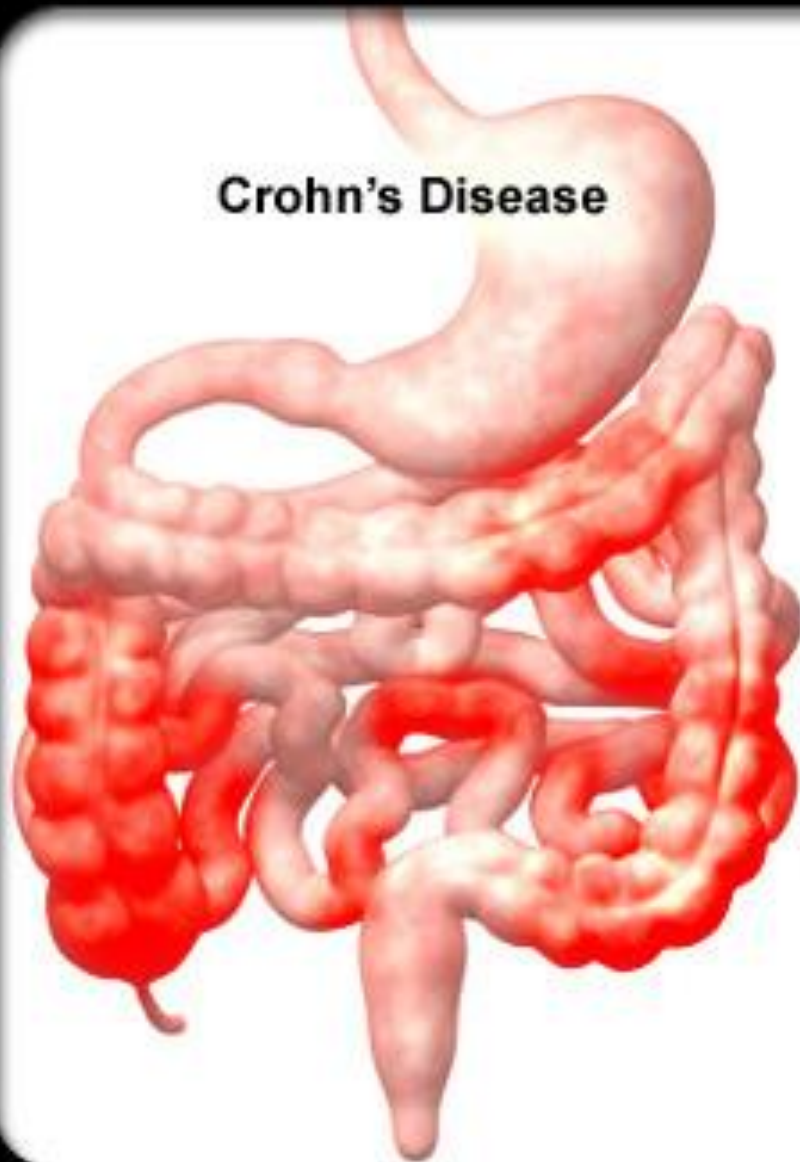


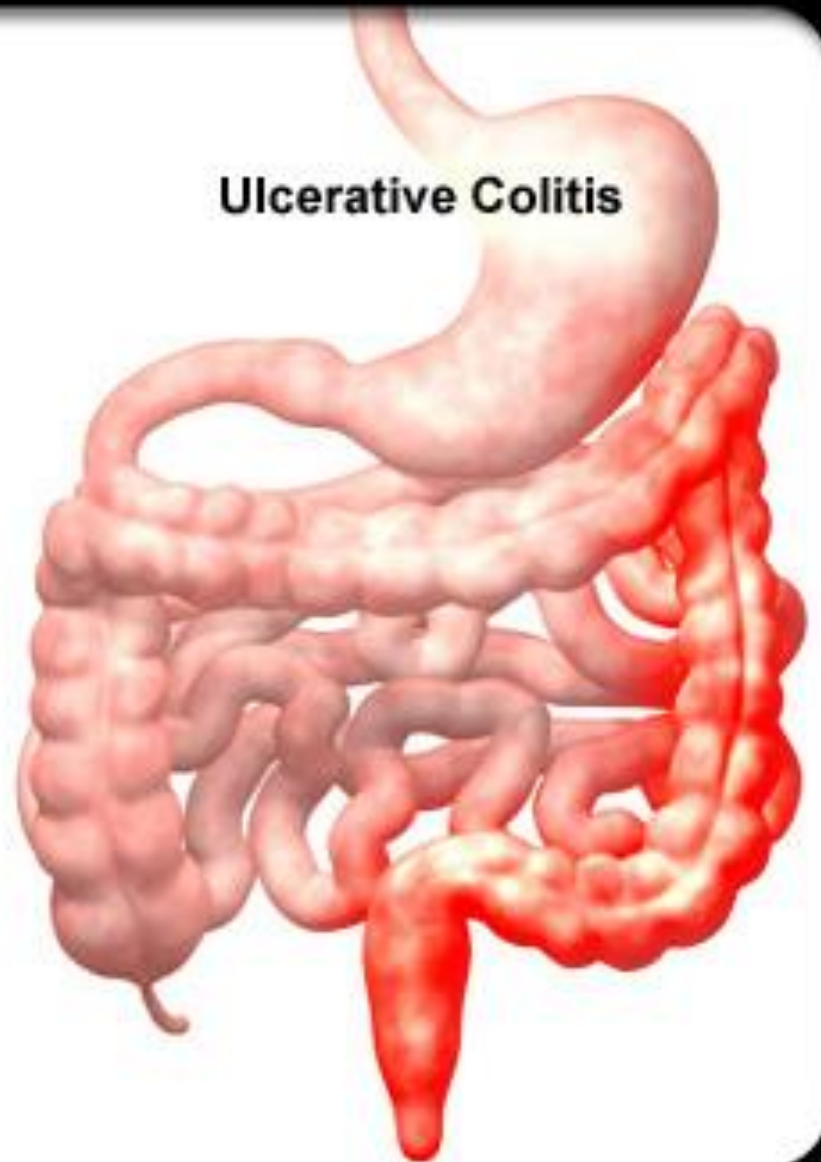
CROHN'S DISEASE AND ULCERATIVE COLITIS



Crohn's Disease



Ulcerative Colitis



Crohn's

- Inflammation in the GI tract but usually in the lower part of the small intestines and the colon.
- Inflammation occur between healthy sections of the gut, and can penetrate the intestinal layers from inner to outer lining
- Symptoms: Intestinal pain and cramping which may be intermittent – area may be sore to the touch, diarrhea, or constipation, loss of appetite, fever, weight loss, anemia (tears in the anus (anal fissures) which can bleed)

Because the immune is involved, joint pain, eye problems skin issues and liver disease can also occur

Treatment

- Anti-diarrhea medications and/or laxatives
- B12 shots, supplements of iron, calcium, and vit D (increased risk of osteoporosis)
- Aminosalicylates: Anti-inflammatories for the large intestine only - does not help small intestine
- Corticosteroids for when the disease is active to try to control it
- Nutrition and diet changes
- Severe: Immune suppressors, antibiotics, surgery (to remove the damaged portions)
- Antibiotics – CD patients show elevated *Klebsiella*



Alternative Treatment

- SCFA – Butyrate was effective in lowering several immune markers of Crohn, improved symptoms and induced remission in 53% of participants (in one small study)
- One study found that glutamine (7 g) alone will not repair leaky gut - gut health formula better
- Another study found that a combination of glutamine and arginine lowered several inflammatory markers in CD patients. Arginine alone did not help but glutamine alone did help lower some markers of inflammation
- Glutamine with antioxidants helped increased the antioxidant status in CD patients

Alternative Treatment

- Crohn's patients may be more sensitive to Inulin and FOS so IMO and GI Sustain may be better for them
- They may also be reactive to resistant starch but long term perspective is that resistant starch is needed for them at some point for true remission
- Resistant starch has been shown to reduce bad bacteria
- Omega 3 – anti-inflammatory
- GOS is better for the small intestines than FOS
- Helpful supplements: aloe vera juice, slippery elm bark, chamomile, peppermint, HSOs



Ulcerative Colitis

- Only affects sections of the large intestine, starting at the rectum (can include the anus)
- Typically, inflammation is in the innermost lining of bowel only
- Ulcerations occur that are red and swollen
- Symptoms: Abdominal pain or cramping, diarrhea, rectal bleeding and whitish mucus, fatigue, loss of appetite and anemia.
- Immune system involvement can also cause joint pain, redness and swelling and liver issues



Healthy



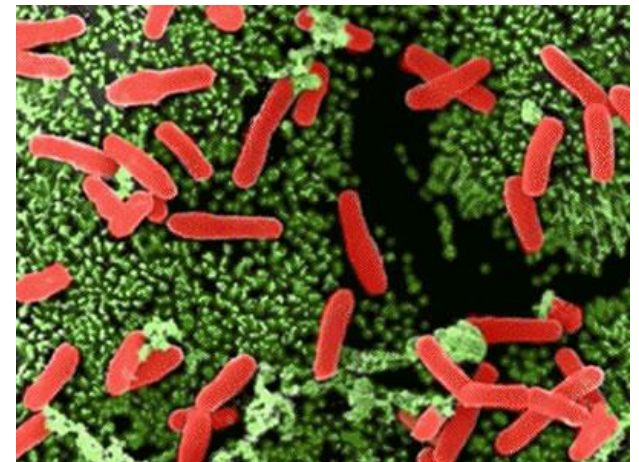
Moderate Colitis



Severe Colitis

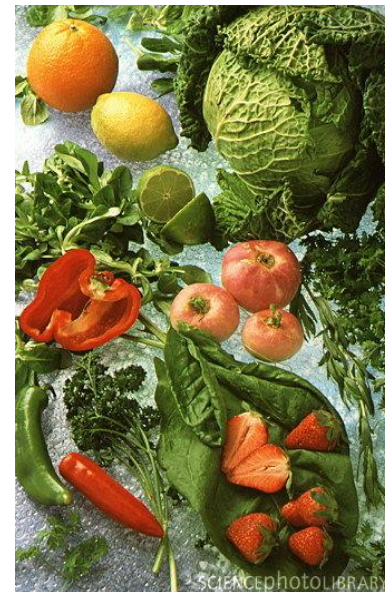
Cause

- Bad bacteria clearly plays a role – studies have not been able to point to specific strain but E coli, Shigella, Samonella and yersinia have been investigated with no clear results
- Bacteroides vulgatus did cause colitis in germ-free mice
- Bad bacteria does localise in mucus and may be degrading the structure, leading to mucosal invasion and inflammation leading to colitis
- Two studies show a significant decrease in lactobacilli concentration in colonic biopsies from active UC patients



Treatment

- Anti-diarrhea medications
- Enemas or suppositories that contain medicine.
- Aminosalicylates. These medicines relieve inflammation in the intestines. They are also taken to keep the disease in remission.
- Steroid medicines may prescribed for a few weeks to control active disease.
- Immunosuppressing drugs, antibiotics and surgery in severe cases
- Changes in the diet.

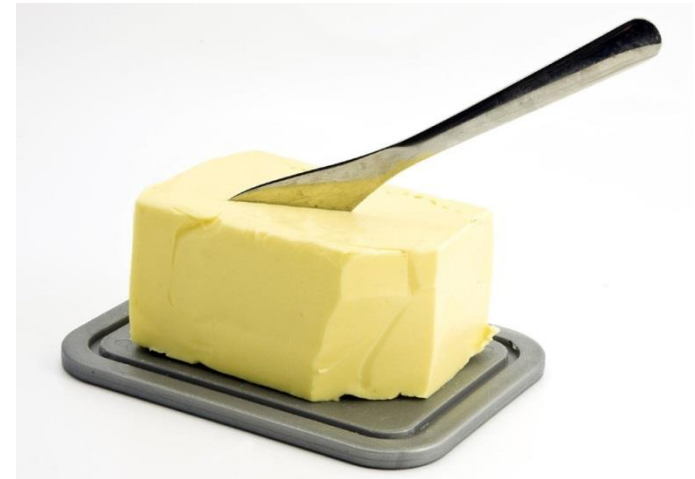


Alternative Treatments

- Probiotics have been shown to be helpful – precise mechanism is not understood
- Studies have shown probiotics are helpful especially in controlling E coli and other bad bacteria strain attachment and increase IL-10
- VSL-3 has been shown to increase IL-10 even more significantly
- SCFA deficiency from a failure for resistant carb to be fermented (either due to lack of good bacteria or a defect) – this is another potential caused
- Supplementing with SFCA has been effective for those with mild to moderate colitis

Alternative Treatment

- Glutamine has been shown to help decrease TNF-alpha and IL-8, can also increase blood flow
- Both glutamine and SCFA have been used in an enema for treatment of colitis – glutamine more effective for repairing gut lining in rats
- Sulphate-reducing bacteria lower sulfur levels and increase hydrogen sulphide which has been implicated in damaging intestinal cell membranes and inhibiting butyrate
- MSM can be helpful for this



- Probiotics
- Turmeric lower inflammation and has been shown to help make conventional treatment more effective
- Bromelian reduces symptoms and helps prevent flare-ups – in one study, fresh pineapple juice lowered inflammation in rats with colitis
- Psyllium seed/husk enhance gut motility
- Aloe Vera - lower symptoms (be careful because of laxative effects)
- EFAs (omega 3) – anti-inflammatory
- Glutamine and SCFA



Lifestyle

- Reduce stress
- Exercise
- Breathing techniques
- Many colitis sufferers from depression so recommendations for that are also helpful.
- Acupuncture and Moxibustion has been shown effective for Crohn's and possible other colon related issues (burning of a moxa (mugwort) near the skin



Both Conditions

- Clients with either condition may have food allergies or sensitivities – they may need a leaky gut protocol
- If their conditions are in remission, then food sensitivities or allergies do not necessarily need to be a concern
- Focus on strategies for repairing the gut health
- If the clients condition is active – consider the leaky gut protocol (with food removals) plus the key supplements to try to help get them into remission
- Then continue to work on gut health.



Final Thoughts

- These conditions and their related cousins are more difficult
- The symptoms are primarily in the GI tract making it more difficult to make recommendations
- Go slow and listen carefully to the clients about their experience for clues.
- The goal is to achieve remission and give client the tools to maintain the remission so they can live a better quality life

