

Gastro- en colonoscopy, adults
Pleinvue

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Introduction

Soon you will undergo a gastro- and colonoscopy: an examination of your stomach and of your large intestine. This brochure explains the where, why and how of the endoscopy and the necessary preparations. We request that you carefully read this brochure and observe the preparations, even if you have undergone this examination in the past.

Appointment details

You have an appointment for a colonoscopy:

Day: _____

Date: _____

Time of admission: _____

Doctor performing
colonoscopy: _____

Please report to the reception desk at C41. (Endoscopy Unit, yellow route). Always make sure you bring a valid identity card. If you have not recently been registered in the hospital system, please do so in advance at the registration desk.

Moving or cancelling your appointment

You have been assigned a specific day for the examination. If you are unable to attend this appointment for an urgent reason, report this immediately to the Gastroenterology Outpatient Clinic (020 - 755 7023, option 3) or to the reception assistant of the Endoscopy Department (020 - 755 7120).

General information

Who will perform the examination?

A gastroenterologist or internist will conduct the examination with the assistance of two endoscopy nurses. These nurses are also there to support and guide you as much as possible during the examination.

Examination preparations

A nurse will retrieve you from the waiting room and escort you to the recovery room. Here, your blood pressure will be taken, and an IV needle will be inserted into your arm or hand. Next, you will be wheeled to the examination room on your bed. There, you will be asked to lie on your left side.

Identity check

During each stage of the examination, we will need to verify your details. Therefore, we will ask you several times who you are and why you are at the hospital. Just before the examination, the treatment team will check the main details one more time. These precautions are what is known as the TOP procedure, which is important for your safety.

Sedation and pain relief

Before the examination begins, a sleep aid (Midazolam) will be administered through your IV to help you relax. This is not an anesthetic. The effect of sedation varies per individual. Some individuals fall asleep while others are just a bit dazed. The sedation will make you feel more relaxed and peaceful. A pain reliever (Fentanyl) will also be administered through your IV.

How long will the examinations last?

Your entire stay at the department will last for approximately 1.5 to 2.5 hours. Sometimes, we must deal with an emergency, or the procedure overruns the allotted time. We apologize in advance for this.

Resting after the examination

After the procedure, you will be brought to the recovery room where you can wake up slowly. Here, nurses will regularly check your blood pressure and the oxygen level of your blood. Once you are fully awake and stable, the IV will be removed. You will be offered a cup of coffee/tea and a sandwich.

Post-examination instructions

Due to the medication you were given, you absolutely must **not travel home by yourself.**

- You may only travel home accompanied by a family member and/or acquaintance.
- You are absolutely not permitted to actively take part in traffic for the rest of the day (and you will not be insured if you do so).

If you do not have anyone to collect you on the day of the examination, the examination CANNOT proceed.

It is advisable to continue resting at home for the rest of the day. We recommend that you refrain from drinking alcohol and from performing any strenuous exercise or sports. You may resume your medications according to prescription unless advised differently.

When will the results be known?

An endoscopy nurse and/or your attending doctor will give you the provisional results after you wake up from the procedure. If a tissue sample has been collected (biopsies and/or polyps), a definitive result will follow the tissue examination. Typically, a telephone conversation will be scheduled for two weeks after the procedure.

Persistent post-surgery complaints

After your examination, you may experience a full feeling, flatulence or some light cramping. These symptoms should go away after 24 hours. Contact us at the Endoscopy Department if you experience the following symptoms:

- Blood loss and/or black stools.
- Fever higher than 38°C, starting within three days of the examination.
- Persistent abdominal pain, starting within three days of the examination.

Contact

You can reach us at the following telephone number:
Treatment Centre/Endoscopy Department
Monday - Friday from 8:00 a.m. to 4:30 p.m.
020 - 755 7120.

In case of problems in the evening and during the weekend, you can call the hospital's general telephone number: 020 - 755 7000.

Gastrosocopy information

Why have a gastrosocopy?

A gastrosocopy is an examination to look at the inside of the oesophagus, stomach and the first part of the small intestines. A flexible tube of 1 cm thickness (gastrosocope), which has a camera and light at the end, is inserted via the mouth.

Preparation

In order to examine the stomach properly, it must be empty and for this reason you may not smoke, drink anything from 3 hours before the examination.

Examination

Immediately before the examination you will be given a drink to avoid any foam build-up in the stomach. You will also be asked to remove any dentures or dental plates.

The examination takes 5 to 10 minutes. During the examination you will be placed on your left side. The nurse places a ring between your jaws to protect the gastrosocope and your teeth.

The doctor inserts the scope over the tongue into the back of the throat. The tube is then slowly pushed via the oesophagus to the stomach. The insertion of the tube is not painful but may be unpleasant for a little while. You do not have to worry about not being able to breathe as the scope does not go into the windpipe.

During the examination the doctor blows air into the stomach to stretch it. This may make you burb.

If necessary, a piece of tissue (biopsy) is removed. This is not painful but may give a pulling sensation.

Risks involved in the examination

The risks of the examination are small. In less than 1 in 1000 people, there is a complication (problem during the examination).

Possible problems:

- An airway infection or pneumonia; because of stomach contents being swallowed the wrong way. This is more common in people who have been sedated.
- A tear in the oesophagus or stomach. This is very rare. It sometimes requires an operation to rectify the tear.

Colonoscopy information

Why have a colonoscopy?

A colonoscopy is performed when a person experiences symptoms such as changing bowel movements, chronic diarrhea, blood loss and/or abdominal pain. This procedure also serves as a check-up following a previous endoscopy, in the case of a genetic predisposition to colon cancer or as screening for the population study. This examination can detect abnormalities, such as (chronic) inflammation, polyps, bulges (diverticulitis) and signs of cancer.

What is a colonoscopy?

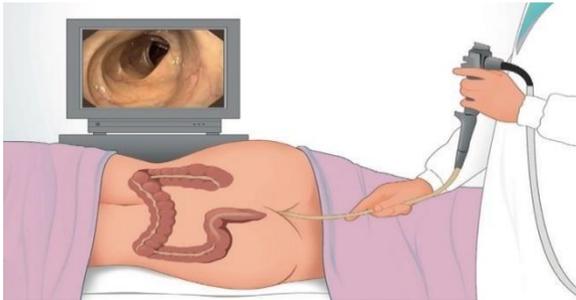
A colonoscopy is an examination in which the mucous membrane of the large intestine and potentially the last portion of the small intestine are inspected. A centimetre-wide flexible hose with a camera and a light, known as an endoscope, is inserted via the patient's rectum.

What does the examination entail?

The endoscope is inserted through the rectum and guided to the starting point of the large intestine (no more than 1.5 metres). Air is blown in to inflate the intestines. This may cause pressure or gastrointestinal cramping. Deep breaths often help to relieve these symptoms.

The doctor will view a monitor to examine the mucous membrane of the large intestine. Small tissue samples (biopsies) will be taken, if necessary, for further examination. This is not painful. Any polyps found during the procedure will be directly treated. In principle, you will not feel this either. In certain cases, it

is not possible to remove a polyp, thus necessitating a follow-up procedure.



Risks involved in the examination

A colonoscopy is a safe procedure. However, occasionally a complication does occur, for example, post-operative bleeding (1 in 100 people) or perforation (a tear in the intestine: 1 in 1000 people). The doctor and/or nurse will have discussed these risks with you prior to your examination.

There is a possibility that abnormalities are not seen during the colonoscopy.

Pre-colonoscopy laxatives

Your intestines must be very clean before the examination. Only then will it be possible to properly assess the mucous membrane. The colonoscopy cannot be performed if your intestines are not clean. Should this be the case, the examination will have to be carried out on a different day after you have taken more laxatives.

Which laxatives are used?

You will receive a prescription for two laxatives: Pleinvue® and Bisacodyl. It is important to follow the instructions from this brochure for these laxatives and not the instructions from the pharmacy.

What is Bisacodyl?

Bisacodyl is a tablet that acts as a laxative and may cause gastrointestinal cramping.

What is Pleinvue?

Pleinvue® is a drink with a strong laxative effect that causes one to go to the toilet repeatedly. This laxative causes one to have thin or watery stools that clean the large intestine.

The Pleinvue® package contains three sachets that must be dissolved in water. The first dosage consists of one sachet which dissolves into a mango-flavored solution.

The second dosage consists of two sachets (A & B). These dissolve into a fruit-flavored solution.

Bowel preparation with Pleinvue

Two days prior to the examination:

- Start a low-fibre diet (no fibre, seeds or pits). See the end of this brochure for the list of dietary restrictions.
- It is essential that you drink sufficient fluids (2 - 2.5 litres per day).
- Take one Bisacodyl tablet in the evening at 10:00 p.m.
- If necessary, stop taking blood thinners

One day prior to the examination:

- You are allowed to have a light breakfast followed by a light lunch. You must finish these meals at least 3 hours prior to your first dose of Pleinvue.
- After 3:00 p.m.: you may only drink clear fluids, such as water, broth, coffee and tea without milk. Do not drink any carbonated beverages.
- At 6:00 p.m.: drink the first dose of Pleinvue® (dissolved in 500ml of water) within a 30-minute period, followed by 500ml of clear fluids over the next 30 minutes. You can also alternate the drinks and drink 1 litre (500ml of Pleinvue® and 500ml of clear fluids) in one hour.
- From 7:00 p.m.: you may only drink glasses of clear fluids.

The day of the examination:

- At 6:00 a.m.: drink the second dose of Pleinvue®
- A&B dissolved together in 500ml of water within a 30-minute period, followed by 500ml of clear fluids over the next 30 minutes.
- Until three hours before the examination you may drink glasses of clear fluids.
- Stop drinking after:

Date: Time:.....

How to use PLEINVUE®

Preparation of PLEINVUE® dose 1

You prepare PLEINVUE® dose 1 when req. required according to your dosing schedule

mango
flavor

Open



Open the box and take out the **dose 1** sachet

Pour



Pour the contents of **dose 1** into a measuring cup large enough to hold 500 ml of liquid

Add water



Add **water** to the cup to make a total of 500 ml

Stir



Stir until the powder is dissolved. This can take up to 8 minutes

Store



Can be stored for up to 6 hours below 25°C or in the refrigerator following preparation. Solution should be discarded

Drink



Drink the solution of 500 ml PLEINVUE® dose 1 over 30 minutes

Timing plan



Try to drink a glass every 10 to 15 minutes until you have finished **dose 1**

Timing plan



Afterwards, drink at least 500 ml of clear fluids every 30 minutes

Clear fluids



Afterwards, drink at least 500 ml of clear fluids every 30 minutes

Date: Time:.....

How to use PLEINVUE® dose 2

Preparation of PLEINVUE® dose 2

You prepare PLEINVUE® dose 2 when required according to your dosing schedule

fruitdrink
flavor



Take **sachet A** and sachet B of dose 2 out of the box



Pour the contents of **sachet A** and sachet B of dose 2 into a measuring cup large enough to hold 500 ml of liquid



Add water to the cup to make a total of 500 ml



Stir until the powder is dissolved
This can take up to 8 minutes



Can be stored for up to 6 hours below 25°C or in the refrigerator following preparation. Solution should be discarded



Follow the instruction based on the recommended dosing schedule



Drink the solution of 500 ml PLEINVUE® dose 2 over 30 *



Drink the solution of 500 ml PLEINVUE® dose 2 over 30 * minutes



Afterwards, drink at least 500 ml of clear fluids every 30 minutes

When are the intestines sufficiently clean?

After taking the Pleinvue® and the rest of the laxative schedule, your stools should look like yellow water (just like urine). The stools, therefore, may not have any solid particles. If you have any doubts about this, please drink a few extra glasses of water to enhance the effect of the laxative schedule.

Below you can see the difference between a successful and a failed bowel preparation:

Clean intestine



Unclean intestine



Clear view

Blurry view



Yellow and clear



Dark and cloudy

Overview of low-fibre foods

Do eat	Do not eat
<p><u>Bread and grain products</u></p> <ul style="list-style-type: none"> • Cornflakes • White rice or pasta • White bread • White rusks • Toast 	<p><u>Bread and grain products</u></p> <ul style="list-style-type: none"> • (Multi)grain products • Whole wheat bread or pasta • Brown or whole grain rice • Brinta or oatmeal • Gingerbread (ontbijtkoek)
<p><u>Sandwich fillings:</u></p> <ul style="list-style-type: none"> • Seedless jam • Honey • (Apple) syrup • Chocolate spread, flakes, sprinkles • Cheese (without seeds) • Chicken fillet, ham, extrawurst, salami • Smooth peanut butter 	<p><u>Sandwich fillings:</u></p> <ul style="list-style-type: none"> • Smoked meat or roast beef • Whole fruit jam • (Russian) salad • Chunky peanut butter
<p><u>Main meals</u></p> <ul style="list-style-type: none"> • Lean meats like chicken, turkey and mince. • Fish (oily or white) • Eggs (boiled or fried) • Broth • Potatoes: boiled, fried or mashed without the skin. 	<p><u>Main meals</u></p> <ul style="list-style-type: none"> • Ready-made meals • Soup with vegetables • Cup a Soup • Red meat (except mince) • Shoulder steak or stewing meat

Do eat	Do not eat
<p><u>Vegetables and fruit</u></p> <ul style="list-style-type: none"> • Well-cooked vegetables like broccoli, cauliflower, carrots and beetroot • Apples, peeled pears, bananas, fruit purée 	<p><u>Vegetables and fruit</u></p> <ul style="list-style-type: none"> • All fibrous vegetables like leafy greens, legumes or cabbages • Mushrooms, tomatoes, sweet peppers • Lettuce, raw vegetables
<p><u>Extras</u></p> <ul style="list-style-type: none"> • Butter or vegetable oils • Cream or whipped cream • Salt, pepper, vinegar, broth • Ground spices • Sugar 	<p><u>Extras</u></p> <ul style="list-style-type: none"> • Nuts or popcorn • Olives, pickles, capers • Fresh leaf spices • Sauces or tinned or packet soups
<p><u>Beverages</u></p> <ul style="list-style-type: none"> • (Mineral) water • Tea or coffee • Lemonade or soda (noncarbonated) 	<p><u>Beverages</u></p> <ul style="list-style-type: none"> • Fresh orange juice

Taking laxatives at the hospital

If you are unable to take laxatives at home due to, for example, mobility or other problems, you might be admitted to the hospital for a night. You may report to the Nursing Department (usually the Lower East Clinic) at 3:00 p.m., one day prior to the examination.

It is important to know that when a patient takes laxatives at the hospital, a stomach probe is inserted the night before the examination. This is a flexible tube that runs via the nose to the stomach. The laxative is administered via this tube, so you do not have to drink additional fluids.

Medication

Blood thinners

If you take blood-thinning medication, you must notify the doctor of this when scheduling your examination. It may be necessary to stop this medication a few days prior to the examination. If so, your doctor will tell you about this.

Medication	Stop date

Never stop taking your blood-thinning medication on your own. Always consult your treating doctor first. After the examination, the doctor or nurse will tell you when you may resume your medication.

If you take **iron tablets** like Ferro-Gradumet or Ferrous Fumarate, you should stop these one week prior to the examination. After the examination, you may resume taking the iron tablets as normal.

If you are on **the pill**, the contraception may be less reliable during the cycle in question due to the laxatives.

If you take **other medication**, you can continue taking it, unless told otherwise by your attending doctor.

Points for attention

Clothing

On the day of the examination, wear loose and nonrestrictive clothing. It is nice to bring a pair of warm socks to wear during the examination.

Nail polish and body lotion

Please ensure that your index fingers do not have any nail polish or artificial nails. We also ask you not to wear body lotion or vaseline on the day of the examination.

Pregnant

If you are pregnant or there is a chance that you are pregnant, notify the doctor who requested the examination or will be performing it. Depending on your symptoms, a determination will be made as to whether and how the examination can take place.

Pacemaker or internal defibrillator

If you have a pacemaker or an Implantable Cardioverter Defibrillator (ICD), notify your treating doctor.

CPAP

If you have a CPAP, do not forget to take it with you for during and after the examination.

Stoma

If you have a stoma, we recommend that you use a collection receptacle that you can empty when taking the laxatives. Always bring an extra bag to the hospital for use after the examination.

Diabetes

If you have diabetes, notify staff of this when scheduling your colonoscopy appointment. It is often necessary to adjust your medication for the examination. Consult the doctor who has requested the examination or the diabetes nurse about this. To minimise the risk of your blood sugar being disrupted, your examination by preference will be scheduled for the morning.

Please note: bring your medication and/or insulin with you so that you can take it after the examination. Bring a blood glucose monitor with you as well.

Depending on the time of your examination and the type of diabetes medication you use, you will receive a modified schedule. Examples of this can be found on the last pages of this brochure.

Insulin protocol for diabetes

Morning colonoscopy

The day before the colonoscopy:

Food: low-fibre diet until 3:00 p.m. After which, you may only drink clear fluids, such as water, broth, coffee and tea without milk. Drink fluids according to the laxative schedule. Insulin in the evening:

- Long-acting insulin: 70% of the evening dose
Insulin mix: only administer the morning dose.
- Short-acting insulin: only administer the morning and lunch doses.

The day of the examination:

Food: do not consume solid food. You may drink clear fluids, such as water, broth, coffee or tea without milk.

Insulin in the morning:

- Long-acting insulin: administer 70% of the dose.
- Insulin mix: do not administer before the endoscopy.
- Short-acting insulin: stop. Resume with the next meal.

Post-endoscopy medication:

- Insulin mix: administer 70% of the dose at lunch.
- Short-acting insulin: administer the normal dose with the next meal.
- Long-acting insulin: according to individual schedule.
Hypo recommendation: lemonade (not light) 1/3 of a glass with 2/3 water.

Afternoon colonoscopy

The day before the colonoscopy:

Food: low-fibre diet until 8:00 p.m. Follow the schedule listed earlier in the booklet.

Morning and afternoon insulin: continue.

Evening insulin:

- Long-acting insulin: 70% of the dose.
- Insulin mix: continue.
- Short-acting insulin: continue.

The day of the examination:

Food: do not eat breakfast.

Morning insulin:

- Long-acting insulin: 70% of the dose.
- Insulin mix: do not administer.
- Short-acting insulin: stop.

Post-endoscopy insulin and medication:

- Insulin mix: 70% of the dose with the next meal.
 - Short-acting insulin: administer the normal dose with the next meal.
 - Long-acting insulin: according to individual schedule.
- Hypo recommendation: lemonade (not light) 1/3 of a glass with 2/3 water.

Oral medication for diabetes

Morning colonoscopy

The day before the examination:

Food: low-fibre diet until 3:00 p.m. After which, only clear fluids according to the schedule.

Medication:

- SU derivatives: halve the Gliclazide, Glimepiride, Tolbutamine, Glibenclamide → among others.
- Continue Metformin.
- DPP4 inhibitors: → continue Vipidia, Trajenta, Onglyza, Januvia and Galvus.
- SGLT2: → continue Invokana, Forxiga, Jardiance and Steglatro.
- GLP-1 analogue injections: → continue Byetta, Victoza, Lyxumia, Bydureon, Trulicity and Ozempic.

The day of the examination:

Food: do not consume solid food. Drink fluids according to the laxative schedule.

Pre- and post-endoscopy medication:

- Take all oral diabetes medication with the next meal.
- GLP-1 analogue injections: → continue Byetta, Victoza, Lyxumia, Bydureon and Trulicity.

Hypo recommendation: lemonade (not light) 1/3 of a glass with 2/3 water.

Afternoon colonoscopy

The day before the examination:

Food: low-fibre diet until 8:00 p.m. according to the schedule. After which, drink only clear liquids according to the schedule.

Medication: no adjustments, continue.

The day of the examination:

Food: do not consume solid food. Drink fluids according to the laxative schedule.

Medication

- Do not take oral diabetes medication.
- GLP-1 analogue: continue Victoza, Byetta, Lyxumia, Bydureon and Trulicity.

Post-endoscopy medication:

- Resume diabetes medication with the next meal. **Hypo recommendation:** lemonade (not light) 1/3 of a glass with 2/3 water.

Contact details

For more information, you can visit the website of the Maag-, Lever-, Darmstichting (Gastric, Liver, Intestinal Foundation), www.mlds.nl.

Outpatient Clinics:

Phone number Hospital:	020 – 755 7000
Gastroenterology:	020 – 755 7023
Internal medicine:	020 – 755 7025
Endoscopy Department:	020 – 755 7120

Comments about this brochure

If any information is missing from this brochure, please contact the hospital via voorlichting@zha.nl