



Overview

What is colonoscopy prep?

When it's time for your colonoscopy screening, you'll need to prepare your bowels by cleaning them out beforehand. Adequate preparation is essential to a successful colonoscopy. If your colon isn't clear, your healthcare provider won't be able to see properly inside. Signs of colorectal cancer, such as polyps, are often small and cling to the inside walls of your colon.

What is a bowel prep kit?

A colonoscopy prep or bowel prep kit is an oral laxative formula that you'll take before your colonoscopy. (You may also need to complete a bowel prep before other procedures, such as a lower GI X-ray exam or colectomy). You'll drink the formula the night before your procedure to clean out your bowels (by pooping). There are several different kinds of formulas that healthcare providers recommend.

What's in a bowel prep kit?

Different bowel prep kits are made up of slightly different combinations of ingredients. But in general, they all include:

- **Osmotic laxatives:** The active ingredient in your bowel prep kit that makes you poop is called an osmotic laxative (or hyperosmotic agent). Your kit may have one or a combination of several hyperosmotics.

These are substances that your bowels can't naturally absorb. They trigger your bowels to draw in more water from your body to force the substances through. The extra water softens your stools and increases the overall volume in your colon. This triggers the muscle contractions that move everything out (peristalsis).

- **Electrolytes:** The process of purging your bowels can be very dehydrating, so it's important to take osmotic laxatives with extra fluids and electrolytes. Hyperosmotic agents move much of your body's water content into your bowels and then move it all out very quickly, without giving your body the chance to reabsorb the water and electrolytes through your bowels as it normally would. Significant electrolyte deficiencies can have severe consequences. So, fluids and electrolytes are built into your bowel prep recipe.

What are the different types of colonoscopy prep kits?

Colonoscopy preparations fall into two basic categories based on the type of laxative they use.

Polymer-based formulas (PEG)

The most commonly prescribed bowel prep formulas use a polymer-based laxative known as polyethylene glycol 3350 (PEG). This is a large molecule that can't be absorbed through your colon, causing a hyperosmotic effect. PEG formulas are typically in powder form designed to be mixed with large volumes of water. They may include electrolytes and/or include directions to be taken with a sports drink.

PEG-based colonoscopy prep drink names include:

- GoLYTELY.
- CoLyte.
- NuLYTELY.
- TriLyte.
- MiraLAX.
- Halflytely.
- GaviLyte.
- MoviPrep.

Pros of PEG bowel preparation kits: Polyethylene glycol and electrolytes solutions are highly effective for colonoscopy prep. The PEG molecule doesn't disturb the intestinal mucosa, making it the gentler choice for people with symptoms of irritable bowel syndrome (IBS). PEG formulas are also considered the safer option for people who are more at risk of complications from fluid and electrolyte depletion, such as those with kidney, liver or heart disease.

Cons of PEG bowel preparation kits: These bowel preps often require drinking high volumes of formula (up to 4 liters). The volume combined with the taste can make it difficult for some people to complete all of their colonoscopy prep. Incomplete bowel prep can make your colonoscopy ineffective and cause it to be rescheduled. To address these concerns, some variations of the standard formula have been developed.

Formula variations:

- All formulas are now available with flavor options. As always, you can also add your own flavor with a powdered drink mix of your choice.

(Avoid red-colored powders, which may look like blood on your colonoscopy.)

- NuLYTELY and TriLyte are sulfate-free to make the taste less salty.
- MiraLAX and Halflytely bowel preps combine a smaller dose of PEG with another laxative, bisacodyl. This reduces the overall volume of PEG formula that you have to drink from 4 liters to 2. But you have to drink the 2 liters within the same hour.
- MoviPrep is another type of combination formula. It combines PEG with ascorbic acid as a secondary laxative. You only have to drink 2 liters of the formula, but you still have to drink another liter of clear water with it.

Saline-based formulas (NaP)

Saline-based laxatives include sodium phosphate (NaP) as a primary osmotic agent, and often other mineral salts such as potassium and magnesium. These formulas offer an alternative to drinking your colonoscopy prep because they come in tablet form. The salts contain natural electrolytes, but in these formulas, electrolyte imbalances can still occur. Some people may be at risk of mineral overdoses.

NaP-based colonoscopy prep brand names include:

- Clenpiq.
- Suprep.
- Prepopik.
- Visicol.
- OsmoPrep.

- SUTAB.

Pros of Saline-based laxatives for bowel preparation: Sodium phosphate bowel preps may be easier for some people to swallow, and they are equally effective when taken as directed. For those who find it difficult to complete a PEG bowel prep as instructed, a NaP formula can help encourage better compliance to ensure a successful colonoscopy.

Cons of Saline-based laxatives for bowel preparation: The salts can irritate your intestinal mucosa if you have an inflammatory gastrointestinal disease. NaP formulas are also not the safest option for those at risk of complications from fluid-electrolyte shifts. People with certain pre-existing conditions or taking certain medications may be more at risk.

Risks include:

- Hypokalemia / hyperkalemia (low / high potassium).
- Hyponatremia / hypernatremia (low / high sodium).
- Hyperphosphatemia and phosphate nephropathy (kidney injury due to high phosphates).
- Hypocalcemia (low calcium).
- Hypomagnesemia (low magnesium).
- Elevated blood urea nitrogen (BUN).
- Dehydration.
- Seizures.

Conditions that put you at risk of these complications include:

- Inflammatory bowel disease.

- Chronic NSAID use (aspirin and ibuprofen).
- Renal insufficiency (kidney disease).
- Hepatic insufficiency (liver disease).
- Congestive heart failure.
- Arrhythmia (irregular heart rhythms).
- Myocardial infarction (heart attack).
- Hypertension medications (ACEIs and ARBs).
- Diuretics.
- Diabetes.
- Malnutrition.
- Age over 65.

Formula variations: Prepopik combines a saline-based hyperosmotic laxative with a stimulant laxative to reduce the overall volume of formula you have to drink. The 10-ounce preparation is the lowest dose currently on the market. Sodium picosulfate is the stimulant laxative, which works by encouraging peristalsis, the muscle contractions that help your bowels purge. However, picosulfate has to be activated by the bacteria living in your colon. If you have reduced colonic bacteria due to antibiotics, it might not work. This formula also doesn't prevent the other risk factors of saline-based bowel preps.

Which is the best colonoscopy prep for me?

This really depends on your personal sensitivities. Some people have no real difficulties with colonoscopy preparation. Others may have specific

concerns about the process of taking it, the side effects while it's working, or complications that could arise afterward from pre-existing conditions. Here are some questions to consider:

What is the easiest prep to take for a colonoscopy?

Are you concerned about being able to swallow all of the formula as instructed? Many people find it's not as hard as they feared. But it is important to complete the entire bowel prep. If you think you might have difficulty with this, you might have better luck with:

- A sulfate-free and flavored formula, such as NuLYTELY or TriLyte (PEG), for better taste.
- A lower-volume formula, such as MiraLAX or Halflytely (PEG), so there's less to drink.
- A sodium phosphate solution (NaP), which is said to be easier to take, especially if it's in tablet form, such as Visicol and OsmoPrep. But only if you don't have any of the conditions (risk factors) listed above.

What is the easiest colonoscopy prep to tolerate?

Are you concerned about side effects such as bloating, cramping and gas? This might be more dependent on the way you prepare than the particular colonoscopy prep you take. Following the prescribed diet in the days leading up to your prep will help reduce discomfort in your bowels.

However, you might also want to consider:

- A hybrid formula. Bowel preps that combine an osmotic laxative with another type of laxative, including MiraLAX, Halflytely and Prepopik, may be better tolerated with fewer side effects.

- Taking your bowel prep with adjunct agents. Ask your healthcare provider about what they might prescribe to take with your bowel prep to make it easier. Adjunct agents such as metoclopramide, ondansetron and simethicone may help reduce nausea, bloating and gas.
- Taking your bowel prep with lemon and/or ginger. Citrus is said to help mask the saltiness of the taste, and both lemon and ginger can help reduce nausea. You can add lemonade powder or ginger tea to your formula, or take alternating sips between the two drinks.

Am I at risk of complications from certain types of bowel prep formulas?

Your healthcare provider will need to understand your complete health history, including past and current conditions you've been treated for and medications you have taken, in order to help choose the right colonoscopy prep kit for you.

Treatment Details

How many hours before your colonoscopy do you start your prep?

You'll begin preparing for your colonoscopy several days in advance, by changing your diet. Instructions may vary, but generally, you'll eat a low fiber diet for two or three days, followed by a clear liquid diet on the last day. The afternoon or evening before your colonoscopy, you'll begin taking your laxative bowel prep. The exact timing will depend on the formula you're taking and what time your colonoscopy is scheduled for. It will all be laid out in your prescription.

How long does it take a bowel prep to kick in?

It depends on the formula you're taking. A PEG-based bowel prep may take one to three hours, while a NaP-based bowel prep may take three to six hours to start. If you are severely constipated and your bowel movements aren't progressing, contact your healthcare provider. You might need to take extra steps, such as another dose of the laxative, or an enema, to get things started.

Will I be up all night with colonoscopy prep?

Probably not, if you start on time. While everyone's body is different, most people are able to complete their round of purging before going to sleep for the night. If you're taking a split dose, you may have to wake up early to take your second dose on the morning of your colonoscopy. But you should be able to sleep in between. Just give yourself the time you need to purge before bedtime. Make yourself comfortable in the bathroom during your stay.

What if I'm still pooping before my colonoscopy?

As long as your poop is clear (it will be yellow, but see-through, not cloudy,) your colonoscopy prep is done. If it's not clear, you may have to take additional steps before you can have your colonoscopy. But in most cases, if you started your prep on time, you won't be pooping a lot by the time you arrive for your procedure. If you're worried about having an accident, go ahead and invest in some underwear protection to ease your mind.

When To Call the Doctor

When should I contact my healthcare provider during my colonoscopy prep?

Call your healthcare provider if:

- You forgot to stop eating or to start your prep on time.
- You have come down with an illness and need to reschedule.
- Your bowels aren't responding to the colonoscopy prep.
- You're having a severe reaction, such as severe abdominal pain.
- You can't stop vomiting or keep fluids down.
- You think you won't be able to finish the bowel prep.

A note from Cleveland Clinic

If you've scheduled your colonoscopy, you already know how important it is to complete your screening. But you should also know that completing your colonoscopy prep as directed is equally important. Your colonoscopy won't be effective if your colon isn't completely clean. You may even have to reschedule it and do it all again.

Some people dread the preparation for colonoscopy more than the procedure itself. But when you know what to expect, it doesn't need to be an ordeal. With so many different types of bowel prep kits to choose from, your healthcare provider can help you choose the best formula for you.

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References

Cleveland Clinic's health articles are based on evidence-backed information and review by medical professionals to ensure accuracy, reliability and up-to-date clinical standards.

- Chang D, Van K, Lie JD, et al. Bowel Preparations: A Review for Community Pharmacists (https://www.medscape.com/viewarticle/820134_2). *US Pharmacist*. 2013;38(12):30-34. Accessed 2/11/2022.
- Harvard Health Publishing. Preparing for a colonoscopy (<https://www.health.harvard.edu/diseases-and-conditions/preparing-for-a-colonoscopy>). Accessed 2/10/2022.
- Johnson DA, Barkun AN, Cohen LB, et al. Optimizing adequacy of bowel cleansing for colonoscopy: recommendations from the US multi-society task force on colorectal cancer ([https://www.gastrojournal.org/article/S0016-5085\(14\)2900881-6/fulltext](https://www.gastrojournal.org/article/S0016-5085(14)2900881-6/fulltext)). *Gastroenterology*. 2014;147(4):903-924. Accessed 2/10/2022.
- Juluri, R., Eckert, G. & Imperiale, T.F. Polyethylene glycol vs. sodium phosphate for bowel preparation: A treatment arm meta-analysis of randomized controlled trials (<https://bmcgastroenterol.biomedcentral.com/articles/10.1186/1471-230X-11-38#citeas>). *BMC Gastroenterol* 11, 38 (2011). Accessed 2/10/2022.
- MedlinePlus. Polyethylene glycol-electrolyte solution (PEG-ES) (<https://medlineplus.gov/druginfo/meds/a601097.html>). Accessed 2/10/2022.
- MedlinePlus. Sodium Phosphate (<https://medlineplus.gov/druginfo/meds/a609019.html>). Accessed 2/10/2022.
- Miller L. Distinguishing Between Different Colonoscopy Preparation Agents (<http://www.insidepatientcare.com/issues/2015/february-2015-vol-3-no-2/135-distinguishing-between-different-colonoscopy-preparation-agents>). *Inside Pharmacy*. 2015;3(2). Accessed 2/10/2022.

