

Inflammatory Bowel Disease and Crohn's Disease

Here are some words to help you understand this disease. There are pictures on the next page so you can see these parts in a body.

Bowel: The bowels are the parts of the body that digests food and fluids. Bowels are also called intestines. There is a small bowel also called the small intestine and a large bowel also called the large intestine. The bowel wall has many layers. There is a picture on the next page.

Small bowel: the food moves from the stomach to the small bowel first. The food is broken into very small pieces and is absorbed into the blood as the muscles push it along.

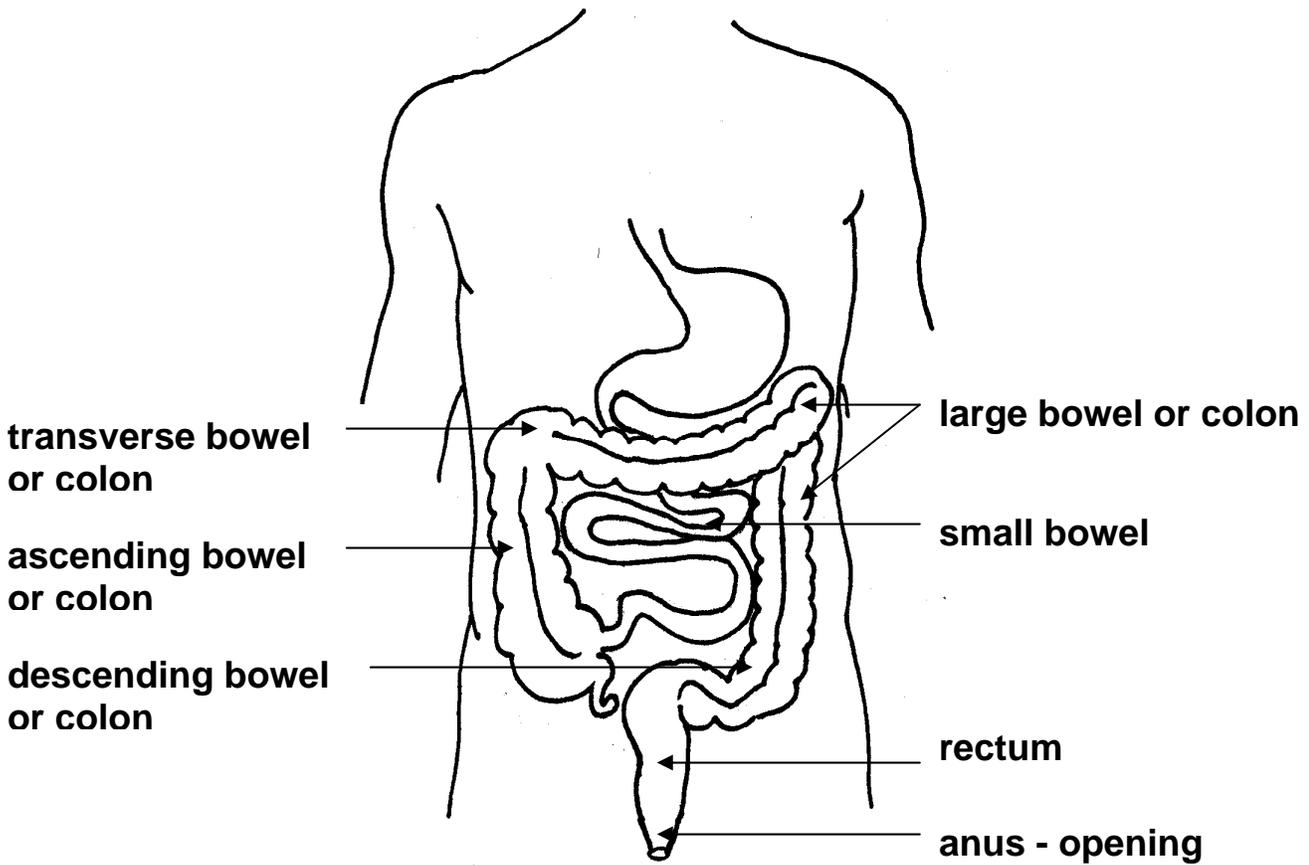
Large bowel: the food moves through the small bowel into the large bowel. The large bowel removes water from the stool. The large bowel may also be called the colon. The large bowel has 3 parts:

- **Ascending colon:** the food comes from the small intestine and moves up this part
- **Transverse colon:** the food moves across this part
- **Descending colon:** the food moves down this part and out the rectum

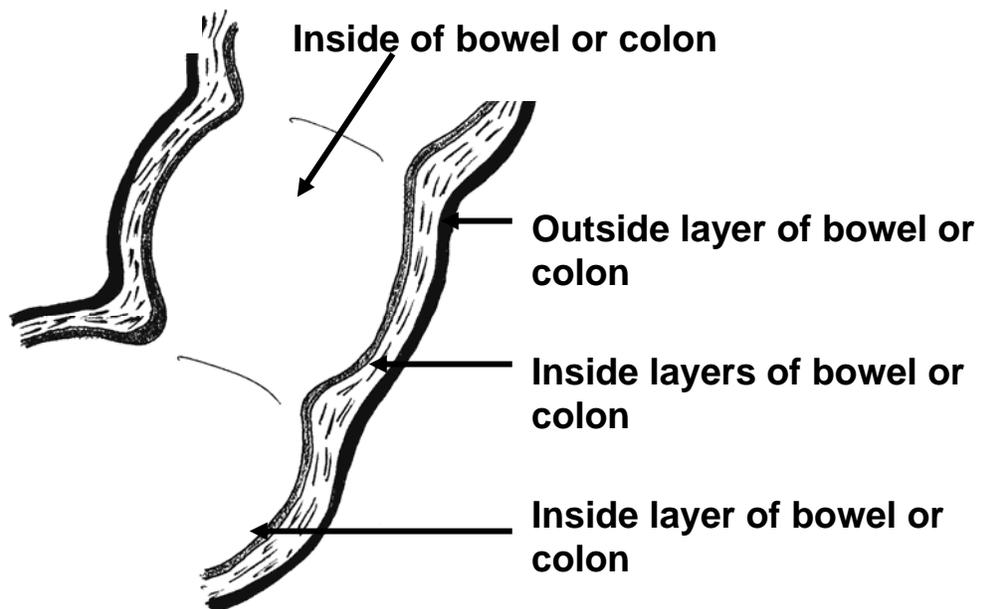
Rectum: is at the end of the colon and stores stool until you have a bowel movement

Anus: is the opening where the stool leaves the body during a bowel movement

Inside the body:



Bowel or Colon Wall:



What happens when you eat or drink?

The food and fluid travels through the gastrointestinal tract. This is what happens:

1. Food and fluids pass from the mouth down the esophagus and into the stomach.
2. The stomach mixes the food and breaks it up. The stomach pushes the food into the small bowel.
3. The small bowel breaks food into smaller and smaller pieces.
4. Each part of the small bowel absorbs different nutrients. These nutrients are passed through the wall of the bowel into the blood.
5. The blood carries these nutrients to the cells in your body.
6. Leftover material passes into the large bowel.
7. The large bowel absorbs water and forms stool.
8. Stool remains in the rectum until you have a bowel movement.
9. Stool leaves the body through the anus.

What is Inflammatory Bowel Disease?

Inflammatory bowel disease is when there is inflammation or swelling in the bowel. It is also called IBD. There are 2 main types of IBD:

- Ulcerative colitis
- Crohn's disease

The symptoms and treatment depend on your type of IBD:

- Ulcerative colitis affects only the large bowel and the rectum.
- Ulcerative colitis affects only a single layer of the bowel wall.
- Crohn's disease can affect any part of the GI tract from the mouth to the anus. It is most common in the small bowel and/or large bowel. Inflammation can extend through every layer of the bowel wall.

IBD is a chronic condition. This means that there is no cure. Symptoms can range from mild to severe. The disease may go into periods of remission and flare-up. Remission means that the symptoms may go away for a period of time. Flare-up means your symptoms become severe. Treatment is based on putting the disease into remission and keeping it in remission, controlling the symptoms and learning to live with the disease.

What is the cause of IBD?

There is no known cause for IBD. Researchers are looking at these reasons:

- a gene or family history
- an immune reaction
- something in the environment such as smoking
- any of these working together
- infection

Research has shown that emotional stress or the food you eat does not cause the disease but may affect the disease or symptoms once you have it. We also know that it is not a disease that you can spread to another person.

IBD is not the same as IBS. IBS stands for Irritable Bowel Syndrome and this is a different medical condition.

What happens when you eat and drink and have IBD?

When the food travels along the small bowel, some pieces may get stuck as the inside of the bowel is no longer smooth. This may cause pain, cramping, an infection or a block in the bowel. People with IBD tend to eat less during periods of pain. There is a risk of developing malnutrition. Malnutrition means that you do not have the right nutrients in your diet to stay healthy and well.

A problem with absorbing nutrients is called malabsorption. Malabsorption may happen in IBD when:

- nutrients such as vitamins and minerals are not absorbed as well because of the inflammation inside the bowel
- nutrients are lost through bleeding and diarrhea
- some medications taken for IBD cause problems absorbing nutrients
- part of the bowel is surgically removed

It is important that people with IBD talk to the members of their health care team about their treatment program.

The next section will tell you more about Crohn's Disease.

Crohn's Disease

What is Crohn's disease?

Crohn's disease is one kind of inflammatory bowel disease. Crohn's disease can affect any part of the gastrointestinal tract from the mouth to the anus. It most often involves the small and large bowel.

Crohn's disease affects people of all ages, genders and races.

Inflammation can affect all layers of the bowel. You may have patches of inflammation with healthy tissue in between.

Crohn's disease is a chronic condition. It cannot be cured by medications or surgery. However medications and/or surgery can relieve the symptoms and put the disease into remission.

What are the symptoms of Crohn's disease?

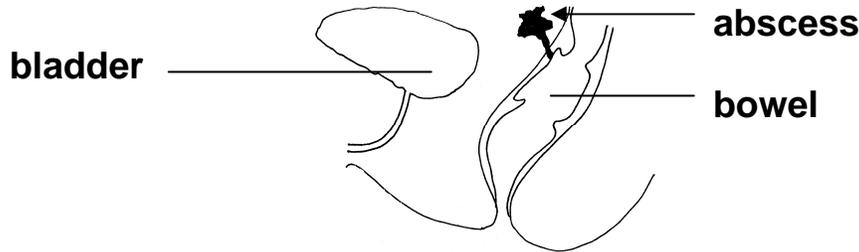
Some symptoms of Crohn's disease are:

- fever or chills for no clear reason
- diarrhea
- rectal bleeding
- abdominal pain, bloating, cramping
- loss of weight
- sores around the anal area
- loss of appetite
- feeling very tired
- joint pain or swelling
- low iron called anemia
- may be a growth delay in children

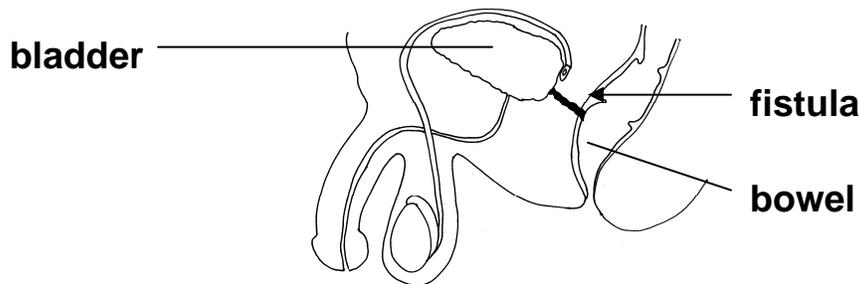
What are the complications?

Some people also get other problems:

- An **abscess** is a pocket of infection that may form in the bowel, around the anus or in the abdominal cavity.



- A **fistula** is a passageway, also called a tract, between the bowel and another organ in a place that should not have a passage. For example, a fistula can form between the bowel and the bladder as shown in this picture. This is not a normal passage.



- A **stricture** is a part of the small or large bowel that is narrow inside. A stricture is caused by inflammation and scarring. A stricture makes it hard for food to go through and may cause pain.



What tests are done to check for Crohn's disease?

A colonoscopy or sigmoidoscopy test may be done. For these tests a thin tube with a small light at the end is put into the rectum. The doctor looks at the lining of the bowel. At this time, a small sample of tissue may be taken for testing. This is called a biopsy.

A gastroscopy may be done. A thin tube is put down your throat for the doctor to look at your throat, stomach and the beginning of the small bowel.

A barium swallow test may be done. You drink a substance called barium. X-rays are taken as the barium moves down the digestive system and through the bowels. The doctor can see where the disease is in the bowel.

A barium enema may be done. A substance called barium is put into your rectum and large intestine through a tube. X-rays are taken as the barium moves through the bowel. The doctor can see if parts of the large bowel are causing problems.

Blood tests are done to check for problems such as infection, inflammation or low iron called anemia.

What are the treatments for Crohn's disease?

Treatment is used to put the disease into remission during a flare-up and then maintain it in remission. There are also some treatments to help manage the symptoms. It may take a while to find the treatment combination that works for you.

Treatment may include nutrition therapy, medication, surgery or a combination of these treatments.

Diet Management

It is important to follow a healthy diet in order to get all of the nutrients you need. The most common nutrients that may not be absorbed are iron, folic acid, calcium and vitamin B₁₂.

When symptoms are mild, you will follow a normal healthy diet and visit your doctor and dietitian when advised.

When symptoms are moderate, you may be advised to change your diet, eat some foods and avoid others. You will work closely with your doctor and dietitian at these times. You may need to take nutrition supplements to help symptoms and prevent weight loss.

When symptoms are severe, you may need to combine supplements with other treatments to help control weight loss, give your bowel a time to rest and help relieve pain. You will work closely with members of the health care team at these times.

Some people with Crohn's disease may have surgery to remove parts or the diseased small intestine. This may leave less tissue that can absorb nutrients such as vitamins and minerals.

At times, some people are not able to eat or drink anything. When this happens, there are 3 ways to provide nutrition:

- A feeding tube passed through the nose into the stomach. This is called a nasogastric tube. Liquid food is put into the tube.
- A feeding tube put into the stomach called a gastrostomy tube. Liquid food is put into the tube.
- A tube in a vein gives you nutrition. This is called Total Parenteral Nutrition (TPN) or Parenteral Nutrition (PN).

Keeping a Diary

Keeping track of what you eat and drink in a journal is a good way to see if any food causes your symptoms. If a specific food causes symptoms more than one time, remove it from your diet. Try including it again in a few weeks to see if symptoms return. If your symptoms return again, avoid that food. This process can take time to figure out.

Here is an example of what to write in your journal:

Date and Time	Food	Symptoms	Other factors (Stress, Activity, Feelings)
Jan 1, 10:00 am	tea, honey donut	gas	Stress from morning meeting
11:30 am	white bread, cheese, apple	no symptoms	Eating lunch

Fluid Balance Management

You may not absorb enough fluids. Drinking plenty of water and fluids helps keep you hydrated.

Some people get dehydrated and many do not absorb enough electrolytes their bodies need to be healthy. When this happens, special fluids are given by intravenous tube into a vein.

Anemia Management

Anemia is low iron. This happens when your body does not absorb enough iron from the food you eat. You feel very tired. You may need to take iron supplement.

Medications

There are a number of medications prescribed for the treatment of Crohn's disease. These medications come in different forms including:

- tablets or capsules
- suppositories or enemas
- medication which is given through a vein, into a muscle or under the skin

Your doctor will prescribe your medications and work with you to find the best results. You can learn more about any medications you take by talking to your pharmacist.

Some medications used to treat the disease are:

1. Anti-inflammatory medication

- This medication helps reduce inflammation. It can help reduce symptoms such as diarrhea and pain. There are many kinds. Some names are sulfasalazine or 5-ASA compounds such as mesalamine. This medication can be taken by mouth, suppository or enema.

2. Steroid medication

- This medication often helps during a severe attack or when the disease is active. It helps reduce inflammation and symptoms such as diarrhea and pain. It is usually used for only a short period of time. It can be taken by mouth, through a vein or by enema.
- Steroids are usually taken for short periods of time. If you take steroids more than 3 months, you will need to take a calcium supplement, vitamin D supplement or other medication to prevent bone loss.
- If you take steroids, you will be watched closely by your doctor. Steroids should never be stopped suddenly.
- Some names for these medications are methylprednisolone, hydrocortisone or prednisone.

3. Immunosuppressive medication

- This medication decreases inflammation by lowering the body's normal immune response. It may be used for a long time. It may take 3 to 6 months to begin feeling results from this medication. Some names for these medications are azathioprine (Imuran), methotrexate and 6-mercaptopurine (6-MP).

4. Biological medication therapy

- This medication works on part of the immune system that controls inflammation. It can be used long term. One example of this type of medication is infliximab (Remicade).

5. Antibiotic medication

- This medication helps destroy bacteria that may cause inflammation and infection. Some names for these medications are ciprofloxacin and metronidazole.

Medications used to help control the symptoms are:

1. Antidiarrheal medication

- This medication helps control diarrhea. Some names for these medications include diphenoxylate (Lomotil) and loperamide (Imodium). This medication is used to help the symptom of diarrhea but has no effect on the disease.

2. Anticholinergic medication

- This medication helps control pain by relaxing muscles of the bowel. Some names for these medications include hyoscine butylbromide (Buscopan) and pinaverium (Dicetel). This medication is used to help the symptom of pain but has no effect on the disease.

Surgical treatment for Crohn's disease

Surgery to remove part of the bowel can help control some symptoms but does not cure it. Another part of the bowel can still get the disease in the future.

Surgery may need to be done when:

- part of the bowel is bleeding
- part of the bowel has opened or perforated
- part of the bowel is blocked
- an abscess or fistula forms
- medication does not control the symptoms

There are many types of surgery. The type of surgery depends on where and what the problem is.

People may have surgery to treat an abscess or fistula. The abscess or fistula may need to be opened and drained.

Bowel resection surgery is most often done to remove a block or obstruction. For this type of surgery, the part of the bowel with the problem is removed. The two healthy parts of the bowel above and below the problem are joined together.

Inflammation may cause the wall of the small bowel to thicken. After a while the inside of the bowel becomes so narrow that food cannot pass through. This is called a stricture. When this happens, you may need a:

- Strictureplasty – an incision is made across the narrow part of the bowel. The bowel is then surgically widened and sewn back together
- Endoscopy dilation – a thin tube with a balloon on the end is put into the stricture area. When in place the balloon is inflated to widen the section. The tube with the balloon is then removed.

Sometimes the surgeon needs to make an ileostomy or colostomy. This means the bad part of the bowel is cut away and the remaining part is brought out to the abdomen. The patient has an opening in the skin called a stoma. A bag is placed over the stoma. Bowel waste leaves the body through the stoma and is collected in the bag. An enterostomal therapy nurse shows you how to take care of the stoma, bag and keep yourself clean.

The surgeon decides what operation is best for you. This will depend on the severity of the disease and your needs. If you need to make a decision about surgery get as much information as you can. Talk to members of the health care team. You should also talk to the enterostomal therapy nurse who helps patients with stomas.

Other problems

Some other problems that people with Crohn's disease have do not seem to relate to the bowels. These include joint pain, arthritis, mouth sores, skin problems, eye disease, and liver and kidney problems.

If you develop any of these problems members of the health care team will help you. During your visits with your health care provider, you can talk about your concerns and ask for help when needed.

Who can help?

Crohn's and Colitis Foundation of Canada

www.ccfcc.ca

National Office:

60 St. Clair Avenue East, Suite 600

Toronto, ON M4T 1N5

Call: 416-920-5035 or 1-800-387-1479



United Ostomy Association of Canada Inc.

www.ostomycanada.ca

344 Bloor Street West, Suite 501

Toronto, Ontario M5S 3A7

Call: 1-416-595-5452 or 1-888-969-9698

Email: info1@ostomycanada.ca



Many members of the health care team can help. Tell your nurse if you would like to speak to a dietitian, social worker, pharmacist or enterostomal therapy nurse.

More helpful hints . . .

Having IBD can seem overwhelming. Most people can still have full and active lives. It is important to focus on keeping the symptoms under control.

- Set goals that you can reach.
- Plan ahead. For example, know where to find clean bathrooms. If going on a trip, talk to your doctor about how to manage this.
- Eat small meals especially if you are traveling or not going to be near a bathroom.
- Buy and keep food at home and work that you know do not cause problems.
- Do some activity or exercise every day.
- Learn how to lower and control stress.

