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## FALL 2006

### WHAT'S HAPPENING

#### CHANGES...

A few changes have taken place here at the clinic. The biggest change has been the name from Intelligent 21st Century Nutrition to **Greenwood Wellness Clinic**. Although the name has changed the services remain the same and we feel the new name better reflects the variety of professional services we offer. For a complete list of these services please pick up a copy of our new brochure on your next visit to the office or for those with internet access check out our website at [www.greenwoodclinic.ca](http://www.greenwoodclinic.ca). Also see John's article on darkfield microscopy for more information on this valuable tool.

As mentioned in our last newsletter, Murray's son Lindsay Bast, B.Sc., N.D. joined the practice in January 2006. Lindsay sees patients in the clinic on Wednesday's and Friday's. Murray has reduced his schedule and patient load and is kept busy with other interests. John Pronk, B.Sc., N.D. is now seeing patients two days a week – Mondays and Thursdays. Sheldon Gilchrist, B.Sc., D.C. continues to offer chiropractic care on the 2<sup>nd</sup> and 4<sup>th</sup> Tuesday of each month.

#### NEW SERVICES

MDS Labs have partnered with Rocky Mountain Analytical Labs to offer their services to the patients of Naturopathic doctors. We have access to nearly all conventional blood

and urine tests offered (among other things) and are very pleased with the speed of processing. You can call the office or speak with either Dr. Lindsay Bast or Dr. John Pronk about what tests or services are available.

#### REMINDERS

- When visiting the office we ask that you refrain from wearing any perfume, cologne or other strong scents in consideration for those who have sensitivities.
- With winter approaching we realize it is not always possible, however we request 24 hours notice of any cancellations whenever possible.
- Please see below for our holiday hours:  
Monday December 25 - closed  
Tuesday December 26 - closed  
Wednesday December 27 – closed  
Thursday December 28 – open, regular hours  
Friday December 29 – open, regular hours  
Monday January 1 - closed  
Tuesday January 2 – open, regular hours  
Wednesday January 3 – open, regular hours

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## LINDSAY'S MESSAGE LINDSAY BAST, B.Sc., N.D.

### IMMUNE SYSTEM HEALTH

The major responsibility of the immune system is to protect us from foreign invaders, such as bacteria, viruses and other external pathogens. In addition the immune system also removes damaged tissues and is in charge of recognizing and removing abnormal cells. When these jobs are performed properly, we remain healthy – we have few colds, flu's or other infections and we heal quickly from injuries. Unbalanced immune function can also contribute to allergies and autoimmune diseases, conditions where the body's normal defenses act against itself. The immune system is not a single entity in the body but is rather the combination of several organs, body structures and molecules produced by these organs. The proper function of the immune system relies on communication between all of these organs and molecules. Some important organs include the tonsils, thymus gland, lymph nodes, bone marrow, spleen, appendix and even intestines. The main immune cells produced are the white blood cells, of which there are 5 major types and several sub-types. Naturopathic medicine has several tools to enhance immune function including botanical medicine, homeopathy, traditional Chinese medicine and perhaps most important – nutrition. The remainder of this article will focus on some lifestyle and nutritional factors involved in maintaining a healthy immune system to help defend against foreign invaders.

As with all body systems and conditions dietary choices significantly impact the functioning of our immune system. It relies on multiple nutrients to function optimally as well as a proper balance of the macronutrients: protein, fat and carbohydrates. It is well known that adequate

protein intake is required to maintain proper white blood cell production. Protein provides the building blocks for many of the molecules required in immune function. Reducing fat intake below 30% of daily calories can increase activity of an immune cell called the natural killer cell. Excess fat may also impair lymphocyte (a type of white blood cell) responses. Finally, sugars may also be harmful to the immune response. Subjects who consumed high amounts of simple sugars (such as those found in pop, white bread and other processed/junk foods) showed decreased production and function of several types of white blood cells.

Deficiency of nearly any single vitamin or mineral can predispose to infection and poor immune function. There are however some vitamins that deserve particular attention. Vitamin A has been called an "anti-infection" vitamin because of the tendency to develop infections in the eyes, urinary tract and respiratory passages in deficiency. Active infections have actually been shown to decrease body stores of vitamin A, thus ensuring adequate stores may help prevent infection. In some instances additional Vitamin A during active infection may also improve recovery. Vitamin A is also playing an important role in preventing intestinal infections among children in developing countries.

A deficiency in the entire B complex of vitamins is associated with decreased antibody response and impaired immunity. Arguably the most important B vitamin related to immunity is B6. A deficiency of B6 reduces both the number and response of a variety of immune cells and supplementation can significantly increase immune response in both critically ill and elderly patients.

The role of Vitamin C in immunity has long been known but new discoveries continue to

be made. It has been demonstrated that during active infections and periods of stress vitamin C levels in the body decline, indicating an increased need during these times. Supplementation of vitamin C has been shown to increase number and activity of several immune cells including lymphocytes and natural killer cells. In addition, adequate intake of vitamin C can improve symptoms and shorten the duration of respiratory infections including common colds.

Many trace minerals are also needed in adequate amounts to promote immune health. Selenium deficiency results in depressed immune function resulting in decreased resistance to infection. Restoring selenium levels to normal can restore proper immune function. In addition, the activity of lymphocytes and natural killer cells may be increased by selenium supplementation even in individuals with 'normal' selenium levels. Zinc is another very important trace mineral involved in immune health as well as tissue healing and supplementation may increase T-cell numbers. Supplementation of zinc and in particular zinc lozenges may reduce the duration of the common cold. However caution must be exercised, as prolonged zinc

and selenium supplementation in high doses can be immunosuppressive.

Other factors that also impact the immune system are exercise and emotions. Immune stimulation is yet another benefit of regular physical exercise. Moderate physical activity is sufficient to see these benefits, something as simple as walking 20-30 minutes each day. In fact intense exercise can have immune suppressing effects. A field of study that has been emerging for several years examines the relationship between emotional state, nervous system function and the immune system. In stressful situations the body releases molecules called corticosteroids and catecholamines that suppress the immune system and make individuals susceptible to infection. As with most things in life stressful stimuli are very individual and identifying these stimuli may be very important in eventually decreasing their negative effects.

It is very evident that immune system function depends on proper nutrition. Sound dietary and lifestyle choices are the best way to maintain proper function. However in certain instances of increased demand or existing deficiency, supplementation may be beneficial.

## UPCOMING SEMINARS AND SPEAKING ENGAGEMENTS

- Lindsay Bast will be speaking on Common Winter Ailments at the Kitchener Public Library February 7<sup>th</sup> at 7 p.m.
- Bio-Ag Consultants and Distributors (the agricultural business located on the same property as our clinic) is hosting a seminar on genetically engineered food which may be of interest to many of you. Please see opposite for details.

### **Bio-Ag Seminar**

January 24, 2007 - 9:30 am – 3:00 pm

*Topic:* Genetically Engineered Food

*Speakers:* **Wendy Mesley**, CBC Television

**Jeffrey Smith**, Institute of Responsible Technology

**Murray Bast**, President, Bio-Ag

*Location:* Perth East Recreation Complex, Milverton

*Cost:* \$50.00 (includes lunch)

Please register by January 16, 2007 (seating is limited.) Call 1-800-363-5278

## JOHN'S MESSAGE JOHN PRONK, B.Sc., N.D.

### QUESTIONS AND ANSWERS CONCERNING THE FLU AND FLU VACCINE

#### What is the flu?

Influenza, also termed 'the flu', is an infection of the airways that can produce fever, chills, sore throat, muscle aches, and cough. It can last a week or more. The severity of the illness can vary, from very mild to life-threatening. At greater risk are the elderly, those with weakened immune systems or who are suffering from diabetes, kidney disease and heart disease. Each year about 20,000 Americans, mostly in these highest risk groups, reportedly die from flu complications such as pneumonia.

#### What is the flu vaccine?

The flu vaccine is prepared from the fluids of chick embryos inoculated with a specific type(s) of influenza virus. The strains of flu virus in the vaccine are inactivated with formaldehyde and preserved with thimerosal, which is a mercury derivative.

Every year, federal health agency officials try to predict which three flu strains (from over hundreds of potential virus suspects) will be the most problematic in the U.S. and Canada over the coming year. Based on this, they determine which strains to include in next year's flu vaccine. If they guess right, the vaccine is thought to be 70 to 80 percent effective in temporarily preventing those three particular types of flu in healthy persons less than 65 years old (the efficacy rate drops to 30 to 40% in those over 65 years old but the vaccine is thought to reduce hospitalization and pneumonia in the over 65 age group). However, sometimes health officials do not correctly predict which flu strains will be most prevalent and the

vaccine's effectiveness is much lower for that year.

#### Does the flu vaccine protect against all throat, respiratory, gastrointestinal and ear infections?

The flu vaccine only protects against the three specific viral strains which are included in any given year's flu vaccine. Throat, respiratory, gastrointestinal and ear infections caused by bacteria or a multitude of other viruses are not prevented by getting an annual flu shot.

#### Why do doctors say I have to get a flu vaccine every year?

Like all vaccines, the flu vaccine only gives a temporary immunity to the virus strains or closely related virus strains contained in the vaccine. The only way to get natural and permanent immunity to a strain of flu is to recover naturally from the flu. Natural immunity to a particular strain of flu can be protective if that strain or closely related strains come around again in the future. However, because the vaccine only provides a 70 to 80 percent chance of temporary immunity to selected strains and those strains may or may not be prevalent each year, doctors say you have to get a flu shot every year.

#### Are there reactions to the flu vaccine?

The most common reactions, which begin within 12 hours of vaccination and can last several days are: fever, fatigue, painful joints and headache. The most serious reaction that has been associated with flu vaccine is Guillain-Barre Syndrome (GBS) which occurs most often within two to four weeks of vaccination. GBS is an immune mediated nerve disorder characterized by muscle weakness, unsteady gait, numbness, tingling,

pain and sometimes paralysis of one or more limbs or the face. Recovery takes several months and can include residual disability. Less than 5 percent of GBS cases end in death.

### **What are contraindications to the flu vaccine?**

Among high risk factors listed by the Centers for Disease Control (CDC) and the vaccine manufacturers are anyone who: (1) is sick with a fever; (2) has an impaired immune system; (3) has an egg allergy; (4) has a mercury allergy; (5) has a history of Guillain-Barre syndrome. In years past, pregnancy was also a contraindication to flu vaccine but, today, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control (CDC) recommends flu vaccine for women more than 14 weeks pregnant.

The package inserts published by the flu vaccine manufacturers state that "Animal reproduction studies have not been conducted with influenza virus vaccine. It is also not known whether influenza virus vaccine can cause fetal harm when administered to a pregnant woman. Although animal reproductive studies have not been conducted, the prescribing health care provider should be aware of the recommendations of the Advisory Committee on Immunization Practices. The ACIP states that if used during pregnancy, administration of influenza virus vaccine after 14 weeks of gestation may be preferable to avoid coincidental association of the vaccine with early pregnancy loss."

### **Is Flu Vaccine Recommended for Children?**

The flu vaccine has never been recommended for healthy children. However, in the past few years there have been indications that health officials are soon going to recommend flu vaccine for all children. A nasal flu vaccine was scheduled to be on the

market in late 2000 and publicity promoting this vaccine has centered on its potential use in children. No further information on it's development has been available.

The current injectable flu vaccine contains mercury as a preservative. In the summer of 1999, the FDA, CDC and EPA directed the vaccine manufacturers to eventually remove mercury as a preservative in childhood vaccines. To this date mercury is still being used in some childhood vaccines and in others has been replaced by 2-phenoxyethanol, another toxic substance used in antifreeze. Mercury is a known neuro-toxin and American babies under six months of age are currently exposed to levels of mercury (via childhood vaccines) that exceed EPA safety standards.

One consideration with the mass use of flu vaccine in healthy children is the removal of natural immunity (antibodies) to flu which are obtained from natural infection. The question of whether it is better for healthy children, who rarely suffer complications from flu, to get the flu and develop permanent immunity to that flu strain or it is better for children to get vaccinated every year to try to suppress all flu infection in early childhood is a question that has yet to be adequately answered by medical science.

### **What should a person do?**

Become educated about the flu and the flu vaccine; their risks and benefits. Then make an informed decision.

### **Additional Resources**

- Vaccination Risk Awareness Network ([www.vran.org](http://www.vran.org))
- *Immunization : History, Ethics, Laws and Health*, written by Catherine Diodatti (available at the clinic)
- Canadian Association of Naturopathic Doctors position paper on flu vaccines <http://www.cand.ca>

## Live Blood Analysis – John Pronk, B.Sc., N.D.

Don't they always say that you need to find out what's causing your problem before you can fix it? That's certainly the case when it comes to solving health problems. However, with the human body being so complex, finding the exact cause of disease can be a real challenge. So many things affect our health ; lifestyle, diet, inherited genetic weaknesses, emotional stresses, environmental influences, etc. We are created with our own built-in 'warning' system that often notifies us when health problems are arising; symptoms are the name we've given to these warning signals. Unfortunately these warnings are often ignored or masked with some sort of a short-term 'band-aid'. Modern medicine now offers us pain killers, anti-inflammatory drugs, decongestants, blood pressure and blood-sugar adjusting medications, etc. In emergency situations, these drugs can save lives, but they typically don't address the underlying cause of the problem. Meanwhile the disease progresses and we wonder why the problem was not caught earlier and prevented. Diagnosing the root cause of problems is vital if we want to practice truly preventative medicine. Modern medicine offers CT scans, X-rays, and blood tests, but it's known that these tests are limited in what they can tell; they don't pick up a problem till it is far advanced. Traditional blood tests are limited in that the blood tested is first preserved with additives, then refrigerated, shipped to a lab, stained with dyes, and finally heat treated before it is 'autopsied' for

chemical composition and cell counts. A lot of the blood's diagnostic value has been lost by that time.

Live Blood Analysis (LBA) is a testing method that can help uncover the root causes of a disease before it has progressed too far. With LBA, a drop of blood is all it takes to get a better picture of what is actually happening in the blood while it is still living. Using a high power Dark Field microscope, a sample of blood is magnified 1000 times or more. This allows the doctor (and the patient) to see the state of red and white blood cells, blood proteins, platelets, and even potential parasites and other foreign materials. Distortions in blood cells can indicate nutritional status of the person, especially levels of iron, proteins, vitamin B 12, folic acid and fatty acids, just to name a few. Digestion and liver function can also be assessed. Liver stress and undesirable bacteria and fungal forms may also be revealed. Improvements in the blood can be assessed over time, usually over a period of weeks to months, as root causes are treated.

LBA can be of value in the early assessment of environmental sensitivity, chronic fatigue syndrome, low immunity and other conditions months to years before traditional medical diagnosis. As part of a holistic disease prevention and health promotion plan the Live Blood Analysis testing offered at Greenwood Wellness Clinic is a very valuable diagnostic tool. I find it invaluable at getting at the root causes of people's health problems.

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If you would like to receive this newsletter by e-mail, or if you would like your name removed from the mailing list, please call the office at (519)656-2358 or e-mail us at [info@greenwoodclinic.ca](mailto:info@greenwoodclinic.ca)