Your Monthly Update

Dear Colleague

Welcome to the April 2008 newsletter from Pure Bio Ltd.

Did you know. . .?

17% of flight-related DVT arise during *short-haul* flights. The blood clots develop in the first two or three hours of flight, but become larger over time. Drinking water during a long-haul flight is likely to *increase* the viscosity of the blood, whilst electrolyte fluids e.g. sports drinks will avoid this risk. Pycnogenol enhances blood flow, whilst Nattokinase has been shown to directly break down blood clots. Tomato, garlic and ginkgo biloba all thin the blood.

Our topic for this month is:

Crohn's Disease

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Fish oil (enteric-coated, free-fatty-acid form) Vitamin D	
Secondary	DHEA Multivitamin-mineral (for prevention or treatment of deficiency only) Saccharomyces boulardii Vitamin K Zinc	
Other	Enzymes Folic acid Lipase Vitamin A Vitamin B12	Agrimony Aloe Chamomile Cranesbill Curcumin Green tea Licorice Marshmallow Oak Slippery elm Witch hazel Yarrow
Primary – Reliable and relatively consistent scientific data showing a substantial health benefit. Secondary – Contradictory, insufficient, or preliminary studies suggesting a health benefit or		

minimal health benefit.

Other – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

Definition

Crohn's disease is a chronic inflammatory disease that can affect any portion of the intestinal tract, but is most commonly seen (roughly half of all cases) in the last part of the small intestine otherwise called the terminal ileum and the caecum; i.e. the ileocecal region. Other cases may affect one or more of: the colon only, the small bowel only (duodenum, jejunum and/or ileum), the anus, stomach or the oesophagus. In contrast with Ulcerative Colitis, Crohn's disease usually doesn't affect the rectum, but frequently affects the anus instead.

Complications outside of the intestine can occur.

There are periods of remission, when patients are symptom-free; followed by relapses, when symptoms flare up. The cause of Crohn's Disease is still unknown, but there is a hereditary tendency. Some cases are triggered by gastroenteritis and stress can cause flare ups.

It is believed that an immune reaction to bacteria in the bowel is an important factor in Crohn's disease. Diet is a critical factor and dietary treatment often enables patients to heal their body naturally without the distressing side effects of prescription drugs. Many find relief when avoiding wheat, yeast and milk. (see dietary modification)

Symptoms

- **Diarrhoea - sometimes with blood**
- **Abdominal pain and tenderness**
- **Weight loss**
- **Fever**
- **Fatigue**
- **Sores and abscesses around the anus, which have a discharge.**
- **Other possible symptoms (not involving the intestine) - ulcers on the tongue or inside the cheek, painful, inflamed eyes, painful, stiff or swollen joints, sore, red lumps on the skin**

Dietary Modification

A high-fibre, low-sugar diet led to a 79% reduction in hospitalizations compared with no dietary change in one group of people with Crohn's disease. Another trial compared the effects of high- and low-sugar diets in people with Crohn's disease. People with a more active disease were reported to fare better on the low-sugar diet than those eating more sugar. Several people on the high-sugar diet had to stop eating sugar because their disease grew worse. While in-depth details of how sugar injures the intestine are still being uncovered, general recommendation is the elimination of all sugar (including soft drinks and processed foods with added sugar) from the diets of those with Crohn's disease.

A diet high in animal protein and fat (from foods other than fish) has been linked to Crohn's disease in preliminary research. As with many other health conditions, it may be beneficial to eat less meat and dairy fat and more fruits and vegetables.

Some people with Crohn's disease have food allergies and have been reported to do better when they avoid foods to which they are allergic. One study found that people with Crohn's disease are most likely to react to cereals, dairy, and yeast. Increasingly, baker's yeast (found in bread and other bakery goods) has been implicated as a possible trigger for Crohn's disease. Yeast and some cheeses are high in histamine, which is involved in an allergenic response. People with Crohn's disease lack the

ability to metabolize histamine at a normal rate, so the link between yeast and dairy consumption and Crohn's disease occurrence may not be coincidental. Whilst the allergy theory cannot account for all cases of Crohn's disease, general avoidance of high histamine-containing foods should be a general guideline for sufferers.

Elemental diets contain amino acids (rather than whole proteins, which can stimulate allergic reactions) and are therefore considered hypoallergenic. They have been used extensively as primary therapy in people with Crohn's disease, with remission rates comparable to those of steroid drugs.

In one trial, people with Crohn's disease were asked which foods aggravated their symptoms. Those without ileostomies found nuts, raw fruit, and tomatoes to be most problematic, though responses varied from person to person, and other reports have displayed different lists. People with Crohn's disease wishing to identify and avoid potential allergens should consult a practitioner.

There is preliminary evidence that people who eat fast foods at least twice per week more than triple their risk of developing Crohn's disease.

Lifestyle Modification

People with Crohn's disease are more likely to smoke, and there is evidence that continuing to smoke increases the rate of disease relapse.

Light exercise such as walking, cycling, rebounding may be helpful for people with Crohn's disease. One study revealed that those who took a brisk walk four times per week notice an improved sense of well-being and quality of life.

Nutritional Supplement Treatment Options

Vitamin D malabsorption is common in Crohn's and can lead to a deficiency. Successful treatment with vitamin D for osteomalacia triggered by Crohn's disease has been reported. Another study found 1,000 IU per day of vitamin D prevented bone loss in people with Crohn's, while an unsupplemented group experienced significant bone loss. Vitamin D status should be first evaluated by blood tests and dosaging of vitamin D supplementation should be carefully monitored.

- ***Vitamin D3 400i.u. PE***
- ***Vitamin D3 1000i.u. PE***
- ***Vitamin D3 oil. PE***

EPA/DHA - Inflammation within the gut occurs in people suffering from Crohn's disease. EPA and DHA have potent anti-inflammatory activity. A two-year trial compared the effects of having people with Crohn's disease eat 3.5 to 7 ounces of fish high in EPA and DHA per day or having them eat a diet low in fish. In that trial, the fish-eating group had a 20% relapse rate compared with 58% among those not eating fish. Salmon, herring, mackerel, albacore tuna, and sardines are all high in EPA and DHA.

In a double-blind trial, people with Crohn's disease who took supplements providing 2.7 g of EPA/DHA per day had a recurrence rate of 26% after one year, compared to a 59% recurrence rate among those taking placebo.

- ***EPA/DHA capsules PE***
- ***EPA/DHA liquid PE***

DHEA - In a preliminary trial, six of seven people with Crohn's disease went into remission after taking 200 mg per day of DHEA for eight weeks. This large amount of DHEA has the potential to cause adverse side effects and should only be used under the supervision of a doctor. *(DHEA is a prescribable medicine).*

Saccharomyces boulardii - In double-blind research, diarrhoea caused by Crohn's disease has partially responded to supplementation with the beneficial bacterium *Saccharomyces boulardii.* Although the amount used in this trial, 250 mg TID, was helpful, as much as 500 mg QID has been administered in research successfully using *Saccharomyces boulardii* as a supplement with people suffering from other forms of diarrhoea - *Saccharomyces boulardii PE*

Vitamin K - In people with Crohn's disease, vitamin K deficiency can result from malabsorption due to intestinal inflammation or bowel surgery, from chronic diarrhoea, or from dietary changes necessitated by food intolerance. In addition, Crohn's disease is often treated with antibiotics that have the potential to kill beneficial vitamin K–producing bacteria in the intestines. Vitamin K levels were significantly lower in a group of people with Crohn's disease than that normally found in healthy people. Moreover, the rate of bone loss in the patients with Crohn's disease increased with increasing degrees of vitamin K deficiency. When combined with earlier evidence that vitamin K is required to maintain healthy bones, this study suggests that vitamin K deficiency is a contributing factor to the accelerated bone loss that often occurs in people with Crohn's disease.

Multivitamin-mineral - Crohn's disease often leads to malabsorption. As a result, deficiencies of many nutrients are common. For this reason, it makes sense for people with Crohn's disease to take a high potency multivitamin-mineral supplement. In particular, deficiencies in zinc, folic acid, vitamin B12, vitamin D, and iron have been reported. Zinc, folic acid, and vitamin B12 are all needed to repair intestinal cells damaged by Crohn's disease. Some practitioners recommend 25 to 50 mg of zinc (balanced with 2 to 4 mg of copper), 800 mcg of folic acid, and 800 mcg of vitamin B12. Iron status should be evaluated by blood tests before considering supplementation.

Vitamin A is needed for the growth and repair of cells that line both the small and large intestine. At least two case reports describe people with Crohn's disease who have responded to vitamin A supplementation. Recommended dosage is 25,000 - 50,000 i.u. per day for adults with Crohn's disease. An amount this high should never be taken without qualified guidance, nor should it be given to a woman who is or could become pregnant - *Vitamin A PE*

Pancreatic Enzymes - People with Crohn's disease may be deficient in pancreatic enzymes, including lipase. In theory, supplementing with enzymes might improve the nutrient malabsorption that is often associated with Crohn's disease.

- ***Pancreatic Enzyme Formula PE***
- ***Pancreatic VegEnzymes L PE***

Botanical Treatment Options

Practitioners sometimes use a combination of herbs to soothe inflammation throughout the digestive tract. Marshmallow and slippery elm are mucilaginous plants that help soothe inflamed tissues. Cranesbill is an astringent. Clinical trials using this combination have not been conducted.

A variety of anti-inflammatory herbs historically have been recommended by practitioners for people with Crohn's disease. These include yarrow, chamomile, licorice, and aloe juice. No research has been conducted to validate the use of these herbs for Crohn's disease.

Curcumin is a compound in turmeric *(Curcuma longa)* that has been reported to have anti-inflammatory activity. In a preliminary trial, four of five people with Crohn's disease had an improvement in their condition after supplementing with curcumin for three months. The amount used was 360 mg TID for one month, followed by 360 mg QID for two months.

Tannin-containing herbs may be helpful to decrease diarrhoea during acute flare-ups and have been used for this purpose in traditional medicine. A preliminary trial using isolated tannins in the course of usual drug therapy for Crohn's disease found them to be more effective for reducing diarrhoea than was no additional treatment. Tannin-containing herbs of potential benefit include agrimony (*Agrimonia* spp.), green tea, oak, witch hazel and cranesbill. Use of such herbs should be discontinued before the diarrhoea is completely resolved; otherwise the disease may be aggravated.

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