



## How Flaxseed Oil May Benefit Childhood Asthma

**Flaxseed Oil May Be One Of The Best Natural Medicines** today for helping children with asthma to better cope with their condition. Supplementing an asthmatic child's diet with flaxseed oil is not only easy to do for parents; it is one of the most positive, cost-effective and beneficial natural approaches to asthma. In some cases, use of flaxseed oil may help children to reduce or eliminate their need for asthma medication.

### Increases in Prevalence and Deaths

Asthma is the leading chronic illness of childhood, is responsible for substantial infant morbidity, and has a significant impact on use of health resources, say researchers from the Department of Pediatrics, University of Washington, and the Center for Health Studies, Group Health Cooperative, Seattle.

Other researchers note that asthma prevalence in children has increased 58 percent since 1980 and that mortality has increased by 78 percent. Interestingly, the burden of the disease is most acute in urban areas and among racial and ethnic minority populations; hospitalization and morbidity rates for nonwhites are more than twice those for whites.

Although studies illustrating causal effects between outdoor air pollution and asthma prevalence are scant, air pollution appears to significantly worsen symptoms among children already having the disease. Decreased lung function, bronchial inflammation and other asthma symptoms such as recurrent wheezing, breathlessness, chest tightness and coughing have been associated with exposure to particulates, ozone, smoke, sulfur dioxide, and nitric oxide.

### How Flaxseed Oil Helps

Research in the past decade has revealed the importance of inflammation of the airways in asthma and successful clinical therapies aimed at reducing chronic inflammation. Asthma is associated with the body's production of proinflammatory fatty compounds called leukotrienes, secreted by the immune system's white blood cells (leukocytes) as a reaction to common environmental allergens and pollutants including house dust mites, animal dander, cockroach, fungal spores, pollens, and industrial airborne contaminants.

Ordinarily, white blood cells defend the body against infecting organisms and foreign agents, both in the tissues and in the bloodstream itself. But in persons with asthma, the white blood cells tend to produce excess amounts of inflammatory leukotrienes that are members of the 4- series.

One way to counter the body's excess production of leukotrienes is to enhance intake of omega-3 fatty acids. The omega-3 fatty acids cause the body to produce more of the less inflammatory 5-series leukotrienes. This shift is directly related to relief from asthma symptoms, notes an expert.

Flaxseed oil is a rich source of **alpha-linolenic acid**, one of the major omega-3 fatty acids. Seafood is also a rich source of omega-3 fatty acids, and it has been shown that children who eat fish more than once a week have only one-third the risk of asthma compared with children who do not eat fish regularly. However, it is often difficult to convince children to consume those seafood dishes highest in omega-3 fatty acids (e. g. , salmon and mackerel) or to take fish oil capsules. Flaxseed oil, on the other hand, can be blended into tasty smoothies, yogurt and spread on bread.

Recent studies have shown that alpha-linolenic acid, the omega-3 fatty acid found in flaxseed, has a profound ability to inhibit the generation of leukotrienes by white blood cells in persons with asthma.

Recently, Japanese researchers' reporting in the International Archives of Allergy and Immunology, compared the clinical features of patients with asthma who had received a supplemental oil rich in alpha-linolenic acid compared to a group not receiving the nutrient. The scientists found that after only two weeks of supplementation generation of proinflammatory leukotrienes by leukocytes decreased significantly in the intervention group. In contrast, the production of proinflammatory leukotrienes increased significantly among persons not receiving the nutrient. Even more intriguing, after only four weeks of dietary supplementation, lung function among the intervention group was significantly enhanced by the addition of an alpha-linolenic acid diet. Further: blood levels of total cholesterol, low-density lipoprotein cholesterol and triglycerides were significantly decreased by dietary supplementation with the alpha-linolenic acid-rich oil. The researchers concluded that dietary supplementation with alpha-linolenic acid with asthma suppresses the generation of leukotrienes and can have many beneficial therapeutic effects among asthma patients.

In another study conducted by the same scientific team, the effects of alpha-linolenic acid on bronchial asthma were compared with the effects of corn oil for lung function and generation of leukotrienes. (Corn oil is a typical vegetable oil consumed in this country; it is rich in proinflammatory fatty acids). In this



study, 14 persons with asthma were divided randomly into two equal groups: one consumed alpha-linolenic acid and the other corn oil for four weeks. The generation of proinflammatory leukotrienes tended to increase in persons receiving the corn oil and decrease among persons whose diets were supplemented with alpha-linolenic acid. Again, lung function was better among persons receiving the alpha-linolenic acid. These results suggest that alpha-linolenic acid supplementation is useful for the treatment of asthma in terms of suppression of proinflammatory leukotriene generation by leucocytes, and improvement of pulmonary function.

In a third study, the effects of eicosapentaenoic acid (EPA) were studied on asthma symptoms. Both EPA and alpha-linolenic acid are members of the omega-3 fatty acid family. Alpha-linolenic acid is the parent compound of EPA. Persons who ingest alpha-linolenic acid produce EPA as a byproduct of the metabolism of the parent compound although EPA may be obtained directly from fish oil capsules or seafood such as tuna, mackerel, and salmon. In this study, also from Japan, patients were given EPA (1,800 milligrams per day) and they recorded signs and symptoms in an asthma diary during a two-week observation period. Administration of EPA was associated with improvements in symptoms of asthma and improved lung function. Thus, the researchers conclude that this omega-3 fatty acid may be useful in patients with asthma. <sup>2</sup> Flaxseed Oil May Be One Of The Best Natural Medicines today for helping children with asthma to better cope with their condition. Supplementing an asthmatic child's diet with flaxseed oil is not only easy to do for parents; it is one of the most positive, cost-effective and beneficial natural approaches to asthma. In some cases, use of flaxseed oil may help children to reduce or eliminate their need for asthma medication.

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#### The Doctors Prescription

Asthma is often thought of as a debilitating childhood disease. It shouldn't be. There are tremendous opportunities to aid children with asthma. And consider this: About one of every five athletes who participated in the 1996 Summer Olympic Games in Atlanta had a past history of asthma, had symptoms that suggested asthma, or took asthma medications, note researchers from the University of Iowa, Iowa City, and the United States Olympic Committee, Colorado Springs, Colorado. This should tell us that when proper steps are taken children with asthma can go on to achieve great things even in elite sports competition.

Supplementing the asthmatic child's diet with one to two TBS. of flaxseed oil daily can help to provide the foundation for such success. Organic, unrefined, flaxseed oil is considered by many to be the answer to restoring the proper level of essential fatty acids which can help in cases of chronic childhood asthma. At a whopping 58 percent omega-3 fatty acids by weight, flaxseed oil contains more than twice the amount of omega-3 fatty acids as fish oils. However, consumption of seafood or fish oil capsules that are rich in EPA can also help.

It's easy to put flaxseed oil into your child's diet. Simply mix with yogurt or in a daily smoothie.

**How to Find the Best Lignan-rich Flax Oil** True unrefined, nutritional oils should be considered as semi-perishable food stuff, much like fresh fruit, vegetables, meats and dairy products. Be sure the company that produces your flax is **M. A. D.** about fresh lignan-rich flax oil. Here's what to look for when it comes to being **M. A. D.** about fresh flax:

**Made To Order.** Be sure your flax oil is made to order. Most nutritional oil companies rely on third-party distributors to stock, inventory and ultimately deliver their products to market, sometimes months after manufacturing. For this reason, most flaxseed oil today is dated for freshness for up to one year. This is too long for a perishable electron-rich live food, like flaxseed oil. What's more, these products are typically shipped by ground transportation resulting in prolonged delivery and conditions such as high heat that may degrade the oil. Worse yet, some companies have resorted to refining and or filtering their oil in order to artificially extend shelf life. Be sure your flax oil is made to order, and that the oil is

pressed the day it is ordered.

**Air Delivered.** Once fresh pressed, be sure your flax oil is rushed by air delivery manufacturer-direct to your favorite natural health center or health professional, arriving within days of being made.

**Dated For Freshness.** Be sure your flax oil comes coded with both a Fresh Pressed date and a Freshest Before date stamp spanning a period of only four months for maximum potency and freshness. Prolonged distributor delivery and warehoused product makes it necessary for other brands to date stamp their oil for six to twelve months. Good for them, not so good for you.

This service is called Fresh ExPress and it guarantees you the absolute freshest flax oil anywhere. You will find this type of extremely high-quality lignan-rich flax oil in the refrigerator sections of natural health centers nationwide.