

Dear Colleague

Welcome to the December 07 newsletter from Pure Bio Ltd.

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

Friday 21st December 2007 Monday 24th December 2007 **Tuesday 25th December 2007 Wednesday 26th December 2007** Thursday 27th December 2007 Friday 28th December 2007 Monday 31st December 2007 **Tuesday 1st January 2008**

normal office hours 09.00 – 12.00 **CLOSED** normal office hours normal office hours 09.00 – 13.00 **CLOSED**

Normal office hours will resume on Wednesday 2nd January 2008.

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 <u>www.purebio.co.uk</u> at any time during the Christmas period.

Did you know. . .?

Researchers in Stockholm who conducted a meta-analysis of studies published between 1966 to February 2007 have found that the risk of developing type 2 diabetes decreases the higher the intake of magnesium. Magnesium-rich foods include whole grains, beans, nuts and green leafy vegetables.

Our topic for this month is:

Otitis Media

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Xylitol	

Other Vitamin C Zinc Probiotics	Echinacea Garlic Linden Mullein St. John's wort
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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.

The Facts

Otitis media is an infection of the middle ear, occurring when the eustachian tubes, which drain fluid and bacteria from the middle ear out to the throat, become blocked. Otitis media is common in infants and children, because of the immature immune systems and the narrow configuration of the eustachian tubes.

Signs & Symptoms

Acute otitis media causes pain, fever and difficulty in hearing. In infants, the clearest sign of otitis media is often irritability and inconsolable crying. Infants may display a lack of appetite and/or may pull on their ears.

Other symptoms that may be associated with an ear infection include sore throat (pharyngitis), neck pain, nasal congestion and discharge (rhinitis), headache, tinnitus, buzzing, or other noise in the ear.

Causes

Blockage of the eustachian tubes may be caused by the following.

- > Respiratory infection
- > Allergies
- > Tobacco smoke or other environmental irritants
- Infected or overgrown adenoids
- > Sudden increase in pressure (such as during an airplane take off or landing)
- > Drinking while lying on the back, such as with a propped bottle
- > Excess mucous and saliva produced during teething
- Ruptured eardrum

Otitis media occurs most frequently in the winter. It is not contagious in itself, but a cold may spread among a group of children and cause some of them to get ear infections.

Dietary Modification

The incidence of food intolerance among children with recurrent ear infections is much higher than among the general public. In one study, more than half of all children with recurrent ear infections were found to have intolerances to foods. Removing those foods led to significant improvement in 86% of the allergic children tested. Other reports show similar results. In one preliminary study, children who were sensitive to cow's milk were almost twice as likely to have recurrent ear infections as were children without the allergy. Although sugar intake has not been studied in relation to recurrent ear infections, eating sugar is known to impair immune function. Therefore, children with recurrent ear infections should reduce or eliminate sugar from their diets.

Foods rich in antioxidants that help boost immune function are important to include in the daily diet. Eating plenty of omega-3 fatty acids may be important as well. Sources of omega-3 include fish, walnuts, and flaxseeds. (Children should not have these foods prior to ages 2 to 3 years old).

Lifestyle Modification

When parents smoke, their children are more likely to have recurrent ear infections. It is important that children are not exposed to passive smoke.

Humidifiers are sometimes used to help children with recurrent ear infections, and animal research has supported this approach. Nonetheless, human research studying the effect of humidity on recurrent ear infections has yet to conclusively show that use of humidifiers is of significant benefit.

Use of pacifiers in infants increases the risk of ear infections.

Other therapies

Chronic infections or persistent fluid in the ear many require myringotomy, an operation in which small "tympanostomy tubes" (grommets) are inserted in the affected eardrums. The procedure equalizes ear pressure and allows drainage of fluid from the middle ear. Though frequently performed, myringotomy has not consistently demonstrated long-term efficacy for preventing recurrent ear infections.

Enlarged or infected adenoids may be removed (adenoidectomy) during the myringotomy procedure.

Applying warm compresses (for example, using a warm clot or hot water bottle filled with warm water) may help relieve pain.

Cranial osteopathy has produced relevant research and data to substantiate its efficacy in the treatment of otitis media.

Nutritional Supplement Treatment Options

<u>Xylitol</u>, a natural sugar found in some fruits, interferes with the growth of some bacteria that may cause ear infections. In double-blind research, children who regularly chewed gum sweetened with xylitol had a reduced risk of ear infections. However, when they only chewed the gum while experiencing respiratory infections, no effect on preventing ear infections was found.

<u>Vitamin C</u> supplementation has been reported to stimulate immune function. Between 500 mg and 1,000 mg of vitamin C per day is generally recommended for people with ear infections.

- Buffered Ascorbic Acid PE
- Pure Ascorbic Acid PE

<u>Zinc</u> supplements have also been reported to increase immune function. As a result, zinc supplements are often recommended for people with recurrent ear infections, at a dosage of about 30 mg per day for adults and lower amounts for children. For example, a 30-pound child might be given 5 mg of zinc per day while suffering from OM.

- Zinc 15/30 (picolinate) PE
- Zinc citrate PE
- Zinc 30 orotate Kloesterl

<u>Probiotics</u> – Lactobacillus and other probiotics may reduce the incidence of respiratory infections, such as colds and sinusitis; and their associated complications e.g. ear infections. More research in this area is required.

- Lactobacillus acidophilus PE
- Lactobacillus sporogenes PE
- Saccharomyces boulaardi PE
- Probiotic-5

Botanical Treatment Options

Echinacea has been reported to support healthy short-term immune response. As a result, it has been suggested that some children with recurrent ear infections may benefit from 1–2 ml (depending on age) of echinacea tincture TID or more. Practitioners who use echinacea suggest that supplementation be started as soon as symptoms start to appear and continued until a few days after they are gone. Nonetheless, research has not been done to determine whether echinacea supplementation either reduces symptoms or prevents recurrence of ear infections.

Ear drops with <u>mullein</u>, <u>St. John's wort</u>, and <u>garlic</u> in an oil or glycerin base are traditional remedies used to alleviate symptoms - particularly pain - during acute ear infections. No clinical trials have investigated the effects of these herbs in people with ear infections.

An unpublished clinical trial of children with colds found that <u>linden tea</u>, aspirin, and bed rest were more effective than antibiotics at speeding recovery and reducing complications such as ear infection. (Aspirin is no longer given to children due to the threat of Reye's syndrome.) However, no research has yet confirmed the use of linden for preventing ear infections.

Homeopathy

Although not many studies have examined the effectiveness of specific homeopathic therapies in general, there have been several studies evaluating the use of homeopathy for ear infections. Some of the homeopathic remedies included in such studies or that a professional homeopath might consider for the treatment of ear infections are listed below.

<u>Aconitum</u> - for throbbing ear pain that comes on suddenly after exposure to cold or wind; and in children with high fever and whose ears have a bright red colouring.

<u>Belladonna</u> - for sudden onset of infection with piercing pain that often spreads to the neck; flushed face including reddened ears; agitation (even impaired consciousness and nightmares); wide-eyed stare; high fever; and swollen glands. This remedy is most appropriate for children who feel relief when sitting upright and from warm compresses to the ear. Belladonna should not be used in children whose symptoms have persisted for more than 3 days.

<u>Chamomilla</u> - for intense ear pain and extreme irritability and anger (including screaming). Chamomilla is most appropriate for children who are difficult to comfort unless being rocked or carried by a person who is walking back and forth.

<u>Hepar Sulphuricum</u> - for sharp pains and a smelly, yellowish-green discharge that occurs in the middle and late stages of an ear infection, particularly when the child is extremely moody and clearly angry. This remedy is most appropriate for individuals whose symptoms are worsened by cold air and improved by warmth.

<u>Lycopedium</u> – for right sided ear pain that is worse in the late afternoon and early evening; the child will generally say that his ears feel stuffed up and he may hear a ringing or buzzing sound.

<u>Mercurius</u> – good for chronic ear infections; for acute or chronic pain that is worse at night and may extend down into the throat; relief comes from nose blowing; and the appropriate child may sweat or drool a lot and have bad breath.

<u>Pulsatilla</u> - for infection following exposure to cold or damp weather; the ear is often red and may have a yellowish/greenish discharge; ear pain worsens when sleeping in a warm bed and is relieved somewhat by cool compresses.

<u>Silica</u> – for chronic or late stage infection when the child feels chilly, weak and tired; sweating may also be present.

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