What is Inflammatory Bowel Disease?

Inflammatory bowel disease (IBD) includes both ulcerative colitis (inflammation of the colon) and Crohn’s disease (inflammation of any part of the gastrointestinal tract).

Does poor nutrition or diet cause IBD?

Despite much research, the causes of IBD remain unknown. Specifically, researchers have tried to link diet to IBD but have not yet proven any definitive relationship. However, diet is important in IBD, both in changing the activity of the disease and preventing complications.

There is a great deal of interest in treating IBD with diet. Although there have been many claims of successful dietary IBD treatment, no particular diet therapy has been proven effective. In general, it is important that a diet is nutritious and that any foods that worsen symptoms should be avoided.

How does nutrition impact ulcerative colitis?

Ulcerative colitis causes inflammation and ulcers of the colon which results in cramps, diarrhea, loss of blood, protein, electrolytes (such as potassium and magnesium), and decreased appetite often resulting in weight loss. Diets high in calories are often recommended together with iron and other nutrients to help reduce the effects of ulcerative colitis. If the patient is treated with the anti-inflammatory medication, sulfasalazine, or methotrexate folic acid should be added. Any foods that worsen symptoms should be avoided.

How does nutrition impact Crohn’s disease?

Since Crohn’s disease can affect any part of the GI tract, many nutritional problems may occur. This may result from intestinal inflammation causing decreased absorption of nutrients, vitamins and minerals.

First, weight loss and poor growth are common with Crohn’s disease. This is often the result of poor appetite with decreased caloric intake, in addition to poor absorption resulting from the inflammation itself. Therefore, it is important that your child eat enough. These extra calories may be provided by high calorie drinks. When more calories are needed, but the child is unable to take all the calories orally, a feeding tube can be placed in the stomach and the calories given via through the tube.

Second, the child may be at risk for specific nutritional deficiencies due to Crohn’s disease or side effects of medications. Your child should be monitored for low iron levels and supplemented orally when required. If this is inadequate, intravenous iron infusions may be considered. Calcium is an important mineral which is often low in patients with Crohn’s disease. Children may have decreased bone mass due to calcium deficiency which is worsened by treatment with steroids, which may be necessary to control the inflammation. Calcium supplementation is therefore important. At times, bone density studies to monitor calcium deficiency may be needed. In addition to calcium, vitamin D is important for bone health and growth. Levels of this vitamin are frequently low in patients with Crohn’s disease; therefore, treatment with supplemental Vitamin D may be necessary.
Children with ileal (part of the small intestine) disease or who have had part of their small intestine removed are at risk for Vitamin B12 deficiency. These children should be monitored and treated if they have low B12 levels.

Changes in diet may reduce symptoms of Crohn’s disease. Some patients develop strictures or scars of the small or large intestine. These are scarred areas of the intestine can be very which narrow. Foods that are difficult to digest such as popcorn, corn on the cob, seeds and nuts should be avoided as they may cause cramps or even intestinal blockage. Also, high fiber foods, such as broccoli, beans and cauliflower, and fried foods may worsen symptoms and therefore should be avoided.

Finally, only taking a liquid elemental (predigested) diet (aka enteral therapy) may lessen the activity of Crohn’s disease in addition to improving the patient’s nutritional status, or may result in the disease going into remission. Therefore, some doctors recommend using elemental diets for treatment of Crohn’s disease. However, disease activity may recur when regular food is added back into the diet. It is important to avoid foods that provoke symptoms. Routine elimination of lactose from the diet is not required as there is no evidence that lactose intolerance occurs with any greater frequency in IBD patients than the general population. However, when the disease is active, your doctor may recommend a lactose free diet for a period of time.

For further information read the NASPGHAN Book Chapters on IBD, found on our website at: www.naspghan.org. On our site you can also locate a pediatric gastroenterologist in your area.

IMPORTANT REMINDER: This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general information and not as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.

LINKS:
Crohn’s and Colitis Foundation of America:
http://ccfa.org/info/diet?LMI=4.2
Children’s Digestive Health and Nutrition Foundation:
National Digestive Diseases Information Clearinghouse:
http://digestive.niddk.nih.gov/ddiseases/pubs/shortbowel/