



Your Monthly Update

Dear Colleague

Welcome to the December 2008 newsletter from Pure Bio Ltd.

Please note that the office will be open at the following times during the Christmas and New Year period:

Tuesday 23rd December 2008 normal office hours Wednesday 24th December 2008 09.00 - 12.00Thursday 25th December 2008 **CLOSED** Friday 26th December 2008 **CLOSED** Monday 29th December 2008 normal office hours Tuesday 30th December 2008 normal office hours 09.00 - 12.00Wednesday 31st December 2008 Thursday Ist January 2009 **CLOSED**

Normal office hours will resume on Friday 2nd January 2009.

Orders will, as usual, be sent out using first class business mail, but please allow at least 3 extra working days for deliveries to reach their destination during this period.

All of the staff at Pure Bio would like to take this opportunity of thanking you for your much valued custom over the past year and to extend to you and your families and staff the very warmest wishes for a happy and peaceful Christmas season.

Don't forget that orders can be placed on our website on www.purebio.co.uk at any time during the Christmas period.

Did you know:

Olive leaf extract, with its active constituents, polyphenolics, has an antioxidant potency 400% higher than vitamin C. The important polyphenolic oleuropein is actually removed from green and black olives due to its bitter taste. Olive leaf extract is also believed to have antimicrobial, anti-inflammatory and anti-thrombotic properties.

The chosen topic for this month is:

Gum disease / Gingivitis

Protocol Summary

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Folic acid (rinse only) Vitamin C (only if deficient)	
Secondary	Coenzyme Q10 Hyaluronic acid Vitamin C plus flavonoids	Bloodroot plus zinc (toothpaste) Mouthwash containing sage oil, peppermint oil, menthol, chamomile tincture, expressed juice from echinacea, myrrh and caraway oil Neem
Other	Calcium Flavonoids Folic acid (in pill form)	Chamomile Echinacea

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

Gingivitis is an inflammation that causes the gums to become red, swollen and spongy. Gums that bleed easily often indicate gingivitis. In time, the inflammation causes pockets to form and deepen between the teeth and gums, although the discomfort is slight.

Gingivitis is also a sign of periodontal disease, which affects the tooth structure and jaw bone, causing loose teeth, receding gums and tooth abscesses. Chronic bad breath usually signals poor mouth hygiene and / or periodontal disease. If allowed to continue, periodontal disease leads to tooth loss.

The Facts

Research has shown that gum disease is an indicator of systemic and chronic disease, including diabetes, cancer, heart disease and mental decline. Some research also indicates that root-canal fillings cause the leakage of bacteria that could lead to arthritis and other auto-immune diseases. There is debate as to whether gum disease is a sign of a compromised immune system that, in turn, leads to systemic illness; or whether periodontal problems are a direct cause of other systemic illnesses

Gingivitis Causes

Gingivitis and periodontal disease are caused by plaque build-up and food particles lodged between teeth - usually the result of poor mouth hygiene. Failing to brush the teeth before bed and in the morning, and not using dental floss for food particles stuck between the teeth, will cause plaque build-up and cavities. If regular visits to the

dentist are missed, plaque build-up and other dental problems like cavities and abscesses continue to erode teeth, cause gum problems and hasten tooth loss. Tooth crowding can also create problem areas for the gums and cause pockets to develop.

Nutrition is an important contribution to gum health. Apples and carrots are foods that clean the teeth, while soft cakes and breads lodge between the teeth and allow bacteria to increase plaque build-up. A lack of vitamin C causes the gums to become swollen and spongy and bleed easily. Even emotional stress can increase susceptibility to gum problems, due to decreased salivation during stress. Mouth breathing also reduces salivation. Silver amalgam dental fillings could be causative, since toxic metal poisoning can cause inflamed gums and loose teeth.

Gingivitis Nutrition

- > Chewing apples, carrots and other root vegetables naturally removes plaque.
- Avoid sugar, which increases plaque accumulation and inhibits the function of white blood cells.
- Citrus fruits contain vitamin C, which is extremely important in the treatment of gingivitis because it maintains collagen, stimulates immune function and promotes healing. Fruit types are best eaten separately and on an empty stomach.
- Dairy products from cows should be minimal research indicates that milk is even more detrimental to the teeth and gums than sugar. Instead use raw goat and sheep cheeses and milk.
- Eat the white skin of citrus fruits for the flavonoids they contain, which are also beneficial in stabilizing collagen structures and reducing inflammation. Other foods rich in flavonoids are blueberries and onions.
- Drink plenty of water. The ideal amount is ½ fl. oz for every pound of body weight.
- > Unsweetened cranberry juice is an excellent source of vitamin C.
- In general, it is better for the teeth to eat little and often, rather than one or two heavy meals per day.

Other therapies

Treatment usually involves a regimen of good oral hygiene, including correct tooth brushing, flossing and professional cleanings. Severe cases might require gum surgery.

Nutritional Supplement Treatment Options

Folic Acid - A 0.1% solution of folic acid used as a mouth rinse (5 ml BID for 30 to 60 days) has reduced gum inflammation and bleeding in people with gingivitis in double-blind trials. The folic acid solution should be rinsed in the mouth for one to five minutes and then spat out. Folic acid was also found to be effective when taken in capsule or tablet form (4 mg per day), though in another trial studying pregnant women with gingivitis, only the mouthwash—and not folic acid in pill form—was effective. However, this may have been due to the body's increased requirement for folic acid during pregnancy.

Phenytoin (Dilantin®) therapy causes gum disease (gingival hyperplasia) in some people. A regular program of dental care has been reported to limit or prevent gum disease in people taking phenytoin. Double-blind research has shown that a daily oral rinse with a liquid folic acid preparation inhibited phenytoin-induced gum disease more than either folic acid in pill form or placebo.

<u>Vitamin C</u> - People who are deficient in vitamin C may be at increased risk for periodontal disease. When a group of people with periodontitis who normally consumed only 20–35 mg of vitamin C per day were given an additional 70 mg per day, objective improvement of periodontal tissue occurred in only six weeks.

For people who consume adequate amounts of vitamin C in their diet, several studies have found that supplemental vitamin C has no additional therapeutic effect. Research, including double-blind evidence, shows that vitamin C fails to significantly reduce gingival inflammation in people who are not vitamin C deficient. In one study, administration of vitamin C plus flavonoids (300 mg per day of each) did improve gingival health in a group of people with gingivitis; there was less improvement, however, when vitamin C was given without flavonoids. Preliminary evidence has suggested that flavonoids by themselves may reduce inflammation of the gums.

<u>CoQ10</u> - Preliminary evidence has linked gingivitis to a coenzyme Q10 (CoQ10) deficiency. Some researchers believe this deficiency could interfere with the body's ability to repair damaged gum tissue. In a double-blind trial, 50 mg per day of CoQ10 given for three weeks was significantly more effective than a placebo at reducing symptoms of gingivitis.

<u>Hyaluronic acid</u> is an important connective tissue component in the gums. Double-blind studies of topical hyaluronic acid treatments have shown that application five times per day to the gum tissues helps reduce bleeding tendency and other indicators of gingivitis. However, plaque removal is still necessary for best results.

<u>Calcium</u> - Some, but not all, research has found that giving 500 mg of calcium BID for six months to people with periodontal disease results in a reduction of symptoms (bleeding gums and loose teeth). This may be best prescribed in conjunction with silica. Recommended dosage is Calcium, 500 mg three times daily and Silica, 1,000 mg daily

<u>Vitamin A</u> is important for healthy mucous membranes. <u>Vitamin E</u> acts to support the healing of mucous membranes. <u>Niacin</u> has also been shown to be effective at reducing gingivitis.

Botanical Treatment Options

<u>Bloodroot</u> contains alkaloids, principally sanguinarine, that are sometimes used in toothpaste and other oral hygiene products because they inhibit oral bacteria. Sanguinarine-containing toothpastes and mouth rinses should be used according to manufacturer's directions. A six-month, double-blind trial found that use of a bloodroot and zinc toothpaste reduced gingivitis significantly better than placebo. However, concerns exist about the long-term safety of bloodroot.

Neem - In a double-blind trial, 1 gram of neem leaf extract in gel BID was more effective than chlorhexidine or placebo gel at reducing plaque and bacteria levels in the mouth in 36 Indian adults. A similar trial found neem gel superior to placebo and equally effective as chlorhexidine at reducing plaque and bacteria levels in the mouth.

A mouthwash combination that includes <u>sage oil</u>, <u>peppermint oil</u>, <u>menthol</u>, <u>chamomile tincture</u>, expressed juice from <u>echinacea</u>, <u>myrrh tincture</u>, <u>clove oil</u> and <u>caraway oil</u> has been used successfully to treat gingivitis. In cases of acute gum inflammation, 0.5 ml of the herbal mixture in half a glass of water TID is recommended by some herbalists. This herbal preparation should be swished slowly in the mouth before spitting out. To prevent recurrences, slightly less of the mixture can be used less frequently.

Of the many herbs listed above, chamomile, echinacea, and myrrh should be priorities. These three herbs can provide anti-inflammatory and antimicrobial actions critical to successfully treating gingivitis.

For rebuilding damaged gums, rinse mouth with horsetail tea and take 1 tbsp. of horsetail juice or 10-15 drops of horsetail tincture with water three times daily.

To freshen breath, rinse mouth with peppermint tea.

Massage gums with myrrh tincture.

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