

USANA Technical Bulletin

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Crohn's Disease

Description

- Crohn's disease is characterized by chronic inflammation of the digestive tract. It usually affects the small bowel (regional enteritis), and can also affect the colon (granulomatous colitis). The inflammation extends through all layers of the intestinal wall and can involve the adjacent lymph nodes, and mesentery. As the inflammation heals, it leaves scar tissue that thickens the bowel wall and narrows the passage way. Because the inflammation occurs segmentally, the bowel can become a patchwork of healthy and diseased segments. Serositis (inflammation of the serosa) also develops causing the inflamed bowel loops to adhere to other diseased or normal bowel loops, which results in bowel shortening.
- Symptoms can include diarrhea, periodic cramping, lower right abdominal pain, fever, malabsorption, anemia, fatigue, and losses in appetite and weight.¹
- A lack of nutrients from malabsorption may cause nutritional deficiencies, weaken the immune system, prolong healing time, and cause intestinal obstruction. Chronic bleeding may cause iron-deficiency anemia. If the inflamed intestinal wall leaks, peritonitis (a rare complication) can occur. If the disease continues for many years, bowel function gradually deteriorates, and can increase the risk for cancer.²

Causes

- Researchers are still investigating the causes of Crohn's disease, possible causes include lymphatic obstruction, infection, allergies, and other immune disorders. Crohn's is not infectious.¹

At Risk

- Crohn's disease is most prevalent in adults ages 20 to 40.
- Genetic factors may play a role; however, no pattern of inheritance has been identified.¹

Prevention and Management

- Measures to help control Crohn's include medications, dietary changes, and supplementation.
- Many suffering from Crohn's require surgery during the course of their illness.

- In periods of severe active inflammation hospitalization may be required, and TPN (total parenteral nutrition) administered. This is necessary to allow the bowel to rest.
- In some studies, a fiber rich, unrefined carbohydrate diet reduced the symptoms of Crohn's disease and decreased the amount and length of hospital admissions and intestinal surgeries.^{3,4}
- Nutritional deficiencies of vitamin K, copper, niacin, vitamin E, zinc, vitamin D, vitamin C, vitamin A, potassium, magnesium, folic acid, vitamin B12, calcium and iron, may occur with Crohn's disease.⁵ As appropriate, nutritional supplements should be utilized to correct deficiencies, reduce the inflammatory process and promote healing of the damaged mucosa (consult with your physician for guidance).
- All dietary allergens should be eliminated.⁶

Sources of Additional Information

- Crohn's and Colitis Foundation of America: 800-618-5583
- <http://www.fred.net/jdblake>

Abstracts

Kuroki F, Iida M, Tominaga M, Matsumoto T, Hirakawa K, Sugiyama S, Fujishima M. Multiple vitamin status in Crohn's disease. Correlation with disease activity. Dig Dis Sci 1993 Sep;38 (9):1614-1618. We measured serum, blood, or red cell concentrations of various vitamins in 24 patients with Crohn's disease who had been free from any nutritional treatment, and compared them with those in 24 healthy controls. Twelve of the patients were affected in the small bowel only, two in the large bowel only, and the remaining 10 in both the small and large bowel. The fat-soluble vitamins A and E were significantly decreased in patients with Crohn's disease compared to controls. Among the water-soluble vitamins, vitamins B1, B2 and B6 and folic acid were more depleted in patients with Crohn's disease than in the controls, whereas vitamins B12 and C, nicotinic acid, and biotin were not different between the two groups, and pantothenic acid was increased in patients with Crohn's disease. In addition, vitamin B2 and nicotinic acid showed a negative correlation with the Crohn's disease activity index. These findings suggest that there is a variety of vitamin deficiencies in Crohn's disease prior to treatment and also that concentrations of some vitamins, such as vitamin B2 and nicotinic acid, may reflect the severity of the disease.

References

- ¹Diseases. 2nd ed. Springhouse (PA):Springhouse Corporation; 1993. p 898.
- ² Balch JF and Balch PA. Prescription for Nutritional Healing. New York:Avery Publishing; 1991. p 147.
- ³ Brandes JW, Lorenz-Meyer H. [Sugar free diet: a new perspective in the treatment of Crohn's disease?]. Z Gastroenterol 1981;19(1):1-12.
- ⁴ Heaton KW et al. Treatment of Crohn's disease with an unrefined-carbohydrate, fibre-rich diet. Br Med J 1979;2:764-66.
- ⁵ Rosenberg IH, Bengoa JM, and Sitrin MD, Nutritional aspects of inflammatory bowel disease. Ann Rev Nutr 1985;5:463-84.
- ⁶Murray M and Pizzorno J. Encyclopedia of Natural Medicine. Rocklin (CA):Prima Publishing; 1991.