

# Your Monthly Update

#### Dear Colleague

Welcome to the April 2010 newsletter from Pure Bio Ltd.

## Did you know:

Alpha-Lipoic acid (ALA) can dramatically protect the body from the increase in free radical production following exercise; and thus improve recovery times in fitness enthusiasts. ALA is unique as an antioxidant as it is both fat-soluble and water-soluble, so protects against oxidative stress throughout the body.

The chosen topic for this month is:

# Raynaud's Disease

## **Protocol Summary**

Ranking	Nutritional Supplements	Botanical Medicine
Secondary	Fish oil Inositol hexaniacinate (vitamin B3)	
Other	Evening primrose oil L-carnitine Magnesium	<u>Ginkgo</u>

**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.

# **Symptoms**

Raynaud's phenomenon is the term used to describe a condition that involves attacks of spasm in the arterioles, especially in the hands and feet which turn white, blue and then red. Cold or emotional upset often stimulates the spasms which may last from minutes to hours. The pain may be excruciating with sensations of tingling, numbness and burning. It is most often seen in young women and rarely leads to any serious consequences such as skin ulcers or gangrene. When the signs and symptoms occur secondary to another disease, the term 'phenomenon' is used. When they are seen unassociated with other diseases (i.e. idiopathic), it is referred to as 'Raynaud's disease.'

As warmth and circulation return to the fingers, they turn red, tingle or burn with pain. Only in severe cases do ulcers form on the fingertips as a result of the poor circulation. Severe, long-standing cases can cause the skin to take on a damaged, shiny and smooth appearance.

#### Causes

The sudden lack of circulation that produces episodes of Raynaud's disease is caused by a spasm in the arteries which supply the fingers. It is similar to the blood-vessel constriction that occurs in migraine headaches. Symptoms may originate from an injury, or be part of another connective tissue or artery-related disease e.g. scleroderma, lupus, thyroiditis, hypertension, thoracic outlet syndrome, rheumatoid arthritis or arteriosclerosis. In other instances, the underlying problem is obscure, possibly the result of a nervous system disorder, coupled with hormonal influences. Smoking constricts blood vessels causing cold hands and feet almost immediately. The contraceptive pill, with its oestrogen content, also worsens Raynaud's symptoms. Food allergies cause symptoms in some cases and should be ruled out.

#### **Nutrition**

Unrefined, cold-pressed flax seed oil is an excellent source of essential fatty acids which help improve blood circulation. Unrefined, cold-pressed nut and seed oils also provide vitamin E, which helps provide relief from the numbness typical of Raynaud's disease. Other good sources of vitamin E are raw wheat germ and avocados, which can be added to salads. Include parsley, beets, carrots, artichokes, watercress or lemons in the diet, as these are liver-cleansing foods which help remove toxins from the blood and improve circulation.

Other liver-cleansing foods are parsnips, dandelion green, watercress and burdock root. Ideal fresh juices include carrot, spinach, beet, cucumber and lemon. Citrus peel, figs, honey and magnesium-rich foods such as spinach, parsley, alfalfa and other green vegetables rich in chlorophyll are also helpful. Avoid cold or cooling foods, beef, pork, alcohol, hot sauces, spicy, fried or processed foods.

# **Lifestyle Modification**

Dressing warmly and wearing gloves or mittens often help prevent attacks of Raynaud's disease. Individuals with Raynaud's disease should not smoke, because

nicotine decreases blood flow to the extremities. Women with Raynaud's disease should not use birth control pills, as this method of contraception can adversely affect circulation.

## **External/Physical Therapies**

Foot baths; moist, warm foot and leg wraps; and lukewarm-to-warm clay wraps kept on overnight are effective treatments for this condition.

## Other therapies

In severe cases, sympathectomy (surgical interruption of sympathetic nerve pathways) may be recommended. People with Raynaud's disease are commonly advised to dress warmly during the winter and to avoid unnecessary exposure to cold, especially of the affected parts.

# **Nutritional Supplement Treatment Options**

In a double-blind trial, supplementation with 12 large capsules of <u>fish oil</u> per day (providing 4 grams of eicosapentaenoic acid [EPA] per day) for 6 or 12 weeks reduced the severity of blood-vessel spasm in 5 of 11 people with Raynaud's phenomenon. Fish oil was effective in people with primary Raynaud's disease, but not in those whose symptoms were secondary to another disorder.

Inositol hexaniacinate—a variation on the B vitamin niacin—has been used with some success for relieving symptoms of Raynaud's disease. In one study, 30 people with Raynaud's disease taking 4 grams of inositol hexaniacinate each day for three months showed less spasm of their arteries. Another study, involving six people taking 3 grams per day of inositol hexaniacinate, again showed that this supplement improved peripheral circulation. *People taking this supplement in these amounts should be under the care of an experienced practitioner*.

Fatty acids in <u>evening primrose oil</u> (EPO) inhibit the formation of the prostaglandins that promote blood vessel constriction. A double-blind trial of 21 people with Raynaud's disease found that, compared with placebo, supplementation with EPO reduced the number and severity of attacks despite the fact that blood flow did not appear to increase. Researchers have used 3,000–6,000 mg of EPO per day.

In one study, 12 people with Raynaud's disease were given <u>L-carnitine</u> (1 gram TID) for 20 days. After receiving L-carnitine, these people showed less blood-vessel spasm in their fingers in response to cold exposure.

Abnormalities of <u>magnesium</u> metabolism have been reported in people with Raynaud's disease. Symptoms similar to those seen with Raynaud's disease occur in people with magnesium deficiency, probably because a deficiency of this mineral results in spasm of blood vessels.

Supplementing <u>vitamin E</u> into the diet often reduces even severe symptoms since it improves circulation and the supply of oxygen to the tissues. Supplementation should be continued long-term for full effect. Vitamin E oil can also be applied locally, by piercing a capsule and applying the contents.

Another supplement which improves microcirculation is <u>coenzyme Q10</u>. Green food supplements high in chlorophyll (e.g. <u>Spirulina</u>, <u>Chlorella</u>) are also beneficial in Raynaud's disease, as they combat inflammation, improve circulation and purify the blood.

<u>Quercetin</u> and <u>pycnogenol</u> or <u>grape seed extract</u> are bioflavonoids which control inflammation.

# **Botanical Treatment Options**

<u>Ginkgo Biloba</u> has been reported to improve the circulation in small blood vessels. One preliminary trial found that 160 mg of standardized Ginkgo extract per day reduced pain in people with Raynaud's disease. Ginkgo is often used as a standardized extract (containing 24% ginkgoheterosides and 6% terpene lactones). Recommended dosage of Ginkgo for Raynaud's is 120–160 mg per day.

# Homeopathy

For relief of symptoms during an attack, choose one of the following in a 6c strength, dissolving 2 tablets under the tongue and repeating every fifteen minutes until relief is obtained or for up to four doses. These remedies are not designed to be taken daily for an extended period of time. Since Raynaud's disease is a persistent problem, a more comprehensive remedy is usually needed to strengthen the body and prevent recurrences. Seek the help of an experienced homeopath.

- Pulsatilla affords relief if allowing the hand to hang or applying warmth aggravates the condition.
- ➤ <u>Carbo vegetabilis</u> may help cold, blue fingers, numbness and burning pains that are brought on by the cold. Oddly, fanning may help restore circulation.
- Arsenicum is also used for burning pains triggered or worsened by the cold. In this case, the hands are usually swollen and itchy.

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