# <u>Treating the Root Causes of Allergies: A Naturopathic Medical Approach</u>

Naturopathic Medicine seeks to address the root causes of disease, treat the whole person, and approach each person as a unique individual. Nutrition, homeopathy, herbal medicine and Traditional Chinese Medicine can then be used to support the body's innate ability to heal itself. In dealing with allergies, Naturopathic Medicine seeks to identify the contributing factors and organ weaknesses that are leading to symptoms. Acting as detectives, Naturopathic doctors seek out which factors are most at play in any given individual.

### The Allergy Process - A Confused Immune System

The classic allergic reaction of itchy eyes, runny nose, swelling and post nasal drip is a product of an Immediate Hypersensitivity Reaction or immunoglobulin E (IgE) reaction. An allergen binds to a preformed IgE antibody which then triggers the release of inflammatory chemicals such as prostaglandins and histamine by mast cells. Other allergic/atopic reactions include dermatitis/eczema, asthma, hives and anaphylaxis. These are all attempts by the body to protect itself from substances which are generally harmless. Allergy triggers, or antigens, can be substances such as food, animal hair, metals, insects, pollen, mold, dust, chemicals, drugs, dyes, detergent, trees, additives etc.

### Allergenic Load and Pollution

The immune system overreacts to benign substances in allergy patients as a result of genetic susceptibility, nutritional and environmental factors. While heredity has been emphasized in the past, it is clear that genetics alone cannot account for the worldwide increase in asthma and allergy prevalence. The International Study of Asthma and Allergies in Childhood and the European Community Respiratory Health Survey have shown some striking patterns. Asthma is more common in Western countries than developing countries, more prevalent in English speaking countries, and increases in incidence in developing countries as they become more "Westernized". New research is being conducted on perinatal, in utero and early childhood exposures to environmental contaminants.

Our bodies are exposed to a virtual barrage of chemicals each year in the form of air pollution, pesticides, toxic household cleaners, and industrial contaminants. It is not surprising that at times our immune system is overwhelmed and confused by this toxic load. Epidemiological studies have shown that all types of allergic diseases are more common in polluted areas than in unpolluted ones<sup>iv</sup>. While many of these exposures are beyond our control, a number of them are within our control. By working to decrease pollution inside and outside of the home, we will be treating one of the major root causes of disease and practicing truly preventative health care.

#### **Food Sensitivities**

From a Naturopathic perspective, another essential part of treating allergies is the identification and treatment of food sensitivities. Many childhood allergies are triggered by foods rather than airborne allergens. The identification and treatment of food sensitivities can therefore remove allergy symptoms in many children and even help to prevent asthma later in life. Adult-onset allergies, on the other hand, are usually due to the airborne allergens. It is still worthwhile investigating food sensitivities in these cases because an allergic reaction in one area of the body (eg intestines) makes the body more reactive in other areas. Decreasing the overall allergenic load in adults with food sensitivities can at least reduce the severity of allergy symptoms.

A common triad seen in infants is atopic dermatitis(eczema) followed by hayfever and asthma later in life. In many cases, eczema is the first warning sign that there is a food sensitivity. A number of studies support the link between food sensitivities and asthma. One study showed that if sensitization to eggs is present early in life, the risk for developing asthma due to house mites is increased. Another study showed that bronchial asthma symptoms in children were greatly improved by eliminating allergenic food from the diet to A third study from the Netherlands showed that the combination of eczema and food allergy at 12 months old was the strongest risk factor for the development of asthma at 24 months old.

## Food Sensitivities versus Food Allergies

There are actually two types of allergic reactions to food. One is a "food allergy", which is an Immediate Type Hypersensitivity/ IgE reaction (eg. hives, anaphylaxis). This is detected by conventional IgE RAST

(blood) or IgE skin tests and can be a life threatening emergency. Another is a "food sensitivity" which is a Delayed Type Hypersensitivity/IgG reaction. A Delayed Hypersensitivity occurs as a reaction in the blood rather than the mucosa and it happens hours or days after exposure. It is identified with an IgG blood test rather than an IgE test and is often missed on routine screening.

#### The Liver and Adrenal Glands

Two organs commonly evaluated and treated in the Naturopathic approach to allergies are the liver and adrenals. The liver is responsible for detoxification. It removes hormones, drugs and chemicals, filters all blood coming from the digestive tract, and makes toxins water soluble for excretion. The liver is commonly overwhelmed by environmental pollution. It can be supported through herbs and supplements to make it more efficient. Common prescriptions include Milk Thistle, a liver herb that promotes liver cell regeneration, and N-Acetyl Cysteine (NAC), a mucolytic agents that supports the central antioxidant and detoxification pathway of the liver.

The adrenal glands release stress hormones such as cortisol and are therefore challenged by high stress living. Cortisol plays an important role in regulating the immune system. In fact, a conventional pharmaceutical approach to allergies and asthma is hydrocortisone, an artificial form of cortisol. In Naturopathic medicine, if the adrenals are identified as being weak, they can be supported by Vitamin C, B Complex and herbs such as Borage, Siberian Ginseng and Licorice root. One should consult a Naturopathic Doctor before taking herbs or nutrients to ensure they are appropriate for one's medical history.

### **Homeopathic Treatment of Allergies**

Homeopathy is one of the therapies commonly used by Naturopathic Doctors to balance the immune system and treat allergies. It uses dilute substances according to the principle that "Like Cures Like". In homeopathy, over a hundred different medicines are used for allergies. They are prescribed according to the unique symptoms of the individual. Although we do not yet fully understand the mechanism of homeopathy, it is clinically effective in helping the body to self-correct. A meta-analysis of 89 double-blind and/or placebo-controlled trials showed that the clinical effects of homeopathy are not due to the "placebo effect". Four of these trials on the effects of a single homeopathic on seasonal allergies showed homeopathy to be twice as good as placebo<sup>ix</sup>. The homeopathic treatment of allergies is gentle, effective and treats each person's unique symptoms.

## **Decreasing Histamine and Inflammatory Prostaglandins**

While decreasing histamine is symptom management rather than addressing root causes, it does provide relief. Supplements that stabilize mast cells to decrease histamine include vitamin C, vitamin E, and flavonoids such as catechin and quercetin<sup>x</sup> High doses of vitamin C decrease blood levels of histamine, act as an antioxidant, and support the immune system. Nettle is also an excellent herb for allergies.

# **Nutritional Considerations**

The nutritional goal in allergy treatment is to decrease histamine, decrease inflammation, and increase anti-allergic substances such as anti-oxidants, essential fatty acids and quercetin. Foods high in histamine which should be avoided are cheese, some wines, and certain kinds of fish such as tuna and mackerel. Foods rich in tryptophan should also be reduced because tryptophan encourages histamine production. These include cottage cheese, liver, peanuts, turkey, lamb, tuna, beef, salmon and cashews. Animal fats (especially beef, pork and lamb) generally increase inflammatory prostaglandins and should therefore be kept to a minimum.

Foods to include are anti-oxidant rich foods and essential fatty acids. Anti-oxidants are high in green, red and yellow vegetables, sunflower seeds, wheat germ oil, and brazil nuts. Essential fatty acids are present in flaxseed oil, borage oil, evening primrose oil and cold water fish. Onion and garlic are particularly anti-allergic because they inhibit histamine decarboxylase and lipoxygenase (inflammatory enzymes). Onions also contain quercetin. For infant nutrition, breast feed wherever possible and avoid introducing solid food before six months. Wait until 1-2 years old before introducing higher risk foods such as milk products, eggs, soya, corn and peanuts.

#### Conclusion

Allergies are due to the immune system overreacting to generally benign substances. This happens because of a complex interplay between heredity, environmental pollution, aggravating foods, insufficient anti-oxidants, an overwhelmed liver and exhausted adrenals. Naturopathic medicine takes a holistic approach to allergies, seeking to evaluate and address all of these root causes through nutrition, homeopathy, lifestyle recommendations, herbal medicine and Traditional Chinese Medicine.

### References

<sup>i</sup>Pizzorno and Murray. Textbook of Natural Medicine, Second Edition. Churchill Livingstone.1999.

<sup>&</sup>lt;sup>ii</sup>Atopy and atopic are medical terms used to describe immediate hypersensitivity reactions/allergies.

<sup>&</sup>lt;sup>iii</sup>Beasley R, Crane J, Lai CK, Pearce N. Prevalence and Etiology of Asthma. <u>J Allergy Clin Immunology.</u> 2000 Feb; Vol 105, pp S466-72

<sup>&</sup>lt;sup>iv</sup>Takafuji S, Nakagawa T. Air Pollution and Allergy. <u>J Investig Allerg Clin Immunol</u> 2000 Jan-Feb; 10 (1); 5-10.

<sup>&</sup>lt;sup>v</sup>Hofer MF. Atopic Dermatitis: the First Allergic Step in Children. Rev Med Suisse Romande 2000 Mar; Vol 120 (3). Pp263-7

vi Rowe and Young. Bronchial asthma due to food allergy alone in 95 patients. <u>JAMA</u>. 1959:169,1958.

viiLaan MP, baert MR, Bijl AM et al. Clinical Manifestations of Atopic Disease up to 2 Years. Clin Exp Allergy. 2000 Jul; 30 (7): 944-53

viii A meta analysis is a study that combines the results of a number of different studies.

<sup>&</sup>lt;sup>ix</sup>Linde K, Clausius n, Ramirez G, Melchart D, Eltel F, Hedges LV, Jonas WB. Are the Clinical effects of homeopathy placebo effects? A meta-analysis of placebo-controlled trials. <u>Lancet</u>. Sept 20,1997; 350 (9081): 834-43.

<sup>&</sup>lt;sup>x</sup>Marz, R, ND. <u>Medical Nutrition from Marz.2'nd Ed</u>.1997.Omni-Press.