

A CTC investigation uses x-rays to produce the images. Medical radiation does carry a very small health risk. The radiation that you receive during a CTC scan is about the same as few years of natural background radiation (from your surroundings). The risk of this is considered to be low.

The CT department monitors radiation doses very carefully and always uses the lowest dose needed to gain good quality images.

- **Expected side effects**

Minor side effects may include:

- dehydration caused by the bowel preparation medicine – you will need to drink plenty of fluids before and after your scan
- a dry mouth and blurred vision caused by the muscle relaxant injection (if given) – this should wear off within 30 minutes, but please do not drive until your vision is back to normal
- feel faint following injection of the muscle relaxant (if given)
- a feeling of warmth and an occasional strange metallic taste with a feeling as if you have passed urine for a few moments, caused by the contrast agent injection (x-ray dye) if given
- bloating in your abdomen (tummy) during and after the procedure caused by the gas used to inflate your bowel – this soon wears off once you have been to the toilet and passed wind
- haematoma (bruising) where the injection was given

- **Rare complications**

More serious complications are rare, but the radiography staff are well prepared to manage them. Before sending you home, they will make sure you do not:

- have a rare allergic reaction to the x-ray contrast (if given). We will go through a safety checklist before the procedure to identify if you are at increased risk.
- have severe abdominal pain – if this develops after your scan please seek urgent medical advice.
- have a perforation of the bowel (a small hole in the bowel wall)
- have a painful eye caused by the muscle relaxant, Buscopan (if given) – this is rare but if it happens you need to attend a hospital emergency department for an urgent eye assessment. The muscles in the eye may also relax with Buscopan and rarely Buscopan can precipitate undiagnosed previously asymptomatic acute closed angle glaucoma.

**Despite these slight risks, your Doctor believes it is advisable that you should have this examination, and do bear in mind there are greater risks from missing a serious disorder by *not* having your scan.**

## Consent

We will fill out a questionnaire on your arrival in the department, which helps us assess your suitability for the contrast dye if needed and the muscle relaxant. We will explain the procedure again to you and we will ask for your consent for us to carry out the scan. If you are not happy to proceed with the above procedure or want more information please call us before you start your preparation. Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

# Patient Preparation Sheet

## CT Colonography with Gastrografin 100mls

If at any time whilst taking the preparation you become unwell or feel unable to carry on with the preparation, please call us and discontinue the preparation.

If you feel that you will be unable to tolerate this preparation, please contact your referring Clinician to discuss your concerns and any other options.

Day	Time	Preparation	Completed
<b>Seven days before</b>		Stop taking any iron tablets but continue other medication.	
<b>Four days before</b>		Stop taking constipating medicines but continue other medication.	
<b>One day before</b>	<b>Drink as much clear fluid as possible (if required, this can contain sugar).</b> <b>Stop eating items on the 'Foods NOT allowed' list (enclosed).</b>		
	<b>8am</b>	<b>Drink 75mls of Gastrografin. You may mix this with 75mls of water and some squash to taste.</b>  Breakfast from the 'Foods allowed' list (enclosed).	
	<b>12- 1</b>	Lunch from the 'Foods allowed' list (enclosed).	
	<b>DO NOT HAVE ANY MORE SOLID FOOD MILK OR DIARY PRODUCTS.</b>  <b>You may have clear fluids, strained soup, meat extract, jelly, clear juices, fizzy drinks and tea and coffee without milk.</b>		
	<b>7pm</b>	<b>Drink 25mls of Gastrografin. You may mix this with 25mls of water and some squash to taste.</b>	
<b>On the day</b>	<b>Do not eat any food. You may drink as much water or clear fluids as you would like.</b>  <b>After the procedure, you will be able to eat and drink as normal.</b>		

## **FOODS ALLOWED**

You can eat low fibre foods including the following:

- Milk (2 cups a day), plain yoghurt, cheese, butter, margarine
- White fish or chicken – boiled/steamed/grilled
- Eggs, tofu
- White pasta, white rice
- White bread, white pitta, white flour chapattis
- Potatoes without skin, e.g. mashed, boiled
- Clear soups (no solid bits) e.g. sieved chicken noodle, Bovril, Oxo
- Clear jelly, boiled sweets, ice cream, chocolate (no fruit or nut pieces)
- Salt, pepper, sugar, sweeteners, honey

Have plenty to drink chosen from the following:

- Tea
- Coffee
- Squash
- Water
- Clear Fruit Juices e.g. grape, apple, cranberry
- Fizzy drinks

Suggested meals could include for example:

Breakfast:                    White bread/toast with butter and honey  
                                      Boiled or poached egg

Lunch/dinner:              Grilled fish or chicken with white rice and boiled potatoes (no skin)  
                                      Scrambled eggs on white toast  
                                      Vanilla ice cream

## **FOODS NOT ALLOWED**

- Red meats, pink fish e.g. salmon
- Fruit, vegetables, salad, mushrooms, sweetcorn
- Cereals, nuts, seeds, pips, bran, beans, lentils
- Brown bread, brown or wild rice, brown pasta
- Pickles or chutneys

## Sources of information

For further information regarding your condition please refer back to the Doctor who has sent you for your scan. If you have internet access, you can find out more about this scan here:-

Patient CT scan information: <https://patient.info/treatment-medication/ct-scan>

Patient CTC information: [CT Colonography: Use, Preparation, and Side-Effects | Patient](#)

For information about bowel cancer screening: [Bowel cancer screening: having a CT colonography \(CTC\) scan - GOV.UK \(www.gov.uk\)](#)

## Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

## Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the patient experience team on 0300 131 4784 or [esh-tr.patientexperience@nhs.net](mailto:esh-tr.patientexperience@nhs.net).

## Hand hygiene

We are committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

## Other formats

**If you require any of our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or [esh-tr.AccessibleInformation@nhs.net](mailto:esh-tr.AccessibleInformation@nhs.net)**

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

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## Reference

The following clinicians have been consulted and agreed this patient information:

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Dr Gillian Watson, Consultant Radiologist, ESHT  
Rebecca Ayling, Clinical Manager CT Scanning ESHT  
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The directorate group that have agreed this patient information leaflet: Core Services Division

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