



THE PLEASANT
WAY TO PREPARE
for your colonoscopy

Information for patients
to prepare for the examination in the best possible way

FERRING
ARZNEIMITTEL

MAGNESIUM CITRATE + SODIUM PICOSULPHATE
 **PICOPREP**[®]
Pleasant. Well-tolerated. Clean.

Dear Patient,

Facts about Bowel Cancer and Risk Factors 4

Facts about Bowel Cancer and IBD 5

Bowel Cancer 6

Preparation 8

Preparation and Diet 10

PICOPREP® 18

Links 19

Your doctor has recommended that you undergo a colonoscopy. You may possibly want this examination to be performed as part of colorectal cancer screening or because you have been experiencing specific discomfort. The bowel must be completely clean for the endoscopic examination of the large intestine – also referred to as a colonoscopy or coloscopy.

Clean intestines = good visibility

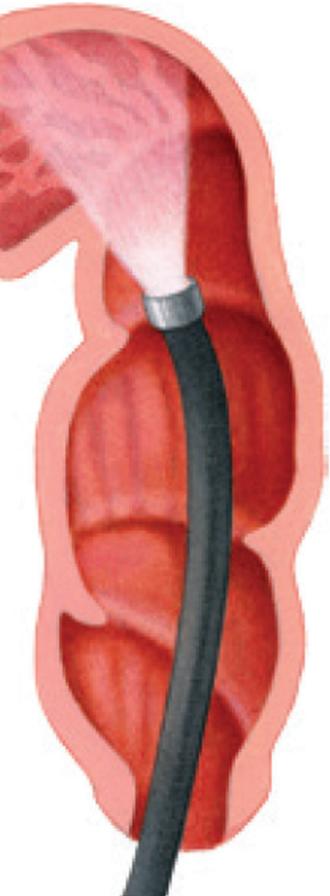
The doctor has the best possible view during the examination and the best chance of detecting possible tissue changes in the intestines only when the bowel is clean.

This brochure will assist you in preparing for the colonoscopy in the best possible way.

If you have any questions, please ask your doctor.



WHAT IS A COLONOSCOPY?



A colonoscopy is an endoscopic examination of the large intestine.

For the examination, the endoscope, a flexible tube, is inserted into the anus and carefully guided through the entire large intestine. At its tip, it has both a small camera and a light. This allows the doctor to illuminate the bowel and view how the intestine looks from the inside on a monitor.

Firstly, the endoscope is pushed towards the end of the large intestine. The doctor keeps an attentive eye on the inner wall of the bowel only when withdrawing the tube again.

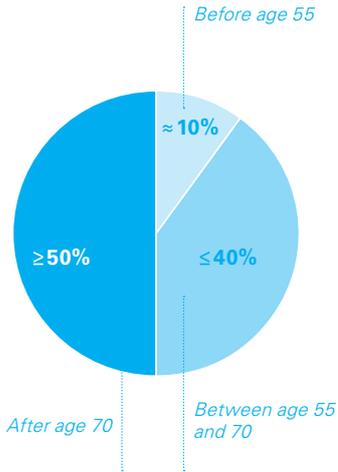
The doctor can use the endoscope to insert small instruments into the bowel, such as forceps used to remove polyps and take tissue samples.

The examination is usually performed under short-acting anaesthesia and is not painful.

A colonoscopy usually lasts around 20 to 30 minutes.

FACTS

Time of cancer diagnosis



(<https://www.dkfz.de/de/presse/download/Grafiken-Darmkrebs-Zahlen.pdf>)

Facts

Bowel cancer is one of the most common malignant cancers in both men and women. It kills around 30,000 people per year in Germany alone.

Screening is advisable

While the number of people diagnosed is increasing, the number of people dying of bowel cancer is falling. This is primarily due to improved early detection, when the bowel cancer is in its earlier and more easily treatable stages. People who undergo a colonoscopy have a 60% to 90% reduced risk of suffering from bowel cancer.

Detecting bowel cancer early

Bowel cancer can be discovered and treated years before the patient starts to show signs of cancer. Since the risk increases with age, health insurance providers in Germany recommend a bowel check-up for early detection from age 55. The costs of these check-ups are covered by the health insurers.

Special caution in cases of bowel disease and familial predisposition

More thorough examinations are performed in the case of certain high-risk conditions or a family history of bowel cancer. Please discuss this with your doctor.

General Risk Factors

- Older than 50 years old
- Smoking
- Regular alcohol consumption
- Diet: a lot of red meat, little fresh fruit and vegetables

Individual Risk Factors

- Family history of intestinal polyps
- Bowel, uterus or stomach cancer in mother, father, siblings or other relatives
- Chronic inflammatory bowel diseases (ulcerative colitis, Crohn's disease)

A colonoscopy is also advisable if the following symptoms arise

- Blood in the stool
- Weight loss
- Changes in toilet habits (frequent alternating bouts of constipation and diarrhoea)
- Repeated, cramp-like abdominal pain

Facts about Bowel Cancer with Chronic Inflammatory Bowel Disease (IBD)

The term chronic inflammatory bowel diseases (IBD) covers both ulcerative colitis and Crohn's disease. Both are chronic, persisting inflammation of the intestines, for which the precise cause is not yet known. Patients who suffer from chronic bowel inflammation have an increased risk of contracting bowel cancer. There are therefore special screening plans for detecting bowel cancer early in patients with IBD.

Ulcerative colitis

Patients with ulcerative colitis are at particular risk of suffering from bowel cancer. The longer this chronic inflammatory bowel disease lasts, the higher the risk of cancer. Particularly intensive early detection measures must therefore be carried out.

Crohn's disease

An increased risk of bowel cancer is also likely for Crohn's disease patients. The risk of bowel cancer is particularly high if the condition began early in life and lasts for a long time. If the entire large intestine is affected by Crohn's disease, the same care recommendations apply as for ulcerative colitis.

*Find out more about chronic
inflammatory bowel conditions
at <http://www.guts4life.com>*



If you have chronic inflammation of the intestine (ulcerative colitis or Crohn's disease), you may have an increased risk of bowel cancer.

Caution with ulcerative colitis

- All patients with ulcerative colitis should undergo a colonoscopy no later than 8 years after the onset of illness.
- If the entire large intestine is affected, it is recommended that you undergo a colonoscopy with tissue samples from all sections of the bowel once a year from the 8th year from the onset of illness.
- If the disease is limited to the rectum, the sigmoid colon and the descending colon on the right, a colonoscopy will be performed once a year from 15 years after the onset of the disease.

*There are many sources of information about colonoscopy in connection with possible chronic inflammatory bowel disease (Crohn's disease or ulcerative colitis). We recommend this website:
www.ced-im-griff.de*

PREVENTION

What can I do myself to reduce my risk of bowel cancer?

You can lower your risk of bowel cancer by eating healthily and leading a healthy lifestyle.

Smoking and consuming alcohol regularly can increase bowel cancer risk.

What does the German Cancer Research Centre say?

Medical specialists recommend the following for prevention:

- Get regular exercise
- Avoid being overweight
- Ensure you eat enough fibre from cereal products, pulses and also from vegetables
- Limit your consumption of red meat or processed meat products (e.g. sausages)
- Refrain from smoking
- Limit your alcohol consumption
- Vitamin or mineral supplement tablets are not recommended for prevention



- ✓ Eat fewer animal fats and high-calorie foods
- ✓ Eat lots of fresh vegetables, fruit and fibre

EARLY DETECTION

Colonoscopy screening from 55

From age 55, everyone with health insurance in Germany is entitled to an endoscopic examination of the intestines, i.e. a colonoscopy. If the results are normal, another examination can only be covered by health insurance after another ten years.

If you have pain in your bowel, you shouldn't wait until your next "screening" appointment, but go straight to your doctor. Warning signs that need to be taken seriously include blood in your stool, persistent changes in stool habits or repeated severe abdominal pain. These symptoms may also indicate other bowel illnesses, and should be investigated by your doctor.

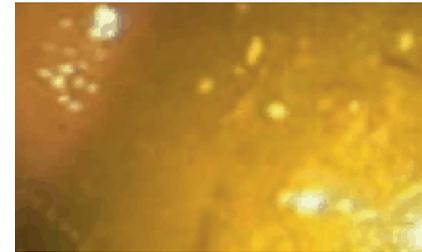
A colonoscopy is performed by a specialist gastroenterologist. You can be referred to such a specialist by your family doctor.

A CLEAN BOWEL IS IMPORTANT

*Clean intestines =
good visibility*



*Unclean intestines
= poor visibility*



Following successful bowel cleansing, the bowel will be as clean as in the image on the upper right – the inner wall of the bowel is light pink and shiny. Tissue changes are almost always easy to see.

If the bowel is clean, the doctor can get the endoscope to reach the end of the large intestine more easily. In addition, he is also in a better position to assess the intestinal mucosa.

Stool residue in the bowel impedes the view during the examination. Careful bowel cleansing is therefore sensible and necessary for the quality of the colonoscopy.



*Only a clean bowel can be
properly examined!*



Drink copiously before the bowel cleansing

In preparation for the examination, you will receive the following from your doctor:

- Detailed information about the examination,
- Personalised instructions for preparation,
- A bowel cleansing agent such as PICOPREP® as well as
- Tips for diet and fluid intake.

Please observe your doctor's recommendations as closely as possible. If you have questions about any of this or are unsure, please call your doctor's practice.

Drinking copiously rinses and cleans

In addition to an effective, pleasant-tasting bowel cleansing solution, it is also important for you to drink a lot of liquid. Without sufficient fluid intake, your bowel cannot become clean.

In adults, the large intestine is around 8 metres long and has a surface area of between 400 and 500m². This is equivalent to the area of 2 tennis courts.

This should hopefully make it clear how important it is to drink enough liquid to rinse the entire intestines completely clean.



*In addition to an effective, pleasant-tasting bowel cleansing solution, it is also important for you **to drink a lot of clear liquid** in addition to the bowel cleansing agent.*

Without sufficient fluid intake, your bowel cannot become clean.

THE OPTIMUM 5-DAY PLAN

It is important that you inform your doctor if you have to take medications regularly.

Bowel-friendly food and drink before a colonoscopy

A clean bowel is an important prerequisite for a successful colonoscopy. The cleaner the bowel, the better the ability to assess it. Residues of stool and food reduce this ability significantly. They can lead to abnormalities being overlooked by the doctor.

You'll know that your bowel is clean when the bowel contents in the toilet are clear, contain no solid lumps and appear yellowish. If small lumps can still be seen or if the stool is still brown, the bowel cleansing is not yet finished.

Over the following pages, we have summarised relevant information for you regarding optimum preparation for the examination.

Please note that these are only general recommendations and that preparation can vary from case to case. Your doctor will explain to you precisely what you need to do. Please follow your doctor's instructions. If you are unsure, please ask your doctor's practice again. People with heart or kidney diseases should clarify the ideal volume of fluid to drink carefully with their doctor.

Tips for taking medications

- Diabetics who inject insulin may have to adjust their dose on the days prior to the examination.
- If you are taking blood thinners, it is important that you inform the doctor in advance. The medications increase the danger of bleeding during the colonoscopy.
- The laxatives can impact the effects of contraceptive pills.
- Please do not take any dietary supplements during the bowel cleansing that you have not discussed previously with the doctor. In addition, you should avoid taking preparations that contain iron.

Tips for the days before the colonoscopy

This is where you will find some tips that will make your bowel cleanse easier. Please ask the doctor treating you if you have questions about preparation for the examination or require additional information.

Days until colonoscopy	5	4	3	2	1	Day of the colonoscopy
Types of fruit and vegetables with pips or seeds, such as muesli	—	—	—	—	—	—
Whole-grain products	—	—	—	—	—	—
Lettuce, mushrooms, peppers, onions	✓	✓	—	—	—	—
Solid food	✓	✓	✓	✓	✓ — from midday	—
Red and cloudy liquids	✓	✓	✓	✓	—	—
Normal food but without pips or seeds	✓	✓	✓	✓	—	—
Light meals	✓	✓	✓	✓	✓ Breakfast	—
Pale and clear fluids	✓	✓	✓	✓	✓	✓ Up to 2 hours before the examination

Day 5

From the 5th day before the colonoscopy, avoid whole-grain products, muesli, nuts, whole grain bread, kiwi fruit, cucumbers, tomatoes and grapes with seeds.

Do not take any iron supplements (they can harden the stool). Otherwise, you can eat and drink as usual.

**Day 4**

From the 4th day before the colonoscopy, only eat easily digestible, low-fibre foods.

- Toast, white bread, light rolls without seeds with a sweet spread or savoury filling, e.g. lean, mild meat or mild cheese
- Puréed, boiled or jacket potatoes
- Husked rice, white noodles
- Egg-based dishes, e.g. omelettes and scrambled eggs
- Easily digestible, steamed vegetables such as fennel, broccoli, cabbage, cauliflower, carrots
- Stewed fruit, steamed fruit, mild fruit juices
- Low-fat meat or fish, steamed
- Low-fat dairy products such as buttermilk and natural yoghurt
- Make sure you drink around 2 litres every day!

Avoid lettuce, raw food, peppers, mushrooms, spinach, asparagus, peas, beans, corn and lentils.

Day 3 & 2



Three days before the colonoscopy, you shouldn't eat any of the foods which could impede a good view in the colonoscopy.

These foods include lettuce, peppers, mushrooms, onions and spinach.

If you are now only consuming light food – e.g. pasta not made from wholemeal flour, rice, potatoes or bread – and have already begun to drink a lot of liquid, then you are well prepared for the examination ahead of you.

Take the time to prepare yourself for the major cleansing of your bowel. Start stocking up on a selection of tasty drinks, so that it is easy for you to drink the required amount of liquid.

✓ **Tips for your preparation**
In the event of circulation problems or headaches, you can eat a glucose tablet – this can alleviate discomfort.



Day 1



- **Breakfast:** White bread or light roll with sweet spread (careful: no marmalade with seeds) or savoury, lean filling; where needed, a cup (potentially sweetened) of black coffee or black tea. After breakfast, avoid solid food until after the colonoscopy.
- **Lunch:** Drink a clear broth without solid ingredients.
- Spread out over the day, drink enough clear liquids, e.g. still water, tea (clear herbal tea or fruit tea without pieces of fruit), clear apple juice or apple juice spritzer. Please ask your doctor how much you should drink.

✓ **How should I deal with hunger?**
Drink enough clear drinks.
This will satiate you to some extent.



Recommended recipe: Clear vegetable broth

Ingredients for ca. 2 litres

- 2 l water
- 1 tbsp oil for frying
- 200 g carrots
- 2 cloves of garlic
- 2 onions
- 1 leek
- 100 g celeriac
- 1 pinch of parsley
- 1-2 bay leaves
- 1-2 cloves
- 3 sprigs of thyme
- A few peppercorns

Chop onion and garlic into pieces, dice vegetables into large pieces.

Fry everything in a large pot in hot oil. Add roughly chopped thyme and parsley. Add water to everything and cook briefly.

If foam develops, remove it with a ladle. Add the rest of the vegetables and leave to cook on medium heat for at least an hour. Strain the broth through a sieve before serving.

What are clear fluids?

Ideally, you would drink as much as possible on the day before the exam and on the morning of the exam itself. All pale and clear drinks are allowed, e.g. water, apple juice spritzer and clear, isotonic sports drinks.

Avoid dark and cloudy drinks such as red or cloudy fruit juices. These drinks could impede the view in the bowel. You should also avoid sparkling drinks in the 24 – 48 hours before the colonoscopy.



To make the difference between a clear and a non-clear liquid, please see the example below:



The paper is illegible.
Do not drink.



The letters are illegible.
Do not drink.



The letters are legible. I.e.:
Drinking is allowed.

Day of examination



On the morning of the examination ...

... until the examination, you should not eat anything else and only drink sufficient clear fluids until 2 hours before the examination.

After the examination ...

... you can eat and drink again. Ideally, start with a small and light meal so as not to stress your bowel unnecessarily. You might take your colonoscopy and cleansing of your bowel as a reason to eat and drink more sensibly to improve your quality and enjoyment of life.

Flatulence or mild cramps in the abdomen that may arise after the colonoscopy are the result of the air blown in during the procedure and will alleviate naturally. A hot water bottle, a warm damp towel on the stomach or a short walk can have a very relaxing effect.

Anaesthesia ...

... is often used in a colonoscopy. This therefore affects your ability to drive and you will not be allowed to drive yourself home.



✓ **Anaesthesia?**
**Please consider
asking someone
to accompany you
home.**

What should your stool look like on the day of the examination?

How will I know that the bowel cleansing has been successful?

After successful bowel cleansing, stool should be liquid, pale and clear without solid lumps – just like urine. If small lumps can still be seen or if the stool is still brown, the bowel cleansing is not yet finished.



Too dark
and too cloudy.
Not OK



Light orange
and almost clear.
Not OK yet



Yellow and clear.
Perfect – you're ready!

When can you start eating again after the examination?

After a colonoscopy, you can eat normally again without restrictions – unless your doctor tells you otherwise.

If you undergo anaesthesia, it may be that your body is still a bit unstable directly following the colonoscopy and that your stomach will be sensitive. You should then wait and only eat once you feel stable again.

Discuss this specifically with your doctor so you can be totally sure what you can do.

PICOPREP®

What is PICOPREP®?

PICOPREP® is a pleasant-tasting bowel cleansing preparation that thoroughly cleanses the intestines, e.g. prior to a colonoscopy. It has a fresh, orangey taste, and is generally easy to digest and to use. PICOPREP® is approved for adults, adolescents and children above the age of 1.

Worldwide, PICOPREP® has been used over 20 million times as a bowel cleansing aid.

PICOPREP® is pleasant

With PICOPREP® bowel cleansing, you only have to drink a small volume of medication solution (2 glasses). PICOPREP® has a pleasant and fresh taste of oranges. You have free choice of the rest of the liquids you drink, as long as they are clear.

Well-tolerated

PICOPREP® is generally well-tolerated by your system and is used by adults, adolescents and children above the age of 1.

Drink

To clean your bowel, you have to drink 2 x 150ml glasses of the PICOPREP® solution. Please note, however, that you also need to drink a large volume of clear fluids to rinse your intestines clean and to enable your doctor to gain a clear view. The choice of the additional clear liquids you drink is up to you.

How PICOPREP® works

Thanks to its dual mechanism of action, PICOPREP® gives the bowel a thorough clean. First of all, liquid is retained in the bowel. This makes the stool softer. Secondly, the stimulation of the bowel means that the stool is ready to be excreted more quickly.

*You can find more
information on the
website
www.picoprep.de*



INTERESTING LINKS



Here you can find some helpful links on the topic of colonoscopy, bowel cancer screening, chronic inflammatory bowel diseases, Crohn's disease, ulcerative colitis etc.

- **The gastroenterology portal – www.dasgastroenterologieportal.de (German only)**

An internet portal run by several gastroenterologists, who introduce themselves, their practices and their work.

- **German Crohn's disease/ulcerative colitis association DCCV – www.dccv.de (German only)**

The self-help association for over 320,000 people with a chronic inflammatory bowel disease (IBD) in Germany.

- **darmkrebs.de – www.darmkrebs.de**

Information about bowel cancer from the Felix Burda Foundation, whose aim is to drastically reduce the mortality rate of bowel cancer in Germany.

- **Lebensblicke – www.lebensblicke.de (German only)**

A foundation founded in 1998 with the goal of reducing the number of deaths from bowel cancer through education and research.

- **Deutsche Krebsgesellschaft e. V. – <https://www.krebsgesellschaft.de/german-cancer-society.html>**

This portal provides you with the most up-to-date information from the biggest specialist scientific cancer association about its commitment to the best possible cancer treatment as well as the current methods of diagnostics and treatment for cancer.



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Doctor's stamp