

# News and Views

## Spring 2008



### Your Daily Dose: Energy and Coenzyme Q10

#### What is Coenzyme Q10?

This vitamin-like substance is, by nature, present in most human cells and is responsible for the production of the body's own energy. In each human cell, food energy is converted into energy in the mitochondria with the aid of Coenzyme Q10 (CoQ<sub>10</sub>). Ninety-five percent of all the human body's energy requirements is converted with the aid of CoQ<sub>10</sub>. Therefore, those organs with the highest concentrations of CoQ<sub>10</sub> – such as the heart muscle, kidney and the liver – have the highest CoQ<sub>10</sub> energy requirements. Pathology in any of these organs also increases the need for supplementation.

#### Drug Depletions and Interactions

Coenzyme Q<sub>10</sub> shares a common biosynthetic pathway with cholesterol. The synthesis of an intermediary precursor of Coenzyme Q<sub>10</sub>, mevalonate, is inhibited by some beta blockers, hypertension medication, and statins, a class of cholesterol drugs. Statins can reduce serum levels of Coenzyme Q<sub>10</sub> by up to 50-54% by blocking its endogenous production. It is important to remember that Coenzyme Q<sub>10</sub> supplementation does not interfere with the cholesterol-lowering effect of statin drugs and is required when these drugs are taken for an extended period of time. CoQ<sub>10</sub> is also depleted by thiazide diuretics and other medications. See your Registered Naturopathic doctor for a complete medication interaction and nutrient depletion consultation.

#### Where Is Coq10 Found In Nature?

CoQ<sub>10</sub> is widely distributed in nature, but only in small amounts. Soybeans, walnuts, and almonds (and their oils), meats, certain fish (particularly abundant in mackerel and sardines), wheat germ, and some vegetables (e.g. green beans, spinach, cabbage, and garlic) are the best sources. Sardines are particularly rich in coenzyme Q<sub>10</sub>. However, it is necessary to eat 1.6kg of sardines to obtain 100mg of Coenzyme Q<sub>10</sub>. Therapeutic prescription of coenzyme Q<sub>10</sub> is the most efficient way to maintain body levels especially when using hypertension or cholesterol medications.

#### Conditions that Benefit from the Supplementation of CoQ10

- ❖ Heart Disease
- ❖ High Blood Pressure
- ❖ Diabetes
- ❖ Gum Disease
- ❖ Kidney Failure
- ❖ Migraine
- ❖ Parkinson's disease
- ❖ Muscular Dystrophy
- ❖ Endurance Athletics and Exercise
- ❖ Fibromyalgia
- ❖ Adrenal Fatigue/Exhaustion
- ❖ Cancer

Getting to the 'heart' of the matter, if you have any of the above-mentioned conditions your Registered Naturopathic Doctor will determine your individual drug depletion and supplementation needs of Coenzyme Q<sub>10</sub>. Research suggests supplementation with coenzyme Q<sub>10</sub> should be a routine adjunct to any medication that may reduce endogenous production of Coenzyme Q<sub>10</sub>.

References: See Website for full Reference List

## Parkinson's Disease - Part I of a II Part Series

### Is Parkinson's Disease a Preventable Illness?

**Parkinson's disease** (also known as **Parkinson disease** or **PD**) is a degenerative disorder of the central nervous system that often impairs movement and speech. It is characterized by muscle rigidity, tremor, a slowing of physical movement (bradykinesia) and in extreme cases a loss of physical movement (akinesia). The primary symptoms are the results of decreased stimulation of the motor cortex by the basal ganglia, in turn caused by the insufficient formation and action of dopamine. Secondary symptoms may include high level cognitive dysfunction and subtle language problems. PD is both chronic and progressive.

There seems to be a link to genetic predisposition, but until recently no clear cause of Parkinson's disease has been determined. New research has revealed an increased risk of developing Parkinson's disease with occupational exposure to herbicides and pesticides.

In the mid-1980's research proved that MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) could immediately cause Parkinson's disease. MPTP is a synthetic byproduct of illegal production of MPPP, a synthetic opioid drug with effects similar to those of heroin and morphine. Then a pesticide called rotenone was investigated as a possible Parkinson-causing agent. In this research it was found that both MPTP and rotenone are lipophilic and can cross the blood-brain barrier. Since then the inclusion of environmental agent MPTP and pesticides /fungicides/herbicides such as Rotenone, Paraquat, Dieldrin, and Maneb in causal research of PD has provided valuable insight into the neurodegenerative process.

In 2006, a study of more than 143,000 people was conducted by researcher Alberto Ascherio (PhD, MD, DR?) of the Harvard School of Public Health found that people who had reported exposure to pesticides

had a 70% greater risk of developing PD. Another 2008 case control study determined that both insecticides (organochlorines and organophosphorus compounds) and herbicides were found to significantly increase risk of PD.

One must not think of Parkinson's Disease as something that 'just happens'. There are many factors that may significantly influence the progression and the outcome. Residents of Southern Ontario have abnormally high exposure to agricultural pesticides/fungicides/ herbicides and thus have a higher probability to develop toxin-related neurological conditions.

Part II of the Parkinson's Disease Series: **'Parkinson's Disease and Glutathione'** will be featured in the Summer Newsletter.

For more information about these specific chemicals please ask for our Pesticide Factsheet.

References: Refer to Website Newsletter

*Join the Sauna Club at the Simcoe clinic location: call 519.426.4275 to discuss our package rate and bring a friend along for free. One sauna session is \$20 while 12 sessions cost \$200 – a savings of \$40 or two sessions for free.*

## **Timely News Announcements of Importance** **to NDs and Patients**

### **Bisphenol A (BPA) – Health Canada has banned the importation, sale and advertising of polycarbonate baby bottles manufactured with BPA.**

BPA is a chemical molecule that mimics estrogen in the body. This xenoestrogen is an endocrine disruptor that may potentiate the risk for developing hormonally based cancers, including breast, prostate and endometrial and may even lead to infertility or affect the onset of puberty. It is primarily used in the manufacture of rigid plastic products, but is also found in canned foods and beverages especially acidic fruits and vegetables where it stops the contents from eroding the metal container.

The Canadian Association of Naturopathic Doctors (CAND) has prepared a Patient Handout to assist you in discussing the risks of BPA and to provide some alternatives. The information will also be posted on the CAND website [www.cand.ca](http://www.cand.ca).

Health Minister Tony Clement has announced that Health Canada will be posting its report on BPA shortly and the public will be given 60 days to comment.

### **Bill C-517 – supporting mandatory labeling of Genetically Engineered foods.**

Private members bill C-517 passed first reading in the House of Commons on April 3, 2008. Second reading is expected shortly. If the bill passes second reading it will be sent to the Standing Committee on Health for review and consultation. If it is returned to the House for a third reading it has a very strong chance of becoming law. The CAND supports Bill C-517 and encourages all members to share the GREENPEACE announcement with colleagues, patients, friends, and family and to call upon their local Member of Parliament to support the Bill.

Complete details including how to locate your local MP are contained in the GREENPEACE announcement at [www.greenpeace.ca](http://www.greenpeace.ca)

## **Time for a Spring Cleanse!**

Your Naturopathic doctor can guide you through a personalized cleansing program safely. If you are cleansing for the first time and are not sure how to proceed, do not use a packaged product. A cleanse is more than taking a group of capsules or supplements – it is a process that involves dietary changes, a commitment to regular sweating and bowel elimination, and a comprehensive evaluation of your health before starting a cleanse altogether. Fasting is not cleansing and may lead to more toxicity and a compromised immune system, and malnourishment.

A cleanse for the body can be designed for you at The Armstrong Clinic after an assessment of your digestion, elimination, exercise, stress, sleep and lifestyle. It may combine any or all of the following: colon hydrotherapy, infrared sauna, dietary elimination via IgG food allergy testing, salivary hormone, blood labs (i.e. liver panel) and urinary testing. Once your assessment is completed, a detailed outline based upon your time commitments is created with you involved in each step of the process.

The Armstrong Clinic has a Complete Cleanse Program including the use of colon hydrotherapy, infrared sauna and a personalized detoxification program. If you would like to know more please inquire at the Simcoe office located at 55 Kent Street South or call us at 519-426-4275.

## Armstrong Clinic for Naturopathic Medicine

# OPEN HOUSE 2008

# May 4<sup>th</sup>

1-4 PM at 55 Kent Street South

Help us celebrate **Naturopathic  
Medicine Week.**

Meet the Naturopathic Doctors at  
the Armstrong Clinic and our  
Certified Colon Hydrotherapist,  
Thia Harrison.

The first 25 people will receive a  
door prize.

Healthy refreshments will be  
served.

Bring a friend and your Spring  
Cheer!

## Referral Rewards Program

Your referral of friends and family is the highest compliment that confirms your satisfaction with our services.

If you have received a 'Thank-you' postcard from us by mail, be sure to bring it in at your next visit so that you can redeem your choice of reward we have to offer you. It's our way of saying "thank-you for trusting us with your health care."

## About Us...

Dr. Heidi Kussmann-Armstrong has been practicing for 5 years and Dr. Sean Armstrong has been practicing for 3 years. Both are Registered Naturopathic Doctors, have successful practises in general family medicine, and have helped many people achieve their health goals.

Your extended health insurance benefits most often covers your visit fees with a Registered Naturopathic Doctor. For example, we are covered by Blue Cross, Green Shield, London Life, Great West Life, and many other insurance providers.

### **How are Naturopathic Doctors trained?**

Training encompasses a minimum of 3 years of pre-medical university education, followed by a four-year full-time program at an accredited college of naturopathic medicine. The education includes training in basic medical sciences, naturopathic therapeutics, and 1500 hours of supervised clinical experience. Obtaining licensure requires successful completion of provincial and North American board exams.

### **Clinic Locations:**

**Simcoe: 55 Kent St South**

**Tillsonburg: 62 Bidwell St.**

**Paris: 15 Grand River St. North**

### **Contact:**

**Toll Free: 1.866.878.0033**

**Phone: 519.426.4275**

**Fax: 519.426.4596**

**Website: [www.armstrongclinic.com](http://www.armstrongclinic.com)**