



Your Monthly Update

Dear Colleague

Welcome to the first newsletter in 2012 from Pure Bio Ltd.

Did you know:

In a report of 50 patients with cataracts, a combination of bilberry (180mg BD) – standardized to 25% anthocyanosides – and vitamin E (100mg BD) for four months stopped the progression of cataracts in 96% of treated patients – *Altern Med Rev*, 2001; 6: 141-66

It's that time of year again, when almost everyone around you has some form of cough, cold, or other non-specific upper respiratory tract infection. With this in mind, we felt that the common cold would be the most appropriate feature for this month.

Don't forget our website on www.purebio.co.uk. We always welcome feedback and suggestions.

Common Cold/Sore Throat

Protocol Summary

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Vitamin C Zinc (as lozenges)	Echinacea (for symptoms; effective only for adults)
Secondary	Propolis Zinc (as nasal spray)	Garlic Geranium (<i>Pelargonium sidoides</i>) marshmallow root, licorice root
Other		Asian ginseng Astragalus Eleuthero (Siberian Ginseng) Eucalyptus (oil) Goldenseal Marshmallow

		Meadowsweet Mullein Myrrh Peppermint Red raspberry Sage Schisandra Slippery elm 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.

Symptoms

Typically symptoms of the common cold include: sore throat, cough, sneezing, running nose, headache, fatigue, and a low-grade fever. The symptoms of the common cold tend to last for around a week.

Since colds are caused by more than 100 different viruses, antibiotics are ineffective as a treatment although they are sometimes prescribed to treat secondary bacterial infections (bronchitis, pneumonia).

Prevention

There is no 100% reliable way of preventing colds, but risks can be reduced by **washing your hands** regularly, **eating plenty of fruits and vegetables**, getting **regular exercise**, **sleep**, and limiting your **stress** levels.

Lifestyle Modification

Lifestyle habits that may support the immune system and speed recovery include the following:

- Drink plenty of fluids in order to maintain water balance and to thin mucous secretions.
- Eat raw garlic, which has antibacterial and antiviral properties. Crush a clove or two and add to foods like soups and grains just before serving.
- A warm, humid environment created by a humidifier may provide some comfort.

The key thing to remember is that the annoying symptoms of a cold are part of the natural healing process - evidence that the immune system is battling illness. For example, a fever is the body's way of trying to kill viruses in a hotter-than-normal environment. Also, the heat from the fever makes germ-killing proteins in the blood

circulate more quickly and effectively. So a moderate fever for a day or two will actually speed up the recovery process.

Coughing is another productive symptom as it prevents infected mucous from reaching the base of the lungs and creating secondary infections.

Decongestants are generally not a good idea as they work by restricting the flow to the blood vessels in the nose and throat; but this in turn causes rebound congestion and stasis and more risk of secondary infection.

Once a cold is apparent:

- 1) One study found that a daily saltwater nasal rinse may be beneficial for colds. The participants who used saline nasal rinses (six times per day initially and TID during the rest of the 12-week study) had fewer nasal and throat symptoms, they were healthier, and fewer of them used medications to manage their symptoms than those who did not use the rinses. The nasal rinse was a standard 0.9% saline (sodium chloride) solution with trace elements and minerals in concentrations similar to those in seawater.

Method:

Mix a pinch of salt and a pinch of bicarbonate of soda in about half a pint of warm water. Use a bulb syringe (a neti pot) to squirt water into the nose. Hold one nostril closed by applying light finger pressure while squirting the salt mixture into the other nostril. Let it drain. Repeat two to three times, then treat the other nostril.

- 2) Blow your nose often - but the *right* way. Regularly blowing your nose avoids mucous from being sniffed back into the head. But avoid blowing hard, as the pressure can push the infected mucous back into the sinuses, increasing congestion and prolonging the cold; or into the ear canals, causing earache.
- 3) Staying warm and resting when you first come down with a cold or the flu helps the body to focus its energy on upregulating the immune system.
- 4) Gargling can moisten a sore throat and bring temporary relief. Try a teaspoon of salt dissolved in warm water, four times daily. An astringent gargle, such as tea (which contains tannins) will tighten the membranes and reduce an irritating tickle in the throat. Or use a thick, viscous gargle made with honey, sage and cayenne pepper all of which are slightly antibacterial or antiseptic. Steep fresh sage leaves with the cayenne in 100 ml of just boiled water for 10 minutes. Add about 50 ml of honey; you can also add a pinch of salt and some cider vinegar to help loosen mucous. Let the mixture cool to room temperature before gargling.
- 5) Hot liquids relieve nasal congestion, prevent dehydration and soothe the uncomfortably inflamed membranes of the nose and throat.
- 6) Steamy showers moisturise the nasal passages and generally relax the body.
- 7) A small dab of mentholated cream under the nose can open breathing passages and help restore the irritated skin at the base of the nose. Menthol, eucalyptus and camphor all have mild numbing ingredients that may help relieve the pain of a nose rubbed raw.

- 8) Sleeping with an extra pillow under the head will help relieve congested nasal passages.
- 9) Don't fly unless it is absolutely necessary. The change in air pressure will increase the stress on the upper respiratory system and may temporarily damage your eardrums.

Dietary Modification

Excessive sugar, dietary fat, and alcohol have been reported to impair immune function, although no specific information is available on how these foods may affect the course of the common cold.

Some good foods to eat when battling a cold or flu:

- **Bananas:** Soothe upset stomachs.
- **Peppers:** Loaded with vitamin C.
- **Blueberries:** Curbs diarrhoea, high in natural aspirin. (May lower fevers and help with the aches and pains.)
- **Carrots:** Loaded with beta-carotene.
- **Chilli peppers:** Can open sinuses, and help break up mucous in the lungs.
- **Mustard and horseradish:** Helps break up mucous in air passages.
- **Onion:** Has phytochemicals claimed to help the body clear bronchitis and other infections.
- **Rice:** Curbs diarrhoea.
- **Tea:** Black and green tea (not herbals) contain catechin, a phytochemical claimed to have natural antibiotic and anti-diarrhoea effects.

Honey is a popular home remedy for cough and colds in many cultures. A new study in the Archives of Paediatrics and Adolescent Medicine provides the first evidence showing that honey may help to calm children's coughs and help them sleep better. Researchers gave 105 children with colds either honey, honey-flavoured cough medicine or no treatment. All of the children got better, but honey consistently scored best in parents' rating of their children's cough symptoms.

The researchers say that honey may work by coating and soothing an irritated throat and it also has antioxidant and antibacterial effects. Dark-coloured honey, such as the buckwheat honey used in the study, is particularly high in antioxidants.

Nutritional Supplement Treatment Options

Vitamin C - 1 to 4 grams daily. A review of 21 controlled trials using 1 to 8 grams of vitamin C per day found that “in each of the twenty-one studies, vitamin C reduced the duration of episodes and the severity of the symptoms of the common cold by an average of 23%.” The optimum amount of vitamin C to take for cold treatment remains in debate but may be as high as 1 to 3 grams per day, considerably more than the 120 to 200 mg per day that has been suggested as optimal intake for healthy adults. A review of 23 controlled trials found that vitamin C supplementation produces a greater benefit for children than for adults. The same review found that a daily amount of 2 grams or more was superior to a daily amount of 1 gram at reducing the duration of cold symptoms.

Vitamin C has been administered i.v. via saline solution in studies in Germany of up to 15 grams without altering bowel consistency or causing tissue damage.

General recommendation is to advise the patient to take a dosage up to bowel tolerance – once the faeces start to become loose, drop the dosage down by about 250mg. Vitamin C should always be reduced down gradually and never stopped suddenly since, with increased intake of vitamin C, the body will increase production of ascorbase. Ascorbase production will reduce gradually with decreased intake of vitamin C and so the temporary higher levels may cause a relative scurvy.

Zinc Lozenges - 13 to 25 mg as gluconate, gluconate-glycine, or acetate in lozenges every 2 hours. Zinc interferes with viral replication in test tubes, may interfere with the ability of viruses to enter cells of the body, may help immune cells to fight a cold, and may relieve cold symptoms when taken as a supplement. In double-blind trials, zinc lozenges have reduced the duration of colds in adults but have been ineffective in children. Lozenges containing zinc gluconate, zinc gluconate-glycine, and, in most trials, zinc acetate have been effective; most other forms of zinc and lozenges flavoured with citric acid, tartaric acid, sorbitol, or mannitol have been ineffective. Trials using these other forms of zinc have failed, as have trials that use insufficient amounts of zinc. For the alleviation of cold symptoms, lozenges providing 13 to 25 mg of zinc (as zinc gluconate, zinc gluconate-glycine, or zinc acetate) are used two hourly while awake but only for several days. The best effect is obtained when lozenges are used at the first sign of a cold.

Probiotics – according to practitioner instruction. In a double-blind trial, daily supplementation with *Lactobacillus* GG (a probiotic organism) for 3 months decreased the incidence of upper respiratory tract infections by 34% in children attending daycare centres. Another double-blind trial found that a probiotic preparation taken for 3 months during the winter decreased the incidence of common infectious diseases in children aged 3-7 years. The product used in that study contained *Lactobacillus helveticus* R0052, *Bifidobacterium infantis* R0033, *Bifidobacterium bifidum* R0071, and fructo-oligosaccharides.

Propolis - 500 mg one to BID. Propolis is the resinous substance collected by bees from the leaf buds and bark of trees, especially poplar and conifer trees. Propolis extracts may be helpful in preventing and shortening the duration of the common cold. A preliminary clinical trial reported propolis extract (daily dose not given) reduced upper respiratory infections in children. In one small, double-blind trial of propolis for the common cold, the group taking propolis extract (amount unstated) became free of symptoms more quickly than the placebo group.

N-acetyl cysteine (NAC) – 600mg daily away from food. N-acetyl cysteine is a potent antioxidant that has been used for several years to treat various lung conditions such as bronchitis due to its expectorant or mucolytic properties. In one study, the researchers found that daily supplementation with 600 mg n-acetyl cysteine tablets reduced the infection rate of influenza like symptoms as well as severity of symptoms in elderly patients.

Vitamin D – 600 – 1200 i.u. daily. Research suggests that low levels of vitamin D are associated with an increased risk of upper respiratory infections. In fact, declining

levels of vitamin D during the winter months is one of the recent hypothesis for the increasing incidence of colds and the flu during winter months.

Botanical Treatment Options

Four different categories of herbs are used to help combat the common cold:

First, herbs that stimulate the immune system to fight the infection are used during the onset of the common cold

Second, herbs known as diaphoretics promote a mild fever and sweating both of which are useful for fighting infection. A fever is a sign that the immune system is working; thus, diaphoretics may also be immune stimulators.

The **third** category includes herbs that, based on test tube studies, may directly kill the viruses that cause colds.

Finally, a **fourth** category of herbs are used to alleviate cold symptoms, such as sore throats. These herbs tend to be high in mucilage and are soothing and anti-inflammatory, or have tannins that are astringent.

As the following chart shows, many herbs fit into more than one category; goldenseal is one example, as it has both immune-stimulating and antiviral properties.

Action Category	Herbs
Immune-stimulating	Asian ginseng , astragalus , echinacea , eleuthero , garlic , goldenseal , hyssop, schisandra
Diaphoretic	elder flower, hyssop, yarrow
Antiviral (test tube studies only)	Barberry , elderberry, goldenseal , myrrh, Oregon grape
Symptom-relieving	<p>Soothe pharyngitis: blackberry, blueberry, red raspberry (astringents), coltsfoot, marshmallow, red raspberry (mucilage)</p> <p>Reduce nasal stuffiness: eucalyptus, peppermint</p> <p>Relieve aches: meadowsweet</p> <p>Miscellaneous pharyngitis relief: sage, yarrow</p>
<p>Note: These actions have not necessarily been proven in clinical trials in humans and are intended only to clarify distinctions among herbs, not to give recommendations for use.</p>	

Additional herbs:

Andrographis - *100 mg of a standardized extract BID*. Andrographis contains andrographolides that have demonstrated immune-enhancing qualities in preliminary studies. Double-blind trials have shown that common cold symptoms improve and recovery is faster when andrographis extract containing 48 to 60 mg andrographolides is taken in three or four divided doses daily, beginning as soon as possible after symptoms appear. In addition, preliminary research in Russia suggests andrographis extract may be effective for the treatment of influenza. This extract was also tested for preventing colds in a double-blind study of teenagers. After three months, the group taking 5 mg of andrographolides BID had only half the number of colds experienced by the placebo group.

Geranium - *20 drops TID for six days*. Geranium (*Pelargonium sidoides*) is an herbal remedy used in Germany, Mexico, Russia, and other countries for the treatment of respiratory tract and ear, nose, and throat infections. In a double-blind study of children with acute tonsillitis/pharyngitis that was not due to a Streptococcal infection, participants given an extract of geranium had significantly more rapid resolution of symptoms, compared with those given a placebo.

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