Your Monthly Update

Dear Colleague

Welcome to the May 2011 newsletter from Pure Bio Ltd.

Did you know:

Regular consumption of fish and omega-3 fatty acids is associated with a significantly reduced risk for the development of age-related macular degeneration (AMD) in women, according to the results of a study reported online *March 14 in the Archives of Ophthalmology.*

The chosen topic for this month is:

Hay fever

Protocol Summary

Ranking	Nutritional Supplements	Botanical Medicine
Primary		Butterbur
Secondary	Probiotics Vitamin E	Horny Goat Weed
Other	Quercitin Vitamin C	Nettle Tylophora Licorice Cassia Ginger HayMax™ - *topical application*

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

Hay fever is a seasonal allergic reaction to a trigger that is typically only present for part of the year, most commonly the spring. The allergic reaction is most commonly to pollen, trees, weeds and grasses.

Hay fever is the most common of all the allergic diseases - about 15 per cent of the population in industrialised countries suffer from this condition. Symptoms usually appear in childhood first and then lessen by the age of 30 or 40.

Symptoms

Different microscopic substances get into the nose and cause the body to produce antibodies and release histamine. The histamine then irritates the upper respiratory passages, making them swell and producing the typical hay fever symptoms.

Symptoms of seasonal allergies include sneezing; runny nose; nasal congestion; itching of the nose and eyes; dark circles under the eyes; loss of smell and / or taste; and post-nasal drip. Not all people experience all of the symptoms of hay fever, and in some people, only one symptom will predominate.

Causes

Pollens are released from flowering plants and are carried by the wind or insects to cross-pollinate other plants of the same type for reproductive purposes. When pollen is present in the air, it can land in a person's eyes, nose, lungs and skin to set up an allergic reaction.

Pollens that are spread by wind are the usual precursors of seasonal allergies, while pollens that rely on insects to be carried from plant to plant are almost never the cause of hay fever. Most plants with bright, vibrant flowers (such as roses) are insect-pollinated and therefore do not cause seasonal allergies.

Pollen can travel long distances and the levels in the air can vary from day to day. The pollen level can be quite different in various areas of a particular city or region. Levels of pollen tend to be highest from early morning to mid-morning, from 5am to 10am.

Spring hay fever is caused by pollen from trees, which can start pollinating any time from January to April, depending on the climate and location. Trees that are known to cause severe allergies include oak, olive, elm, birch, ash, hickory, poplar, sycamore, maple, cypress and walnut.

In certain areas of the world, some weeds will also pollinate in the springtime.

Grass pollen is typically the main cause of late spring and early summer hay fever. Grass pollen is highest at these times, although grass may cause allergies through much of the year if someone is mowing the lawn or lying in the grass.

Lifestyle Modification

People who suffer with hay fever will invariably have a predisposition to excessive release of histamine; therefore minimizing the intake of foods that are naturally high in histamine will automatically reduce the symptoms of hay fever. Consult your practitioner for a list of high histamine-containing foods.

People with lactose intolerance may notice that they feel more congested after consuming dairy products. Preliminary studies suggest that some people with allergies to grass pollens may also react to tomatoes, peanuts, wheat, apple, carrot, celery, peach, melon, eggs and pork, and that people with ragweed allergies may also react to foods in the Cucurbitaceae family, such as cucumber and melon.

An elimination-and-challenge diet can be conducted to identify any food sensitivities. It involves the removal of suspected foods from the diet for at least a week, followed by a systematic re-introduction of these foods to isolate any foods that may be aggravating hay fever symptoms. This process should be undertaken under the guidance of a practitioner.

Additional therapies

Acupuncture

In one German study, 52 people with hay fever received acupuncture (once a week) and a Chinese herbal tea designed to address allergic symptoms (three times a day) or sham acupuncture and a regular herbal tea. After 6 weeks, people who received the acupuncture and herbal treatment noticed an 85 percent improvement on a "global assessment of change" scale compared to 40 percent in the control group.

In another study, 72 children with hay fever received either acupuncture (twice a week) or sham acupuncture. After eight weeks, the real acupuncture was more effective at improving symptoms and was associated with more symptom-free days compared to sham acupuncture.

HayMax™

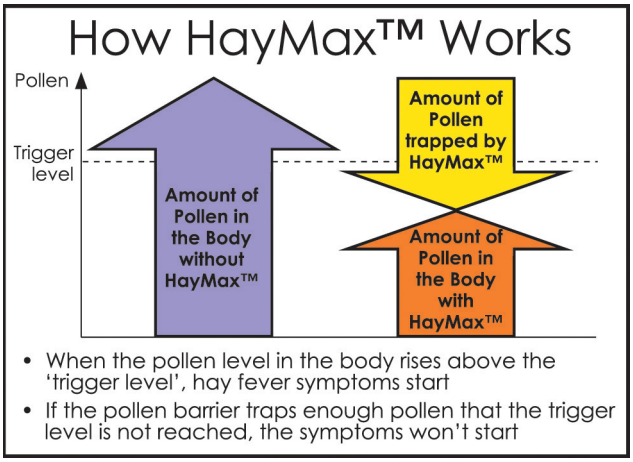
HayMax™ is an effective organic, natural and simple to use pollen barrier balm that is applied to the base of the nose to reduce pollen entering the body. (HayMax™ can also be used against house dust, dust mites, animal hairs and dander, and other allergens)

HayMax™ is made from 100% top quality certified organic ingredients - beeswax, essential oil, aloe vera leaf juice powder and sunflower oil.

HayMax™ does not cure the allergy or hayfever, but rather stops the cause of the hayfever - by stopping the pollen from entering the body, it can reduce or even eliminate the sneezing and itchy eyes, throat and ears associated with hayfever.

HayMax™ has been shown effective in both scientific studies and user trials. It is certified organic by the Soil Association.

How HayMax™ works:



Nutritional Supplement Treatment Options

Quercetin – *500 – 1000mg daily.* Quercetin is an antioxidant that belongs to a class of water-soluble plant substances called flavonoids. Quercetin is thought to prevent the release of histamine from immune cells called mast cells.
Quercetin is found naturally in certain foods, such as apples (with the skin on), berries, red grapes, red onions, capers, and black tea.

Hesperidin – *250 – 500mg daily.* Hesperidin is also a bioflavonoid that, like Quercitin, inhibits the release of histamine from mast cells.

Beta-carotene – *according to practitioner instruction*. Beta-carotene is a member of the plant pigments called carotenoids, the most popular being beta-carotene. A lack of carotenoids in the diet is thought to promote inflammation in the upper respiratory tract. Good sources of carotenoids include apricots, carrots, pumpkin, sweet potato, spinach, kale, butternut squash, and collard greens.

Omega-3 Fatty Acids (EPA/DHA, Flax Seed, Neuromins) – *1000 – 2000mg daily.* Omega-3 fatty acids reduce the production of inflammatory chemicals in the body (prostaglandin E2 and inflammatory cytokines).

Although there are no randomized controlled trials showing that omega-3 fatty acids are effective treatments for hay fever, there are associations. For example, one German study involving 568 people found that a high content of omega-3 fatty acids in red blood cells or in the diet was associated with a decreased risk of hay fever.

At the same time, reducing foods rich in arachidonic acid might be wise. One study found an association between arachidonic acid and hay fever. Although arachidonic acid is essential for health, too much has been found to worsen inflammation. This means reducing intake of egg yolks, red meat, and shellfish.

Probiotics - In a double-blind trial, supplementation with a specific probiotic strain (***Bifidobacterium longum*** strain BB536 – found in Probiotic 5) during the pollen

season significantly decreased symptoms such as sneezing, runny nose, nasal blockage, compared with a placebo.

Vitamin E - *800 i.u. daily.* In a study of 58 people with hay fever, adding vitamin E to regular anti-allergy treatment during the pollen season significantly reduced the severity of hay fever symptoms.

Vitamin C – *1000 – 2000 mg daily.* Vitamin C has antihistamine activity and supplementation in preliminary research has been reported to help people with hay fever, although this has not been supported in placebo-controlled trials.

Botanical Treatment Options

Butterbur - *1 tablet standardized to contain 8 mg petasin extract BD or TDS for two weeks* . Butterbur (*Petasites hybridus*) is being extensively studied as a natural allergy treatment. Butterbur is thought to work in a similar way to allergy medications by blocking the action of histamine and leukotrienes, inflammatory chemicals involved in allergic reactions.

Two double-blind studies have compared butterbur extract to standard antihistamine drugs in people with hay fever. The first compared it with the drug cetirizine (Zyrtec) and found the drug and butterbur extract relieved symptoms equally well. However, cetirizine caused significantly more adverse effects, including a high rate of drowsiness. The second study compared butterbur extract with fexofenadine (Allegra) and placebo. Butterbur extract was as effective as fexofenadine at relieving symptoms, and both were significantly better than placebo.

Side effects of butterbur may include indigestion, headache, fatigue, nausea, vomiting, diarrhoea, or constipation. Pregnant or nursing women, children, or people with kidney or liver disease should not take butterbur.

Butterbur is in the ragweed plant family, so people who are allergic to ragweed, marigold, daisy, or chrysanthemum should not use butterbur.

Horny Goat Weed - *5 grams simmered in 250 ml (1 pint) of water for 10 to 15 minutes, TDS.* People with hay fever had better symptomatic relief and reductions in levels of immune cells associated with allergic reactions (eosinophils) when treated with an herbal formula containing horny goat weed compared with a formula without horny goat weed and another herb by itself.

Tylophora - *Spray a lotion containing 3.7% citronella in a slow-release formula every morning for six days per week*. Tylophora is an herb used by Ayurvedic doctors in India to treat people with allergies. It contains compounds that have been reported to interfere with the action of mast cells in the body. Ayurvedic practitioners recommend 200–400 mg of the dried herb daily or 1–2 ml of the tincture per day for up to two weeks.

Nettle - *0.5 to 8 grams daily, or tincture equivalent*. In an isolated double-blind trial, nettle leaf led to a slight reduction in symptoms of hay fever—including sneezing and itchy eyes.

Licorice, **Cassia bark** and **Ginger** have all been shown to reduce symptoms, such as sneezing, for people with hay fever.

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