## Irritable bowel syndrome and ulcerative colitis-—an inflammatory disease

The New England Journal of Medicine, June 13, 1996 states "EFFECTS OF AN ENTERIC- COATED FISH-OIL PREPARATION ON RELAPSES IN CROHN'S DISEASE". Because fish oil (Omega-3) has **anti-inflammatory** actions, its use has been proposed in patients with several inflammatory diseases, including inflammatory bowel disease. "In this study, we investigated the effects of the new, enteric coated fish-oil preparation in the maintenance of remission in patients with Crohn's disease". In Canada the product is called "**FISHOL E.C.**" *Conclusions*: "In patients with Crohn's disease in remission, a novel enteric-coated fish-oil preparation is effective in reducing the rate of relapse". (N Engl J Med 1996; 334:1557-60)

Crohn's disease is characterized by chronic and long-lasting ulceration of a section or sections of the digestive tract. Symptoms of Crohn's disease include chronic diarrhea, pain in the upper and lower abdomen, fever, headaches, malabsorption (and consequently malnutrition), steatorrhea - the presence of excess fat in stool, loss of energy, appetite, and weight. Chronic bleeding may cause iron-deficiency anemia.

Microscopic intestinal **villi** produce enzymes that break down disaccharides (double sugars) to monosaccharides (single sugars). If **villi** are damaged undigested disaccharides that remain in the small intestines cause reversal of normal digestive and nutritional process. These double sugars provide a perfect medium for growth of undesirable microorganisms, both aerobic and anaerobic including bacteria, yeast and protozoa causing overgrowth in the small intestines and damage to tiny **villi** and **toxins**. This overgrowth may cause degradation of intestinal brush-border (disaccharides) and pancreatic enzymes. These enzymes may be replaced by Enteric Coated disaccharides (Carbase E.C.)

## SUGGESTED NUTRIENTS and ANTI-INFLAMMATORIES

- **FISHOL E.C. (Omega-3)** as anti-inflammatory: Two capsules 3 to 4 times daily.
- **CARBASE E.C.** enteric-coated disaccharide enzymes Sucrase, Lactase, Maltase and Isomaltase)
- **L-Glutamine** powder ½ to 1 teaspoon three to four times daily.
- **Zinc** up to 50 mg daily and glutathione 100 to 250 mg up to 3 times daily
- **N-acetylcystine** 500 mg three times daily (promotes healing and iron absorption)
- **Lipase** if steatorrhea present also Alkaline Salts E.C. help to activate pancreatic enzymes

## BEST Multiple Vitamin and Mineral chewable tablet- two daily

Special attention should be paid to food allergies and intolerance, thyroid function, parasites and H.Pylori.

Proper diet is very important- low in disaccharides

**Mega-B12-5000** orally active B12 (Methylcobalamin) One capsule daily and Lipoic acid capsules 100 mg to 250 mg up to 3 times daily.