Probiotics for Allergy Relief

Clinical and Experimental Allergy June 2008

New research suggests Probiotics can alter the body's immune response to grass pollen -- a common cause of seasonal allergic rhinitis, or hay fever.

The landmark study published in Clinical and Experimental Allergy suggests that in the future, "good" bacteria, or Probiotics, may potentially offer a treatment option to the estimated 35.9 million people in the U.S. who have allergies.

✿ Vitamin D May Offer Asthma and Allergy Protection

American Academy of Allergy, Asthma & Immunology Published by Mosby, Inc. June 2007

Augusto A. Litonjua MD, MPH and Scott T. Weiss MD, MS
Harvard Medical School
n the 1960s, the prevalence of asthma and allergic diseases began to increase worldwide. Currently, the burden of the disease is more than 300 million people affected.

We hypothesize that as populations grow more prosperous, more time is spent indoors, and there is less exposure to sunlight, leading to decreased cutaneous vitamin D production. Coupled with inadequate intake from foods and supplements, this then leads to vitamin D deficiency, particularly in pregnant women, resulting in more asthma and allergy in their offspring.

Vitamin D has been linked to immune system and lung development in utero, and our epidemiologic studies show that higher vitamin D intake by pregnant mothers reduces asthma risk by as much as 40% in children 3 to 5 years old. Vitamin D deficiency has been associated with obesity, African American race (particularly in urban, inner-city settings), and recent immigrants to westernized countries, thus reflecting the epidemiologic patterns observed in the asthma epidemic. Providing adequate vitamin D supplementation in pregnancy may lead to significant decreases in asthma incidence in young children.

Quercetin, Stinging Nettle Leaf, Bromelain

Quercetin

The next time you browse through the produce department in your local supermarket, take a closer look at some of those fruits and vegetables. They contain substances called bioflavonoids. These flavonoids play a major role in the color and taste of many of the fruits and vegetables we eat, and they possess numerous medical benefits as well.

Bioflavonoids have long been known to possess anti-allergic effects. As early as the 1950s, studies showed that flavonoids could prevent the release of histamines and inhibit anaphylaxis. (Clark W, Mackay E. Effect of flavonoid substances on histamine toxicity, anaphylactic shock and histamine-enhanced capilary permeability to dye. J Allergy 21: 133-47, 1950).

Quercetin, a natural flavonoid, its appearance: yellow needle like crystal has been shown to block the initial histamine release from mast cells.

An allergic reaction is caused by a rapid release of histamine from mast cells (immune cells) and starts the chain of events which eventually leads to the familiar symptoms of allergy: nasal discharge, stinging and watery eyes, itching, and hives.

There are numerous medications available, both by prescription and over the counter, to give...
relief to the allergy sufferer. However, most, if not all, produce unpleasant side effects such as dry mouth, nausea, and drowsiness. These medications work by blocking the histamine receptors on other cells, not by blocking the initial release of the histamine itself.

**Stinging Nettle Leaf**

The stinging nettle, *Urtica dioica*, is found across Asia, Europe and North America. Stinging nettle has long been used as a medicinal herb with diuretic and anti-inflammatory properties.

Stinging nettle reduces levels of inflammatory chemicals in the body and interferes with pain signals sent from the brain, reducing pain levels. It also contains antihistamines.

**Bromelain**

Bromelain has proven mucolytic properties. As such, bromelain supports normal mucosal tissue function and enhances the absorption of quercetin.

The bromelains are a group of naturally occurring protein-digestive (proteolytic) enzymes. They are found in the stem of the pineapple. Other components of the stem, including various enzymes and calcium, are also present in commercial bromelain preparations. Besides being used as a protein digestive aid, the enzymes in bromelain inhibit inflammatory chemicals called prostaglandins.

The anti-inflammatory effect has been studied for its effectiveness in inflammatory conditions like arthritis and sinusitis.

In order to get substantial amounts of bromelain from pineapple you must eat the fibrous stem, therefore it is much easier to use a supplement form.