IBD-Ulcerative Colitis
INFLAMMATORY BOWEL DISEASE (IBD)

What Is It?

Ulcerative colitis is an inflammatory bowel disease (IBD) that generally affects the rectum (proctitis) and the lower left portion of the colon (the sigmoid colon) though it may spread throughout the entire colon (pancolitis). In this chronic condition, there are ulcers along with inflammation. Also, there is usually blood in the stool as well as diarrhea and cramping. Unlike Crohn’s disease, which involves the entire thickness of the bowel wall, the inflammation of ulcerative colitis is generally confined to the first layer of the colon lining, the mucosal membrane. It spreads in a continuous fashion rather than in patches like Crohn’s disease. Ulcerative colitis does not involve the small intestine—except in those few cases when it backs up into the ileum (lower portion of the small intestine).  

What Causes It?

While the cause of ulcerative colitis is unknown, many theories have been put forth, and a number of contributing factors have been identified. Among the proposed contributing factors are poor eating habits, stress, food allergies and infectious agents. Involvement of microbes, like pathogenic bacteria, is often associated with the use of antibiotics that alter the normal bacterial balance in the intestines and permit microorganisms that are normally held in check to proliferate.  

A dominant theory as to cause of ulcerative colitis is an over-reaction of the immune system to the presence of microbes, toxins or other stress factors (like irritating or allergenic foods). What is unknown, however, is whether the immune system disturbances found in the disease are the cause or the result of ulcerative colitis. For a more in-depth discussion of possible microbial involvement in IBD see the previous section on Crohn’s disease. 

Like Crohn’s disease, ulcerative colitis symptoms generally first appear between ages 15 and 30, with a second peak between ages 50 and 70. Like Crohn’s, ulcerative colitis affects men and women equally, and the disease appears to run in families. Most studies show that ulcerative colitis is more common than Crohn’s disease. In the United States, 10 to 12 Americans out of 100,000 develop ulcerative colitis.  

What Are the Signs and Symptoms?

The symptoms of ulcerative colitis often resemble those of Crohn’s disease or irritable bowel syndrome. Microscopically, however, the superficial inflammation of ulcerative colitis gives a different appearance than the deep lesions of Crohn’s disease. Still, ulcerative colitis, like Crohn’s disease, usually lasts a lifetime, but may go into remission for long periods of time. Those with ulcerative colitis may experience any of the following symptoms:

- Diarrhea, which is often bloody, and may lead to iron-deficiency anemia
- Pain in the low abdomen (especially in the lower left quadrant)
- Weight loss
- Fever
- Fatigue
- Nausea
- Fissures
- Hemorrhoids
- Abscesses
Like Crohn's disease, the diarrhea of ulcerative colitis can lead to dehydration and electrolyte disturbances. Unlike Crohn’s, the malnutrition that may result from ulcerative colitis is not directly due to malabsorption (because the small intestine is not generally involved) but rather due to loss of appetite and fear of eating stemming from the discomfort of the symptoms.  

Another similarity between ulcerative colitis and Crohn’s disease is that both may produce systemic problems such as inflammation of the joints, eyes, spine, liver or gallbladder. This inflammation is usually mild and disappears when the colitis is treated. Having ulcerative colitis also increases the risk of developing other serious conditions such as osteoporosis and kidney stones.

A rare but serious complication of ulcerative colitis is toxic colitis which can develop into a condition known as toxic megacolon. Toxic megacolon is a condition in which the entire colon is damaged and loses its ability to contract. In time, it will dilate or expand due to loss of muscle tone. Toxic megacolon can lead quickly to perforation, a life-threatening complication. Another possible complication of ulcerative colitis is the development of dysplasia, abnormal cell changes that increases the risk of cancer.

**How Is It Diagnosed?**

In addition to physical examination and thorough health history, a colonoscopy with biopsy can help doctors to diagnose ulcerative colitis and assess its severity. A sigmoidoscopy may alternatively be used if complaints are confined to the rectal area. These types of endoscopic exams allow the doctor to take a biopsy—tissue sample—that can later be microscopically evaluated for a definitive differential diagnosis. They also look for dysplasia. A barium enema (lower GI series of X-rays) may also be used to reveal abnormalities in colonic tissue.

In addition to endoscopic evaluation—and possibly barium enema—blood tests are normally ordered for the purposes of detecting iron deficiency anemia, signs of inflammation, and protein status. Finally, an extensive stool analysis can be helpful in detecting infection and/or parasites. Specialized testing, involving more than one stool sample, may be needed to accurately detect parasites.

Natural health practitioners may also suggest additional diagnostic testing such as a comprehensive stool analysis (CSA), intestinal permeability test, food sensitivity testing, or a Heidelberg stomach pH test to determine stomach-acidity levels. (See the Appendix for information about these tests.)

**What Is the Standard Medical Treatment?**

Treatment depends upon the severity and extent of the ulcerative colitis. It would ideally be tailored to meet the individual needs of the patient. Most doctors will recommend the avoidance of irritating substances that may include highly seasoned foods, alcohol, caffeine and sugar.

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**Healing HOPE Testimonial**

“I suffered from crippling diarrhea and cramping that made it difficult to have a normal life. I was diagnosed with bleeding hemorrhoids and colitis. I learned about the benefits of taking probiotics and L-glutamine powder to heal and rebalance the gut. Within three days, I was symptom-free! I stopped the products for a while, but my symptoms came back. I went to my gastroenterologist who scheduled a colonoscopy for six weeks later. On my way home from that appointment, I made the decision to commit to the use of these products that had made such a difference.

I stuck to the daily supplementation and was symptom free when I had the colonoscopy. Before the procedure, I told my doctor about the supplements I was taking, but he didn’t give much response. After the colonoscopy, he came back into the room with images of my healthy colon and began to ask about what I had been taking. I told him about Brenda Watson and Dr. Leonard Smith and he requested more information about them.

I continue to live free of crippling symptoms that once controlled me and my life.”

– Tammy
Interestingly, nicotine patches may help induce remission, or at least reduce symptoms, in approximately 40 percent of patients who use the patch for more than four weeks. The nutrition-oriented doctor would most likely expand the list of offending foods to include those to which the patient is sensitive or allergic as established through stool (see the Appendix) or blood testing or through a trial on an elimination diet. Even without testing, some doctors may advise the avoidance of milk and wheat since these foods have the highest allergy potential.

Traditional dietary treatment of serious cases of IBD (both Crohn’s disease and ulcerative colitis) often involves use of an elemental (predigested) diet or one that is administered intravenously. These approaches, as well as the elimination diet (to treat allergies) have been quite successful in managing inflammatory bowel diseases. Medical management, however, relies very heavily on drug therapy that can be problematic.

The most widely used drugs in treatment of both Crohn’s disease and ulcerative colitis are corticosteroids and sulfasalazine. The side effects of both of these medications are discussed in the section on Crohn’s disease. Additionally, ulcerative colitis patients may be placed on medications to relax them, relieve their pain, suppress their immune systems (due to the suspected autoimmune nature of the disease) and to counter infection and diarrhea. All these drugs contribute to nutrient depletion, already an issue with IBD patients. Protein depletion is of particular concern due to tissue damage in the bowel that is sometimes extensive. Ongoing diarrhea raises concerns about iron and trace mineral status. Supplementation with a good multiple vitamin/mineral is therefore needed, though this need may go unrecognized by some traditional physicians whose knowledge of nutrition is limited.

Mild cases of ulcerative colitis, such as proctitis (inflammation of the rectum), may be treated with a mesalamine or steroid suppository or enema at bedtime. There is some danger of absorption of these medications into the body, however, with the accompanying side effects. (See the chart in the Crohn’s disease section.)

The holistic physician would be more likely to prescribe a butyrate enema. Butyrate is a short-chain fatty acid, produced by bacterial fermentation of dietary fiber, that serves as food for the cells of the colon, helping to heal the colitis. Omega-3 essential fatty acids, found in fish oil, chia seeds and flax, are also helpful in reducing inflammation.

Hospitalization is required for those with severe cases of ulcerative colitis. Here nutrients, antibiotics and steroids are administered intravenously. If these treatments are not effective, then immunosuppressive drugs like cyclosporine may be added, first intravenously, then orally. In patients with severe colitis, anti-diarrheal drugs are generally avoided since they can precipitate the development of toxic megacolon. To treat toxic megacolon, the bowel is compressed by inserting a tube through the nose into the stomach, so air and stomach contents may be aspirated on a continuous basis; a rectal tube may also be placed to decompress the colon. A low-fiber diet is necessary during the initial stages of recovery in the disease process to be replaced with a higher-fiber diet later, if tolerated.

Treatment goals for the hospitalized patient are to:

- Correct malnutrition (often through administration of an elemental diet that is pre-digested)
- Stop diarrhea
- Stop blood loss
- Stop loss of fluids and minerals

If these conservative measures fail, surgery may be recommended. Although the majority of patients with ulcerative colitis will never require surgical intervention, about 20 to 25 percent will eventually require removal of part or all of their colon due to one or more of the following:

- Massive bleeding
- Chronic debilitating illness
- Perforation of the colon
- Cancer risk (which may be as much as 32 times normal, especially if the whole colon is involved and the disease has been longstanding)
- Failure of drug treatment (as described above)
- Side effects of steroids (or other medications)
Ulcerative colitis (UC) is the other inflammatory bowel disease (IBD) which involves genetic, epigenetic, environmental, and immunological factors that create the perfect storm resulting in widespread ulceration and bleeding in the colon. Like Crohn’s disease (CD), UC involves the body’s inability to distinguish foreign invaders (antigens) from self.

The etiology of UC has not been clearly delineated, however there are many theories, most of which center around imbalances in the overall colonic microflora. Since there is cross-talk between the microflora, the epithelial lining and the immune system, significant imbalances in the microflora will reprogram the gut epithelial/immune system to that of a pro-inflammatory state.

There are two exciting therapeutic modalities for reprogramming the epithelial/immune imbalances: use of beneficial parasites, and human to human fecal implant.

There is much support in the literature for the use of pig whipworm (Trichirus suis) therapy in IBD for both UC and CD. A University of Iowa double-blind placebo-controlled study gave 2500 pig whipworm ova (eggs) or placebo orally at two week intervals for 12 weeks to 54 patients with active colitis. Those treated with the pig ova were statistically significantly improved over the placebo group and there were no side effects.

It was the genius of Dr. Joel Weinstock, MD and others who demonstrated that using a pig whipworm is ideal since it is not a pathogenic parasite in humans and is expelled from the body within six weeks. This represents a beautiful example of how a low-grade parasitic infection can reprogram the gut epithelium and immunity as if it were reprogramming a computer. Maybe in the natural order of things we were meant to live closer to nature, and as a result would have a more natural balance of a microflora that would even include some low-grade beneficial parasitic infections.

The rationale behind transplanting fecal matter from a healthy patient to a patient with IBD or even C. difficile diarrhea, is explained by work being done through the Human Microbiome Project showing that there are between 15,000 and 36,000 species of bacteria inhabiting the human gastrointestinal tract. It may be that there are multiple bacteria creating the inflammation of UC, therefore, in severe cases, the more probiotics given, the better. With a fecal transplant from a healthy donor, the patient may be receiving up to 30,000 or more species of commensal bacteria, which would include many probiotics.

In a study published in the Journal of Clinical Gastroenterology and Hepatology, severe UC patients were treated with antibiotics and cathartics and then received fecal transplant. Some patients were completely free of UC up to 13 years later! This is a small study, but there have been many more like it in the past seven years. In fact, fecal therapy is also now being used for irritable bowel syndrome (IBS) and chronic constipation.

There are other novel natural therapies for IBD, including aloe vera. In one double-blind randomized placebo-controlled trial, patients receiving oral aloe vera gel for four weeks had a statistically significant positive clinical response and reduced histological disease activity compared to the placebo.
Ulcerative colitis usually involves the descending colon, which is on the left side of the abdomen. Diarrhea is often present with ulcerative colitis. Suggestions for this condition are similar to those for Crohn’s disease since the two conditions are so similar in nature. Getting to the root cause of the intestinal inflammation is important, and this can be done by looking at what is occurring in the gut. A comprehensive stool analysis, or CSA (see the Appendix), is a great test that lets you do just that.

Another important component is the diet. In many cases, food sensitivity—often to wheat or dairy—is causing inflammation in the gut. This should be ruled out when dealing with ulcerative colitis. (See the Gluten Sensitivity and Allergies sections.) If food sensitivity is suspected or discovered, adherence to a diet which eliminates the offending foods for at least three months is necessary. This is an important point because it can take quite a while for the body to stop reacting and begin to heal. A strong commitment and determination are needed here. A comprehensive diet and supplement program, as outlined below and further described in the Appendix, can help you on your way to healing your gut.

**Rule Out:**

- Candida overgrowth (See the Candidiasis section.)
- Food sensitivity (See the Gluten Sensitivity and Allergies sections.)

**Recommended Testing**

- Comprehensive stool analysis (CSA) (See the Appendix.)
- Food sensitivity test (See the Appendix.)

**Diet**

- During acute phase, avoid processed, fatty and spicy foods, red meats, caffeine, alcohol and carbonated beverages until feeling better. Steam vegetables until soft before eating.
- Consuming raw foods can be beneficial, but must be blended in mixer and taken with digestive enzymes.
- Drink herbal teas like chamomile, slippery elm and fennel.

**Lifestyle**

- Exercise is very important and can help reduce pain levels. Low impact walking, swimming and weight training are good.

**Complimentary Mind/Body Therapies**

- Stress can be a major component of this disease, so find ways to reduce it with therapies such as meditation, yoga, deep breathing, massage, biofeedback, or music therapy.
- Acupuncture may be helpful as it targets the meridians associated with the digestive system, and it is also a stress reducer.
- Colon hydrotherapy should be performed only under a physician’s supervision in cases of ulcerative colitis.
<table>
<thead>
<tr>
<th>Recommended Nutraceuticals</th>
<th>Dosage</th>
<th>Benefit</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>Critical Phase</strong> Daily maintenance recommendations should also be taken during this phase unless otherwise indicated.</td>
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<tr>
<td>Vitamin D₃</td>
<td>2,000 to 4,000 iu daily for 6 months</td>
<td>Low levels associated with autoimmune diseases.</td>
<td>Research is showing many health complications as a result of low vitamin D levels.</td>
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<tr>
<td><strong>Helpful</strong></td>
<td></td>
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<tr>
<td>Powdered or Liquid Multi vitamin/mineral Formula</td>
<td>Use as directed</td>
<td>Supplies nutrients lost from malabsorption.</td>
<td>The powdered or liquid is best verses tablets for those with ulcerative colitis.</td>
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<tr>
<td>Zinc</td>
<td>Additional 25-30 mg daily for 3 months</td>
<td>Low zinc levels associated with inflammatory bowel disease.</td>
<td>You could choose to continue zinc at 15 mg per day.</td>
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<tr>
<td>Mucilaginous herbs such as slippery elm, marshmallow and cranesbill</td>
<td>Use as directed</td>
<td>Soothes irritated and sore intestinal tract.</td>
<td>Take one or two separately or look for a formula that includes several.</td>
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<tr>
<td><strong>Daily Maintenance</strong></td>
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<tr>
<td>L-Glutamine Powder with Gamma Oryzanol</td>
<td>5 grams twice daily</td>
<td>Essential for maintaining the health and integrity of the intestinal lining.</td>
<td>Added gamma oryzanol may help relieve pain associated with gastrointestinal complaints.</td>
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<td>Probiotics</td>
<td>200 billion culture count twice daily</td>
<td>Has been shown to help reduce severity and relapse of IBD.</td>
<td>Look for high amounts of bifidobacteria and in powder form for higher culture counts.</td>
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<td>Omega-3 Fatty Acids</td>
<td>At least 2 grams daily of EPA/DHA combination</td>
<td>Helps restore moisture to the intestinal tract. Provides lubrication.</td>
<td>Look for a concentrated, enteric coated coated fish oil.</td>
</tr>
<tr>
<td>Fiber</td>
<td>4-5 grams twice daily</td>
<td>Helps produce healthy bacteria levels and good elimination.</td>
<td>Use as part of the maintenance protocol, avoid during acute attack of Crohn’s.</td>
</tr>
<tr>
<td>Digestive Enzymes</td>
<td>1-2 capsules with meals</td>
<td>Can be helpful to digest foods and absorb nutrients.</td>
<td>Use as part of the maintenance protocol, avoid during acute attack of Crohn’s.</td>
</tr>
<tr>
<td>Vitamin D₃</td>
<td>1,000 to 2,000 iu daily after critical phase</td>
<td>Low levels associated with autoimmune diseases.</td>
<td>Research is showing many health complications as a result of low vitamin D levels.</td>
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See further explanation of supplements in the Appendix