**Key Points**

- There is no *special diet* proven to be effective at reducing symptoms inducing remission, or maintaining remission in IBD.
- There is research evidence, mostly in children, that using special liquid diets via a feeding tube and taking in no regular table food can induce a remission in persons with active Crohn’s disease.
- There are some diets that should be followed by persons with IBD with specific types of problems. For instance persons with Crohn’s disease and a tight stricture or narrowing of the small bowel should eat diets low in fiber. Persons with Crohn’s disease who have a partial bowel obstruction and stay at home (do not go to a hospital for treatment) should just drink liquids and should avoid solid food.
- Lactose intolerance is more common in persons with Crohn’s disease and may be managed by moderating the intake of milk products.
- Food avoidance and *trigger foods* are commonly reported by people with IBD. However, the list of trigger foods varies person to person. There is no consistent evidence as to which specific foods should be avoided by most persons with IBD.
- Nutritional deficiencies (both in your diet and in your blood) are common in persons with IBD. Left untreated, nutritional deficiencies can lead to longer term complications.
- A multivitamin is needed every day, whether your IBD is active or in remission.
- When you are diagnosed with IBD, it is very helpful to consult with a registered dietitian who is familiar with IBD. Consider a complete nutritional assessment which includes measurements of your body weight, fat and muscle, as well as blood tests and a diet. Your doctor may be able to recommend a registered dietitian.

**Diet and the development of IBD**

- Greater consumption of some foods is associated with the risk for developing IBD. This includes greater consumption of meat and fats, particularly polyunsaturated fatty acids (PUFAs) and omega-6 (n-6) fatty acids. There is lower risk among people with diets high in fiber, fruits, and vegetables.
- There has been limited research on these aspects of diet when IBD is present.
Trigger Foods

- Although there is no need to avoid any particular food in IBD, some foods have been reported as *trigger foods* by some adults with IBD. These may include: nuts and seeds, popcorn, raw fruit and vegetables, spicy foods, milk/milk products, tomato products, legumes, deep fried and higher fat food, processed deli meat (which contains sulphites), and alcohol.
- For some people with IBD, foods are avoided for personal preferences. For others, they have identified certain foods as triggers of abdominal discomfort or diarrhea.
- Some people follow a different diet when they are having active symptoms than when they are feeling well.
- Studies are limited and typically inconclusive as to whether specific foods should be avoided by most people with IBD.
- A healthy diet, as recommended by the Canada Food Guide has advantages, so there is no need to avoid specific groups of food unless they have caused problems for you.

Lactose Intolerance and IBD:

- **Lactose intolerance** is a common problem in the community. *Lactose* is a sugar present in milk products. It is broken down in the small intestine by the enzyme *lactase* into simpler sugars that are easily absorbed in your body. Production of this enzyme is highest in infancy (when milk is the only source of nutrition). Normally the production of this enzyme drops off as people get older. In parts of the world where milk products were historically a major part of the diet of adults such as northern Europe, production of the enzyme is maintained at a higher level in the adult years than in areas of the world where it was not a major part of the diet for adults.
- People with lactose intolerance do not produce enough lactase to digest all of the lactose they take in with milk products. Usually their body can handle some lactose without too much of a problem (the amount in one or two cups of milk spread over a day) but with more than this they have trouble with digestive symptoms. The undigested lactose draws water into the intestines leading to diarrhea. In the colon the undigested lactose is digested by bacteria there, producing excess gas which can cause abdominal pain. Note that this is not a food allergy.
- Lactose intolerance is much more common in ethnic groups where milk products historically were not such an important part of the diet: Blacks, Hispanics, Asians and Ashkenazi Jews.
A higher proportion of people with Crohn’s disease, approximately 40 to 80% (4 to 8 out of 10) have lactose intolerance. It also appears to be present in more of those with active Crohn’s disease. Lactose intolerance does not seem to be elevated above the level in the general population in those with ulcerative colitis.

If you have not been diagnosed with lactose intolerance you do not need to avoid milk and milk products.

Lactose intolerance can be diagnosed by a breath test, but most commonly it is diagnosed by having a trial of avoiding milk products and determining if the symptoms improve.

Assessing your own lactose tolerance: If you think that you may be intolerant of milk products; that is when you ingest higher levels of milk products (more than a cup or two a day) you get cramps, bloating, gas or diarrhea you may wish to arrange a trial period where you strictly avoid milk products for 2 weeks. If you find that your bowel symptoms improve considerably you may be lactose intolerant.

Lactase enzyme tablets. If you have lactose intolerance, you may still be able to eat milk products if you take lactase enzyme pills (available at your pharmacy without a prescription) with the milk product (this helps to digest the lactose).

Adequate calcium intake. Milk and milk products are an essential source of calcium which is important for bone health and the prevention of osteoporosis. If you are restricting all milk and milk products and not consuming calcium from other calcium-rich food sources, you can hinder your bone health.

Alternative sources of calcium. If you have lactose intolerance, there are food alternatives you can try to ensure you are consuming enough calcium. These foods include: lactose-free milk; hard cheeses (which are lower in lactose); lactose free yogurt and yogurt that contains lactobacilli (bacteria that may help digest the lactose); soy milk and related soy products; orange juice fortified with calcium; spinach; salmon; tofu and almonds.

Calcium supplements. Adult men and women need 1000 – 1200 mg of calcium per day. If you are not meeting your calcium requirements from milk and alternatives to milk, you will need a supplement each day. If you have been diagnosed with osteoporosis you may require additional calcium supplementation.

Talk with your doctor/health care provider about the calcium supplementation.

**FODMAP Foods and IBD**

• FODMAPs are a group of carbohydrates (sugars) present in certain foods. The word FODMAP stands for Fructo-Oligo-Di-and Monosaccharides And Polyols. So sugars like fructose (commonly present in fruit and sweet desserts) and lactose (present in dairy foods)
are types of FODMAPs. Eating foods high in FODMAPs have been linked to gastrointestinal symptoms (GI) such as abdominal pain, gas, bloating, cramping and diarrhea.

- Most research with FODMAPs and GI symptoms have been done with people with irritable bowel syndrome (IBS) and not IBD. However, the GI symptoms in irritable bowel syndrome are similar to those in IBD.
- One pilot study with persons with Crohn’s disease showed improvement in abdominal pain, bloating and diarrhea when following a low FODMAP diet. More research is needed to be confident of this finding. It is unknown if a low FODMAP diet has any effect on reducing inflammation of the GI tract. Many foods must be avoided to follow a low FODMAP diet. So if you decide to try this diet you and find it to be effective it may be possible to add back restricted foods one at a time to determine if some can be tolerated or which can not be tolerated. A low FODMAP diet is explained in the following link: http://www.cdhf.ca/bank/document_en/32-fodmaps.pdf. If you decide to try this diet it is best to consult a registered dietitian.

Nutritional Deficiencies and IBD

**Malnutrition, Calories and Protein**

- Malnutrition and IBD is widely reported. However, a diagnosis of IBD does not mean that you are malnourished. Malnutrition is often diagnosed when there is significant or severe weight loss. This weight loss could be secondary to not eating enough calories and protein.
- People with IBD may be eating less as a result of the pain, nausea and diarrhea associated with active IBD symptoms. During these times, your food choices and the amount of food you eat may be less than normal.
- **Malnutrition.** Weight loss when you are experiencing IBD symptoms, is often a sign that your food intake is not enough to maintain your health.
- **Nutritional supplements:** If you think you are not getting adequate nutrition when your IBD symptoms are active, it is helpful to use nutritional supplements. These are sold at your local supermarket or pharmacy – common brand names are Ensure or Boost. You can also make your own high calorie / high protein supplements at home using milk or soy milk, protein powder, frozen fruit. and yogurt. Recipes for smoothies are available on the internet. You may also prefer fluid meals such as cream or broth soups, oatmeal and fruit shakes instead of regular solid food.
When your IBD is settled and you are feeling well, you may want to continue using nutritional supplements and fluids to maintain a healthy body weight. Ensuring adequate protein and calorie rich foods is important in maintaining healthy nutrition.

Anemia & Iron Deficiency

- Anemia is when the blood contains a reduced number of red blood cells. This condition is common in persons with IBD and many other chronic diseases.
- Anemia can be due to a deficiency in iron - due to a diet low in iron, malabsorption of adequate iron from your diet, or ongoing blood loss from your intestine.
- Alternatively, you may have anemia due to the nature of IBD being a chronic disease.
- Anemia can also be due to a deficiency in folate (a B vitamin) or vitamin B12.
- Sulfasalazine: If you are taking the drug sulfasalazine you may need to take a folic acid supplementation.
- Azathioprine (Immunuran) or 6-mercaptopurine (Purithol): These drugs can cause anemia.

Important blood tests: Knowing your levels and understanding the cause of anemia is important in determining treatment. Ask your health care provider to check your blood levels of hemoglobin, ferritin and vitamin B12.

Depending on your blood test, you may need to start an iron supplementation. Talk to your health care provider for an appropriate formulation and the amount of iron you need. If you can not tolerate oral iron there are iron formulations given intravenously that are well tolerated and can replace iron stores more quickly than with using oral iron.

Dietary sources of iron. Ensure that you are eating foods high in dietary iron. There are two sources of iron in food: animal food sources (Heme Iron) and plant food sources (Non Heme Iron).

- Animal food sources include red meat, fish and poultry. Plant food sources of iron include dried beans, peas, lentils and grain products (flour, pasta, breakfast cereals).
- Heme iron is readily absorbed by your body. Non heme iron is better absorbed if you combine the food with a food source of vitamin C such as fruits, vegetables or juices. The vitamin C helps your body absorb the non heme iron better.

Vitamin D

Vitamin D deficiency among persons with IBD has been reported. A deficiency can be the result of not eating enough vitamin D rich foods or malabsorption due to your IBD. If you are vitamin D deficient, this can hinder your bone health. Vitamin D and calcium work together in your body to maintain optimal bone health and prevent osteoporosis.
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- Vitamin D is also known as the sunshine vitamin; your body produces vitamin D when the skin is exposed to sunlight. Therefore living in areas where there are few days where skin is exposed to sunlight will also affect your vitamin D levels. If you live in a northern climate, like Canada, and have little exposure to sunlight on your skin then you may need vitamin D supplementation. It is difficult to get vitamin D from your diet other than from milk products or oily fish.

- **Dietary sources of vitamin D.** Key sources are: milk, soy milk (fortified with vitamin D), fish (particularly salmon), egg yolks and margarine. If these are not regular staples of your diet then you may need vitamin D supplements.

- Adults need 600 – 800 IU of vitamin D per day from their diet. Depending on your blood test and your dietary intake, you may need higher amounts.

- **Supplement.** Ask your health care provider for the appropriate amount of Vitamin D supplementation you may need.

**Multivitamin:**

- Nutritional deficiencies are common with IBD. In addition to using supplements discussed above, a multivitamin every day is recommended whether or not your disease is active. Your pharmacist can discuss the alternatives with you.

**References**


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Disclaimer: This information is provided for educational purposes only. Always consult a qualified health care professional for your specific care.

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