

An Integrative Approach to Inflammatory Bowel Disease (IBD)

What is inflammation?

Inflammation is one of the body's natural ways of protecting itself. It includes many chemical reactions that help to fight off infections, to increase blood flow to places that need healing, and to cause pain as a signal that something is wrong with the body. Unfortunately, it is possible to have too much of a good thing. A number of medical conditions are linked to too much inflammation in the body.

What is inflammatory bowel disease (IBD)?

Inflammatory bowel disease (IBD) includes both Crohn's disease and ulcerative colitis. IBD causes inflammation and injury to the lining of the intestine. Over time, these conditions can cause further harm. This may include the need for drugs that will lower your ability to fight disease. This can lead to other illnesses (such as cancer) and a poor quality of life.

What is an integrative approach in treating IBD?

The good news is that IBD can be controlled. A combination of good nutrition, healthy lifestyle choices, supplements/herbals, and prescription medication can help you feel better. It can also help prevent further health problems.

DIET

- The best nutrition comes from a well-balanced diet that is **LOW** in saturated fat, refined sugar, and animal protein, and **HIGH** in fruits and vegetables (7-9 servings/day), fish, fiber (at least 25 grams per day), and omega-3 fatty acids. (See our handout [Omega-3 Fatty Acids.](#))
- For mild to moderate **ulcerative colitis**, eat 60 grams per day of oat bran (This contains 20 grams of fiber.)
- Instead of vegetable oil, use flax seed oil, olive oil, or coconut oil (1-2 tablespoons per day)

Common Diets Used To Treat IBD

- **Specific Carbohydrate Diet**¹
 - This diet removes food that may make your symptoms worse. It includes carbohydrates that your body can more easily digest.
 - It consists of meat, poultry, fish, eggs, most vegetables and fruits, nut flours, aged cheese, homemade yogurt and honey
 - The diet avoids all grains and products made from grains (including sweeteners other than honey), legumes, potatoes, lactose-containing dairy products, and sucrose.
 - The evidence shows that it is more effective for **Crohn's disease**.
 - For more information, read: *Breaking the Vicious Cycle* by Elaine Gottschall or go to the following website: <http://www.breakingtheviciouscycle.info>



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DIET (CON'T.)

- **Low Sulfur Diet**²
 - If your **ulcerative colitis** is in remission (i.e., if you have few or no symptoms), your risk for relapse is increased if you eat more protein (especially meat), and food containing sulfur and sulfates.
 - This diet avoids beef, pork, eggs, cheese, whole milk, ice cream, mayonnaise, soy milk, mineral water, nuts, cruciferous vegetables (such as broccoli, Brussels sprouts, cabbage, cauliflower, radish), dried fruits, sodas and alcoholic beverages containing sulfites (such as wine).
- **Elimination (Exclusion) Diets**
 - Eliminate foods that are likely to cause symptoms. This can help you to stay symptom free.
 - Common foods to avoid are wheat, cow's milk and products made from cow's milk, cruciferous vegetables (such as broccoli, Brussels sprouts, cabbage, cauliflower, radish), corn, yeast, tomatoes, citrus fruit, and eggs.
 - See our handout [*Elimination Diet*](#) for more information.

LIFESTYLE

- Exercise can help you reduce stress and stay healthy.
- Reduce stress to reduce inflammation. Consider trying one or more of the following:
 - Mind-body approaches: yoga, meditation, tai chi, or hypnosis. See our handout [*Self-Hypnosis Balloon Technique for Abdominal Pain*](#).
 - Psychotherapy or counseling.
- Avoid all tobacco products.
- Limit the amount of alcohol you drink.



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SUPPLEMENTS

Consider adding the nutritional supplements listed on the following page if they are **LOW** in your diet or found to be **LOW** by your physician. Discuss taking any supplements with your physician before you start.

PATIENT HANDOUT



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SUPPLEMENT ³	DOSE	REASON TO TAKE
Folic Acid*	1 g/day	If taking drugs known as 5-ASA derivatives such as mesalamine, sulfasalazine.
Vitamin B ₁₂ *	1000 µg/month by injection	If your ileum (the lower part of your small intestine) has been removed. Or if you have ileitis (inflammation of the ileum).
Vitamin B ₆ *	10-20 mg/day	To prevent urinary stones.
Vitamin D ₃	1000-2000 IU/day	To prevent bone loss by aiming for a Vitamin D level of 40-50ng/mL.
Zinc**	25 to 200 mg/day	In Crohn's disease , to maintain plasma zinc higher than 800 mg/L.
Calcium	1000 mg/day	To strengthen your bones if you take steroids.
Selenium	200 µg/day	If your ileum (the lower part of your small intestine) has been removed.
Magnesium citrate	150 to 900 mg/day	To prevent urinary stones. May cause diarrhea.
Chromium	600 mcg/day	If steroids have affected your body's ability to use glucose. (Glucose is a sugar in the blood. It is a major source of energy for your body.)
N-acetyl glucosamine (NAG)	3000 to 6000 mg/day	To restore the protective mucus layer in the lining of your stomach and intestines.
Fish oil (Omega-3 fatty acids)	4000 mg/day of EPA + DHA	To remain free of IBD symptoms.

* Homocysteine is an amino acid needed by your body. It can be harmful in high amounts. When homocysteine levels are too high, you might develop blood clots that can cause serious harm. If a blood test determines that your homocysteine level is too high, you can take folic acid, B₆ and B₁₂ together to help lower it.

** **IMPORTANT:** For every 50 mg/day of zinc you take, you must also take 2 mg/day of copper at a separate time of day. Taking zinc can result in your having too little copper in your body. Taking a copper supplement can prevent this. If you take less than 50 mg/day of zinc, you do not need to take additional copper.

PROBIOTICS

- Probiotics can be used to restore the normal balance of bacteria in your bowel. See our handout [Probiotics and Prebiotics: Frequently Asked Questions](#).
- They can help you stay free of symptoms if your disease has been under control.
- Studies have shown lower rate of relapse when probiotics are used along with 5-ASA medications.
- **Do NOT** use probiotics if you are taking drugs that suppress your immune system.
- The most effective and well-studied probiotics include:
 - **VSL-3**, which is a mixture of 8 strains of bacteria including Bifidobacterium, Lactobacillus, and Streptococcus
 - For **ulcerative colitis**, take 1 sachet twice a day to remain free of symptoms⁴
 - **Lactobacillus GG** (*Lactobacillus rhamnosus var GG*) 10 to 20 billion CFUs per day⁵
 - **Saccharomyces boulardii** 250 mg three times a day or 500 mg twice daily, especially for **Crohn's disease** or if you are taking 5-ASA medications. A low cost way to get this probiotic is to eat one to two teaspoons of nutritional yeast each day.
 - You can buy it in health food stores. This probiotic may cause constipation.⁶

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PREBIOTICS

- Prebiotics are ingredients in foods that increase the growth or activity of healthy bacteria that lives in the intestines. Prebiotics are usually not digested until they reach the large intestine.
- Prebiotics include bran, psyllium husk, guar gum, inulin, lactulose and fructooligosaccharides (found naturally in chicory root, onions, legumes, asparagus, garlic, bananas, and artichoke)
- Common side effects of prebiotics are gas, bloating, and/or diarrhea.
- Synbiotics combine both probiotics and prebiotics.
- Prebiotics are more effective for **ulcerative colitis**.
- Prebiotics to consider include:
 - Wheat grass juice 100 ml twice daily.⁷
 - **Prebiotic oligosaccharides** 10 grams per day (See the table below for dosing)⁸

FOOD ⁹	AMOUNT TO EAT TO GET 10 GRAMS (g) OF PREBIOTICS
Raw Chicory Root	15.5 g (0.6 oz)
Raw Jerusalem Artichoke	31.7 g (1.1 oz)
Raw Dandelion Greens	40 g (1.4 oz)
Raw Garlic	57.2 g (2 oz)
Raw Onion	116.3 g (4.1 oz)
Cooked Onion	200 g (7.1 oz)
Raw Asparagus	200 g (7.1 oz)
Raw Wheat Bran	200 g (7.1 oz)
Cooked Whole Wheat Flour	208.3 g (7.3 oz)
Raw Banana	1000 g (2.2 lbs)

BOTANICALS

- Can be used to reduce inflammation.
- Botanicals to consider include:
 - **Boswellia serrata** (in Indian frankincense) 350 mg three times/day¹⁰
 - **Curcumin** (found in the Indian spice turmeric) 1000 to 1800 mg twice a day with meals or use in cooking if you have **ulcerative colitis**. Reduce the dose if it causes intestinal discomfort.¹¹
 - **Oral aloe vera gel** 100 ml twice a day. Do not eat aloe vera latex as it is harmful.
 - *Pistacialentiscus* resin (**mastic gum**) 1000 mg twice daily for **Crohn's disease**.¹²

MEDICATIONS

- **AVOID** anti-inflammatory medications such as aspirin or non-steroidal anti-inflammatory drugs (NSAIDs) (e.g., ibuprofen). These drugs interfere with healing in the intestines.
- Your clinician may prescribe one or more of the following medications:
 - 5-ASA derivatives (e.g. mesalamine, sulfasalazine) reduce symptoms in mild-to-moderate colitis and are continued to keep you free of symptoms.
 - Corticosteroids (e.g. prednisone) help reduce symptoms in moderate to severe disease.



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MEDICATIONS (CON'T.)

- Immunomodulators calm down the immune system and reduce inflammation. They can help you taper off steroids once your active disease is controlled.
 - Azathioprine and 6-mercaptopurine are given for IBD that is controlled by steroids. It may also be prescribed if your disease is not controlled by 5-ASA medications.
 - Infliximab is an antibody that blocks TNF-alpha (an inflammatory cytokine). It may be prescribed to reduce your symptoms and keep you in remission if you have severe **Crohn's disease** that cannot be controlled in other ways.

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The information in this handout is for general education. It is not meant to be used by a patient alone. Please work with your health care practitioner to use this information in the best way possible to promote your health.

Notes: