Health and Wellness Issues

Cholesterol Facts vs. Myths

Cholesterol is a very misunderstood molecule.

There has long been a vocal minority of doctors, researchers and health professionals who believe that cholesterol and fat have been wrongly convicted as the primary promoters of heart disease. Many health professionals believe that this emphasis on cholesterol has caused many to take their attention off what is believed to be the true promoters of heart diseases – inflammation, oxidative damage, stress and sugar.

It is believed that the evidence against cholesterol as a causal factor in heart disease is much weaker than was previously believed. It is also believed that the statin drugs given to lower cholesterol are being over-prescribed, and are not without significant side effects. Cholesterol is needed for life. It's the parent molecule for all the major sex hormones, including estrogen, progesterone and testosterone. It's needed for the immune system, and it's needed for the brain. In fact, one of the most serious side effects of cholesterol-lowering medication is memory loss.

The Great Cholesterol Myth is really a series of related myths that impact everything from diet to the way heart disease is treated. Here are the biggest ones backed with research:

MYTH: High cholesterol is a good predictor of heart attacks. **FACT**: High cholesterol is a terrible predictor of heart attacks.

More than half the people admitted to hospitals with cardiovascular disease have normal cholesterol, and plenty of people with elevated cholesterol have perfectly healthy hearts. One Harvard study, published in the journal *Circulation*, showed that the people with the highest ratio of triglycerides to HDL had 16 times the risk of heart attack as those with the lowest ratio of triglycerides to HDL. In fact, the ratio of triglycerides to HDL was the strongest predictor of a heart attack, even more accurate than the LDL/HDL ratio.

MYTH: Lowering cholesterol with statin drugs will prolong your life.

FACT: There is conflicting data on whether statins have any impact on longevity.

The majority of cholesterol-lowering studies don't show any difference in death rates between patients who take statins and patients who don't. In the PROSPER study, statin use in women with known heart disease resulted in a small reduction in mortality from heart disease; however, this was offset by additional deaths from cancer and other mortalities, so the overall net "gain" in terms of lives saved was a big fat zero.

MYTH: Statin drugs are perfectly safe.

FACT: Statin drugs have significant side effects, including loss of memory and libido, muscle pain and fatigue.

University of California San Diego researchers found that the majority of doctors dismissed some important side effects that may have been caused by statins. Approximately 65% of doctors in their study missed some side effects or failed to connect some complaints with the medication. Meanwhile, side effects such as forgetfulness, loss of sex drive, fatigue, and muscle pain and worse continue to be reported.

MYTH: Statin drugs are appropriate for men, women, children and the elderly.

FACT: The only group in which statins have been shown to have even a modest effect is in middle-aged men who've already had a heart attack.

A 2004 study in the *Journal of the American Medical Association* by Judith Walsh, MD found that statin drug treatment to reduce cholesterol in women provided no mortality benefit. A 2007 study claims there is no evidence to show that giving statins to women keeps them free of heart disease, and statin drugs have never been tested long term on children.

MYTH: The higher your cholesterol, the shorter your lifespan.

FACT: In the Framingham Study, the people who actually lived the longest had the highest cholesterol.

One study published in the *Journal of the American Geriatric Society* found that those with cholesterol levels lower than 189 were far *more* likely to die than those with the highest cholesterol levels. "Subjects with low total cholesterol levels are at higher risk of dying even when many related factors have been taken into account," the researchers wrote.

Source: Jonny Bowden, PhD, CNS and Stephen Sinatra, MD, FACN, Authors of *The Great Cholesterol Myth*

The Dangers of Cholesterol-Lowering Medications

Statin drugs work by inhibiting an enzyme in your liver that's needed to manufacture cholesterol.

Statin drugs inhibit not just the production of cholesterol, but a whole family of intermediary substances, many if not all of which have important biochemical functions in their own right. For starters, statin drugs deplete your body of Coenzyme Q10 (CoQ10), which is beneficial to heart health and muscle function. Because doctors rarely inform people of this risk and advise them to take a CoQ10 supplement, this depletion leads to fatigue, muscle weakness, soreness, and eventually heart failure.

Muscle pain and weakness, a condition called rhabdomyolysis, is actually the most common side effect of statin drugs. This condition may be an indication that your body tissues are actually breaking down and this can cause kidney damage.

Statin drugs have also been linked to:

- An increased risk of polyneuropathy (nerve damage that causes pain in the hands and feet and trouble walking);
- Dizziness;

- Cognitive impairment, including memory loss;
- A potential increased risk of cancer;
- Decreased function of the immune system;
- Depression; and
- Liver problems, including a potential increase in liver enzymes (so people taking statins must be regularly monitored for normal liver function).

And recently a possible association was found between statins and an increased risk of Lou Gehrig's disease. Other cholesterol-lowering drugs besides statins also have side effects, most notably muscle pain and weakness.

How to Lower Your Cholesterol Naturally

- 1. Make sure you're getting plenty of high-quality, animal-based omega3-fats. New research suggests that as little as 500 mg may lower your total cholesterol and triglycerides and will likely increase your HDL cholesterol.
- 2. Reduce sugars in your daily diet. It is especially important to eliminate dangerous sugars such as fructose.
- 3. Eat the right foods for your nutritional type and eat a good portion of your food raw.
- 4. Eat healthy, preferably raw, fats that correspond to your nutritional type. This includes: Olive oil, Coconut and coconut oil, Organic raw dairy products (including butter, cream, sour cream, cheese, etc.), Avocados, Raw nuts, Seeds, Eggs (lightly cooked with yolks intact or raw), Organic, grass-fed meats
- 5. Get the right amount of exercise.
- 6. Avoid smoking and drinking excessive amounts of alcohol.

Source: The Huffpost Healthy Living Canada, (By Dr Joseph Mercola), March 2013

CNIB Eye Van

The CNIB's Ontario Medical Mobile Eye Care Clinic, also known as, the CNIB Eye Van, is a fully-equipped, medical eye care clinic on wheels.

Each year from March to November, a group of 25-30 participating ophthalmologists, assisted by two CNIB ophthalmic assistants, carry out vision screening, treat eye conditions and perform minor surgery in remote northern Ontario communities where services are not available. The unique and innovative Medical Mobile Eye Care Unit is an integral part of the Prevention of Blindness program for both CNIB and the Ontario Medical Association.

The Eye Van is a custom-made transport truck and 48 foot trailer including reception and waiting areas, a vision screening area, and a doctor's examination room. Special features include a reinforced floor and hydraulic levelling system that allows for minor surgery to be performed on site, including a state-of-the-art SLT laser for the treatment of glaucoma.

Each year, the Eye Van travels more than 6,000 km to 30 communities, examining more than 5,000 patients. This service provides for an early diagnosis of eye conditions that could lead to blindness if left untreated.

Schedule for 2013			
Englehart	March 18 - 21		
Iroquois Falls	March 25 - 28	April 2 - 5	
Cochrane	April 8 - 12	April 15 -19	April 22 - 23
Smooth Rock Falls	April 24 - 26		
Kapuskasing	April 29 - May 3	May 6 - 10	May 13 - 16
Hearst	May 21 - 24	May 27 - 31	June 3 - 7
Hornepayne	June 10 - 12		
Longlac	June 13 - 14		
Geraldton	June 17 - 20		
Atikokan	July 2 - 5	July 8 - 9	
Fort Frances	July 10 - 12	July 15 - 19	
Rainy River	July 22 - 25		
Kenora	July 29 - 31		
Ear Falls	August 1 - 2		
Red Lake	August 6 - 9	August 12 - 16	
Dryden	August 19 - 21		
Sioux Lookout	August 22 - 23		
Pickle Lake/Osnaburgh	August 26 - 27		
Ignace	August 29 - 30		
Schreiber/Terrace Bay	September 3 - 4		
Manitouwadge	September 5 - 6	September 9 - 12	
White River	Sept 16 - 18		
Dubreuilville	Sept 19 - 20		
Wawa	Sept 23 - 27		
Chapleau	Sept 30 - October 4		
Blind River	October 8 - 10		
Little Current	October 15 - 18		
Gore Bay	October 21 - 25		
Mindemoya	October 28 - November 1	November 4 - 5	
Wikwemikong	November 6 - 8		

Source: www.cnib.ca, March 2013

Increase Your Potassium Intake to Lower Blood Pressure

Potassium may be the missing mystery mineral in your own better-blood-pressure equation. Just one in 50 Americans gets enough of this good stuff, found in abundance in almost all produce, dairy products and beans. Potassium actively lowers blood pressure, in large part by buffering salt's efforts to jack it up. Every 600-milligram increase in the amount of potassium you eat every day (that's less than a cup of cooked spinach) lowers your BP by one point.

Here are six strategies to help you do that naturally:

Feast on leafy greens more often. Swiss chard and spinach are potassium all-stars, with one cup of cooked greens delivering more than 800 milligrams — one-sixth of the 4,700 milligrams you need daily. Cooked kale, cabbage, beet, mustard and turnip greens are also terrific sources, with about 300 milligrams per cup.

Keep potassium-boosters in the freezer. Stock up on bags of convenient, no-waste, frozen chopped kale, collards, mustard greens and spinach (plain, without added sauces or sodium).

And in your cupboard. Dried beans are another super source of potassium, with about 600 milligrams per cup when cooked.

Dive into spinach or romaine salad. While cooked spinach (steamed or boiled), added to soup or sauteed with olive oil and garlic, delivers a blood-pressure-pleasing percentage of your daily potassium requirement, going raw delivers an even bigger dose.

Enjoy an old-fashioned baked potato. A medium-size baked white potato — if you eat the skin it nourishes you with 751 grams of potassium.

Sneak in these seasonings and natural sweets. Spice things up with ginger and turmeric — both contain pressure-pampering potassium. A fruit salad made with potassium-rich strawberries, bananas and dried apricots are also good.

Source: The Star, March 2013

5 Ways You Can Make Health Last

Take a look at how many healthy years these risk factors could cost you.

Cost of physical inactivity: Four quality years

Aim for at least 150 minutes of moderate-to-vigorous physical activity per week, in bouts of 10 minutes or more. Any physical activity can have a positive impact on your heart health, including walking and dancing. The Heart and Stroke Foundation has tips to help you get active.

Cost of a poor diet: Three quality years

A nutritious and balanced diet helps you manage your weight, blood pressure, blood sugar and cholesterol levels and boosts your overall well-being. Canada's Food Guide recommends women aged 19-50 eat seven to eight servings of vegetables and fruit per day, while men should eat eight to 10.

Cost of excessive stress: Two quality years

Too much stress can elevate blood cholesterol or blood pressure and make it difficult to lead a healthy lifestyle – especially since many respond of us to stress by eating, drinking or smoking too much. In times of stress, it's important to care for your physical and mental health.

Cost of smoking: Two and a half quality years

Smoking and exposure to second-hand smoke can increase your risk of heart disease and stroke. The sooner you become smoke free, the sooner your body recovers. Within 10 years of becoming smoke-free, your risk of dying from lung cancer is cut in half. After 15 years of being smoke-free, your risk of dying will be nearly that of a non-smoker.

Cost of excessive drinking: Two quality years

If you drink alcohol, moderation is key – women should limit themselves to two drinks a day or 10 drinks a week, and men should limit themselves to three drinks a day or 15 drinks a week.

Source: www.heartandstroke.com, February 2013

Heart Disease in Women: Understand Symptoms and Risk Factors

The most common heart attack symptom in women is some type of pain, pressure or discomfort in the chest. But it's not always severe or even the most prominent symptom, particularly in women. Women are more likely than men to have heart attack symptoms unrelated to chest pain, such as:

- Neck, shoulder, upper back or abdominal discomfort;
- Shortness of breath;
- Nausea or vomiting;
- Sweating;
- Lightheadedness or dizziness; or
- Unusual fatigue.

Heart disease risk factors for women

Although the traditional risk factors for coronary artery disease — such as high cholesterol, high blood pressure and obesity — affect women and men, other factors may play a bigger role in the development of heart disease in women. For example:

- Metabolic syndrome a combination of fat around your abdomen, high blood pressure, high blood sugar and high triglycerides has a greater impact on women than on men;
- Mental stress and depression affect women's hearts more than men's. Depression makes it
 difficult to maintain a healthy lifestyle and follow recommended treatment, so talk to your
 doctor if you're having symptoms of depression;

- Smoking is a greater risk factor for heart disease in women than in men; and
- Low levels of estrogen after menopause pose a significant risk factor for developing cardiovascular disease in the smaller blood vessels (small vessel heart disease).

What can women do to reduce their risk of heart disease?

There are several lifestyle changes you can make to reduce your risk of heart disease:

- Exercise 30 to 60 minutes a day on most days of the week;
- Maintain a healthy weight;
- Quit or don't start smoking; and
- Eat a diet that's low in saturated fat, cholesterol and salt.

You'll also need to take prescribed medications appropriately. And you'll need to better manage other conditions that are risk factors for heart disease, such as high blood pressure, high cholesterol and diabetes. Some women at high risk of heart disease may also benefit from the use of supplements, such as omega-3 fatty acids.

Source: Mayo Clinic, March 2013

Seasonal Allergies: Nip them in the Bud

Reduce your exposure to allergy triggers

- Stay indoors on dry, windy days the best time to go outside is after a good rain, which helps clear pollen from the air;
- Delegate lawn mowing, weed pulling and other gardening chores that stir up allergens;
- Remove clothes you've worn outside; you may also want to shower to rinse pollen from your skin and hair;
- Don't hang laundry outside pollen can stick to sheets and towels; and
- Wear a dust mask if you do outside chores.

Take extra steps when pollen counts are high

- Check your local TV or radio station, your local newspaper, or the Internet for pollen forecasts and current pollen levels;
- If high pollen counts are forecasted, start taking allergy medications before your symptoms start;
- Close doors and windows at night or any other time when pollen counts are high; and
- Avoid outdoor activity in the early morning when pollen counts are highest.

Keep indoor air clean

- Use the air conditioning in your house and car;
- If you have forced air heating or air conditioning in your house, use high-efficiency filters and follow regular maintenance schedules;

- Keep indoor air dry with a dehumidifier;
- Use a portable high-efficiency particulate air (HEPA) filter in your bedroom; and
- Clean floors often with a vacuum cleaner that has a HEPA filter.

Try an over-the-counter remedy

Several types of nonprescription medications can help ease allergy symptoms. They include:

- Oral antihistamines: Antihistamines can help relieve sneezing, itching, runny nose and
 watery eyes. Examples of oral antihistamines include loratadine (Claritin, Alavert),
 cetirizine (Zyrtec Allergy, others) and fexofenadine (Allegra Allergy). Older
 antihistamines, such as diphenhydramine (Benadryl) and chlorpheniramine (ChlorTrimeton), are also effective, but they can make you drowsy;
- Decongestants: Oral decongestants such as pseudoephedrine (Sudafed, Afrinol, others) can provide temporary relief from nasal stuffiness. Decongestants also come in nasal sprays, such as oxymetazoline (Afrin) and phenylephrine (Neo-Synephrine). Only use nasal decongestants for short-term relief. Long-term use of decongestant nasal sprays can actually worsen symptoms (rebound congestion);
- Nasal spray: Cromolyn sodium nasal spray can ease allergy symptoms and doesn't have serious side effects, though it's most effective when you begin using it before your symptoms start; and
- Combination medications: A number of allergy medications combine an antihistamine with a decongestant. Examples include the oral medication Drixoral, which combines the antihistamine dexbrompheniramine maleate with the decongestant pseudoephedrine sulfate, and the nasal spray Claritin-D, which combines the antihistamine loratadine with pseudoephedrine sulfate.

Rinse your sinuses

Rinsing your nasal passages with distilled, sterile saline solution (nasal irrigation) is a quick, inexpensive and very effective way to relieve nasal congestion.

When home remedies aren't enough, see your doctor

If you have bad seasonal allergies, your doctor may recommend that you have skin tests or blood tests to find out exactly what allergens trigger your symptoms. Testing can help determine what steps you need to take to avoid your specific triggers and identify which treatments are likely to work best for you.

For some people, allergy shots (allergen immunotherapy) can be a good option. Also known as desensitization, this treatment involves regular injections containing tiny amounts of the substances that cause your allergies. Over time, these injections reduce the immune system reaction that causes symptoms.

Source: Mayo Clinic, March 2013

Alzheimer's Prevention Strategy Prescribes Exercise

More than one in seven cases of Alzheimer's disease could be prevented if people who are physically inactive started getting regular doses of exercise, a new report suggests. The Ontario Brain Institute commissioned the research paper examining 55 studies on physical activity.

Study author Prof. Michael Rotondi of York University's School of Kinesiology and Health Science in Toronto said they found people over age 65 who were physically active were about 38 per cent less likely to develop the degenerative brain disease than those who were physically inactive.

The researchers strongly recommended the Public Health Agency of Canada's guidelines to maintain 150 minutes of moderate to vigorous physical activity per week — half an hour, five times a week — that can even be done in 10 minutes bursts. Moderate to vigorous activity makes breathing harder while still allowing a person to sing.

The Alzheimer's Society of Canada projects that the number of cases will more than double to 1.25 million by 2038. Improving physical activity levels is a strategy for prevention and delaying onset of Alzheimer's disease.

Source: CBC News, March 2013

Three Reasons to Eat More Wheat Bran

Wheat bran is a wonderfully healthy food that packs a nutritious punch of goodness. It offers an extraordinary fibre boost and helps promote regular blood pressure too. It is known for supporting the immune system and for adding much needed vitamins and minerals to our diets.

Here are three reasons to eat more wheat bran.

- 1. It helps make up for nutrient losses We consume lots of white flour from bread, pasta and baked goods. When flour is refined, the most nutritious parts, the bran and germ, are removed, and so are a lot of the vitamins and minerals. Choosing only whole grain wheat products or enriching muffins, pancakes, cereal with wheat bran will add vital B vitamins, iron, zinc and other nutrients back into your diet.
- **2.** It packs a great fibre boost Wheat bran is the best fibre for promoting regularity and keeping your digestive system on track. A half-cup serving has 11 grams of fibre, which is a large portion of the amount you need each day (men need 38 grams, women 25 grams). You get all that fibre for a mere 58 calories.
- **3.** It has mucho magnesium Wheat bran is the top food source of this mineral. A half-cup serving provides about half of your daily requirement. Magnesium helps you maintain normal muscle and nerve function, keeps your heartbeat steady and your bones strong, promotes normal blood pressure and supports your immune system

Source: Canadian Living, March 2013

Is This Pill Making You Blind?

Swallowing an aspirin every week could triple your risk for age-related macular degeneration (AMD)—a common cause of vision loss and blindness among older adults, finds research published in Internal Medicine.

Aspirin stokes activity in one part of your immune system, which in turn may promote the growth of new blood vessels behind your retinas, according to the study. When those blood vessels burst, scar tissue forms, causing AMD and vision loss, the researchers explain.

The risk for AMD was still relatively small among the study's aspirin poppers: After 15 years of regular use—defined as once or more per week—9.3 percent of aspirin users developed macular degeneration compared to 3.7 percent of the other study participants.

Bottom line: Don't stop taking aspirin if your doctor has prescribed it for your heart.

Meanwhile, a specific combination of vitamins including C, E, zinc, and copper can lower your risk for macular degeneration, according to a study from the National Eye Institute, along with leafy green vegetables including kale and spinach. If you're looking at over-the-counter eye supplements, select one marked "AREDS," which stands for "age-related eye disease study"—a reference to the NEI research. Just make sure you check with your doctor before taking them, the NEI recommends.

Source: Men's Health News, March 2013

The Supplement That Fights Skin Cancer

Taking omega-3 fish oil supplements could help you stave off skin cancer, according to a new study in *The American Journal of Clinical Nutrition*.

Researchers from the University of Manchester found that people who consumed 5 grams of omega-3 a day experienced 50 percent less suppression to their immune system when they were exposed to up to 15 minutes of sun.

What that means: Getting your daily dose could make you more immune to sunlight by decreasing the inflammation happening in your tissue, says lead study author Suzy Pilkington, Ph.D.

But remember, just because a 5-gram dose of omega-3—equivalent to about 1.5 portions of oily fish—offers some protection, it doesn't mean you should skip the sunblock.

Source: Men's Health News, March 2013

Infections Becoming Threat as Drug-resistant Bacteria Rise

Ear, throat and skin infections that were once easy to treat are becoming serious threats to Canadians. The rise of antibiotic-resistant bacteria is the reason and it's one of the biggest health issues facing the country, the Ontario Medical Association (OMA) warns.

One of the major underlying causes is the overuse of antibiotics. When antibiotics are overused and given to patients when they are not needed, bacteria can adapt and become resistant to the drug. Once bacteria develop resistance to one antibiotic, they can easily become resistant to others.

Regulations prohibit important first-line human antibiotics from being given to animals. However, the OMA warns that farmers who use other antibiotics to promote growth or prevent illness in animals are contributing to the problem of drug resistance because many animal and human drugs belong to the same family. The OMA report makes several recommendations.

Source: The Globe and mail, March 2013

Palliative Care: Symptom Relief During Illness

Palliative care is a multidisciplinary medical specialty that aims to improve quality of life for people who have serious or life-threatening illnesses. Palliative care takes into account the person's emotional, physical and spiritual needs and goals.

Anyone who has a serious or life-threatening illness can benefit from palliative care, either to treat symptoms of the disease, such as pain or shortness of breath, or to ease the side effects of treatment, such as fatigue or nausea.

Palliative care may be a good option for someone with a serious illness who needs help:

- Managing pain or other symptoms;
- Understanding and coping with his or her condition; and
- Navigating the health care system.

How does palliative care work?

Palliative care can be provided throughout treatment for a serious illness — whether you or your loved one is being treated on an outpatient basis or in a hospital or a nursing home. This type of treatment can be provided by various specialists, including doctors, nurses, social workers, psychologists, counselors, chaplains, registered dietitians, pharmacists and rehabilitation specialists.

A palliative care specialist works with the primary care doctor and a team of other health care professionals to create a treatment plan that eases symptoms, relieves pain, addresses spiritual and psychological concerns, and helps maintain dignity and comfort.

A palliative care specialist can also help you or your loved one communicate with doctors and family members and create a smooth transition between the hospital and home care or nursing facilities. The palliative care team will educate you and your family members about what to expect and schedule routine meetings to discuss ongoing care throughout the course of your illness.

Source: Mayo Clinic, March 2013

Drug Information and Update

How Long Does the Shingles Vaccine Last?

The Vaccine

A form of the virus that causes chickenpox, shingles affects the nerve roots in the body, causing pain, itching, rash, headache, blistering of the skin, and dizziness. Shingles most commonly affects people over the age of 60. Known as Zostavax, the shingles vaccine is only given in one dose and is recommended for adults ages 60 and over.

If untreated, shingles can last two to four weeks. Onset is often the result of a weaker immune system due to advancing age, stress, serious diseases such as cancer or AIDS, or physical stress to the body, such as that from sunburn.

Duration

In terms of vaccinations, the shingles vaccine is fairly new on the market, approved by Health Canada in 2008. Because Zostavax is a new vaccine, it means researchers do not have a significant amount of long-term research as to its efficacy. However, current estimations say the shingles vaccine is effective for six years at least, possibly longer in some individuals. A booster shot may be given to patients after this time. While the vaccine is most effective in protecting those ages 60 to 69, it has been shown to reduce symptoms in older persons.

According to the drug company, Merck's own research:

- The vaccine cuts the risk of illness by half for those in their 60s.
- Between the ages of 70 to 79, the effectiveness falls to 41 per cent.
- For those 80 years and older, the effectiveness is less than 20 per cent.

The shingles vaccine is safe. Most reactions are harmless and do not last long. Symptoms experienced after vaccination are not necessarily caused by the vaccine.

Reactions

Possible reactions to the vaccine:	What to do:
Pain, redness, swelling (10-49%), itching or heat (1-9%) at the injection site	Apply a cold, damp compress to the injection site
Headache (1-9%) A few pimples resembling chickenpox (1 to 9 per 1,000)	Cover the lesions. If you cannot, avoid contact while the lesions are present with premature newborns and those with weakened immune systems. See a doctor if symptoms are severe

Source: www.zostavax.ca, CBC News, www.msss.gouv.qc.ca, ehow.com, March 2013

Vitamin D Loss Attributed to Obesity

British researchers looked at data from about 165,000 people, and found that a 10 percent rise in body-mass index (BMI) was linked with a four percent drop in concentrations of vitamin D in the body. BMI is a measurement of body fat based on height and weight.

The link between BMI and vitamin D levels was found in men and women, as well as in younger and older people, the investigators noted.

The findings suggest that a higher BMI leads to lower levels of vitamin D circulating in the body, while a lack of vitamin D has only a small effect on BMI, according to the authors of the study, published February 5, 2013 in the journal *PLoS Medicine*.

Efforts to tackle obesity may also help reduce levels of vitamin D deficiency, said lead investigator Dr. Elina Hypponen, of University College London's Institute of Child Health. Previous studies have linked vitamin D deficiency with obesity, but it wasn't clear whether a lack of vitamin D triggered weight gain or whether obesity led to vitamin D deficiency, the study authors noted in a university news release.

Vitamin D, which is essential for healthy bones and other functions, is produced by the skin when exposed to sunlight. It can also be obtained through foods and supplements.

"Vitamin D deficiency is an active health concern around the world. While many health messages have focused on a lack of sun exposure or excessive use of sun creams, we should not forget that vitamin D deficiency is also caused by obesity," Hypponen said.

"Our study highlights the importance of monitoring and treating vitamin D deficiency in people who are overweight or obese, in order to alleviate adverse health effects caused by a lack of vitamin D," she added.

Although the study reported that higher BMI leads to lower levels of vitamin D circulating in the body, it did not prove a cause-and-effect relationship.

Source: Drugs.com, February 2013

MS Gets the 'Poison Chair' Treatment

A form of fumaric acid—an agent used as a food additive, industrial chemical and treatment for psoriasis—may also be effective against multiple sclerosis.

Two recently published randomized phase III trials have shown that BG-12, an oral compound of dimethyl fumarate, reduced relapse rates and MRI-confirmed disease activity in people with relapsing-remitting MS compared with placebo. (As an industrial agent, dimethyl fumarate is known for causing a European outbreak of contact dermatitis among people who purchased chairs and sofas for which the chemical was used as a fungicide and desiccant during shipping—thus the term "poison chair" treatment.)

In the DEFINE (Determination of the Efficacy and safety of oral Fumarate IN relapsing-remitting MS) trial, 1,234 volunteers received 240 mg BG-12 taken either two or three times daily or placebo.

Dr. Amit Bar-Or, a neurologist and neuroimmunologist at the Montreal Neurological Institute and Hospital, was a site investigator and global adviser in these trials. "Perhaps the best message for primary-care physicians and general neurologists to take away is that important progress is being made and that we can be, I think, increasingly optimistic about the future of patients diagnosed today with MS compared with those diagnosed with the same MS ten or even five years ago," Dr. Bar-Or told the Medical Post.

Fumaric acid is an intermediate product of the citric acid cycle. Fumaderm, licensed in Germany since 1994, is a mixture of fumaric acid esters, including dimethyl fumarate, used to treat moderate to severe plaque psoriasis. BG-12 is a second-generation enteric-coated formulation of dimethyl fumarate that has anti-inflammatory and cytoprotective properties.

Source: Canadian Healthcare Network, January 2013

PROVINCIAL ISSUES

Ontario Supporting People Living with Mental Illness

Ontario is ensuring that supportive housing and mental health services continue to be provided to those who need them.

The province will help to support the At Home/Chez Soi project in order to maintain 216 supportive housing units and support services for 240 people living with mental illness. The four-year research project, led by the Mental Health Commission of Canada, is focused on reducing the growing number of homeless people affected by a mental illness. At Home/Chez Soi provides formerly homeless Ontarians with mental illness with access to independent housing through rent subsidies and mental health supports.

Ontario's comprehensive Mental Health and Addictions Strategy is focused on providing the right mental health care at the right time in the right place, and is part of The Way Forward in building a strong economy and a fair society for the benefit of all.

Quick Facts

- Ontario announced this investment on Bell's Let's Talk Day, which raises funds for and awareness of mental health across Canada, reaffirming its commitment to creating healthy, resilient and inclusive communities.
- Since 2003, the province has increased funding for community mental health services by 95 per cent and increased funding for addiction programs by 58 per cent.
- Ontario funds 9,600 mental health and addiction housing units throughout the province.
- The government is currently in the second year of the \$257 million, three-year investment that will help over 50,000 children with mental illness and their families receive the support and treatment they need.
- On Bell Let's Talk Day, Bell Canada donated 5 cents to mental health initiatives across Canada on behalf of customers for every text message sent, long distance call made, or tweet using #BellLetsTalk.

Source: Ministry of Health and Long-Term Care, March 2013

OPA Wants Fairer ODB Co-pays

The Ontario Pharmacists' Association (OPA) is urging the provincial government to reform the current deductibles and co-payments required under the public drug program to ensure long-term sustainability and improve fairness.

OPA chair Billy Cheung notes that Ontario and other provinces have tackled rising costs related to prescription drugs through a series of price reductions. "However, price reductions will only address this issue to a point," he writes. "As health professionals whose work is most closely involved with public drug programs and the patients they serve, pharmacists are intimately

aware of the limitations and issues in the current system and the potential solutions to address those."

Currently, Ontario Drug Benefit (ODB) recipients are required to pay a portion of their prescription drug costs through a deductible or co-payment, depending on their and their spouse's income level. The deductible is \$100 and co-payment for low income people is \$2.00, while higher income individuals pay \$6.11.

"This model is not ultimately sustainable at the low level of cost-sharing we have now," says Dennis Darby, OPA's CEO. "As pharmacists, we need to make sure that there is long-term sustainability so that everyone who needs prescription drugs can afford them and new drugs are added to the provincial formulary."

Asking higher income seniors to pay more was mentioned in the provincial budget in 2012 and also suggested in Ontario's Senior Strategy report released in January 2013. But, Darby says reform must go beyond seniors. "We've heard that the government wants a more comprehensive public drug plan and we want to be one of the stakeholders at the table."

OPA is suggesting that there be no cost-sharing for individuals at the lowest income levels and cost sharing be more closely tied to a patient's income for higher income individuals.

Source: Canadian Healthcare Network, January 2013

Supporting Brain Research in London

The Ontario government is investing in world-leading brain research at Western University to bring better health care and increased investments to London.

As part of the recently announced five-year, \$100 million commitment to the Ontario Brain Institute, the province is investing in a new, collaborative research project on neurodegeneration, led by Dr. Michael Strong, Dean of Western University's Schulich School of Medicine and Dentistry. The project will have a strong social focus, with the goal of improving patient care across the province.

The government's support is enabling the Ontario Brain Institute to expand its research into the areas of neurodegeneration (such as Alzheimer's disease) and depression, as well as continue its important work on cerebral palsy, autism and epilepsy. It will also allow the institute to leverage additional investments from various partners including industry, philanthropic, federal and international sources.

Investing in innovation and improving health care are part of the new Ontario government's efforts to build a strong economy and a fair society for the benefit of all.

Quick Facts

- The Ontario Brain Institute is a virtual research institute dedicated to advancing brain research through scientific collaboration between institutions, translating research findings into improved patient care, and introducing new health care technologies into the marketplace.
- The institute was launched in November 2010 with the support of a \$15-million provincial grant which helped leverage an additional \$26 million in funding from other sources.
- One in three Canadians will be affected by a neurological or psychiatric disease, disorder or injury at some point in their lives.
- Ontario is home to one of North America's leading concentrations of biomedical research and development, with universities and teaching hospitals investing \$1.7 billion a year in health research.
- In Ontario, the economic impact of brain and mental health disorders on the health care system is estimated to well above \$39 billion annually.

Source: Ministry of Health and Long-Term Care, March 2013

NATIONAL ISSUES

The Eat Well Campaign

The government launched the latest phase in the national *Eat Well* campaign promoting healthy eating and healthy weights.

The campaign provides information to anybody who wants to make healthy choices at home, at the grocery store and when eating out. It provides easy-to-use tips for busy parents to help them make changes in their day-to-day lives. The campaign focuses on how planning can contribute to healthier food choices.

"The government wants to provide information to Canadians to help them make healthier food choices," said Minister Aglukkaq. "Investing in the health of children and youth pays off in the long run for everyone, and the best way for us to do that is by continuing to provide leadership on nutrition and physical activity."

Working with partners, including the Retail Council of Canada (RCC) and the Canadian Federation of Independent Grocers, this part of the campaign aims to give Canadian families the information they need to make healthier food choices when they shop.

"Providing Canadians with the tools to eat well is a top priority of RCC's grocery members, so we are very pleased to be partners with the government in this campaign," said David Wilkes, Senior Vice President of Retail Council's Grocery Division. "Our grocers are committed to supporting healthy Canadians, and know we are best able to accomplish this goal when we all work together."

"The Heart and Stroke Foundation is very pleased to be working with Health Canada as it launches the latest phase of its Eat Well campaign," says Bobbe Wood, President of the Heart and Stroke Foundation. "Both organizations are committed to improving the health of Canadians and one important way to do this is to support their efforts to make nutritious and balanced food choices for themselves and their families. Following a healthy diet is one of the best things Canadians can do to reduce their risk of heart disease and stroke and live full healthy lives."

These latest activities build on the ongoing successes through media partners Astral Media, Corus Media and TC Transcontinental, Heart & Stroke Foundation, Dietitians of Canada, as well as Health Canada's ongoing Nutrition Facts Education Campaign, a collaboration with Food & Consumer Products of Canada.

For more information and healthy eating tips, please see: healthycanadians.gc.ca/eatwell

Source: Health Canada, March 2013

Regulating Natural Health Products in Canada

Canadians now have access to more than 60,000 licensed natural health products as a result of the Government of Canada's more efficient approach to authorizing these products, Parliamentary Secretary of Health, Dr. Colin Carrie announced today.

Natural health products refer to a group of health products that include:

- vitamin and mineral supplements;
- herbal and other plant-based health products;
- traditional medicines, such as traditional Chinese medicine;
- homeopathic medicines;
- probiotics and enzymes; and
- some personal care products like toothpastes and sunscreens that contain natural ingredients.

The safety of Canadians is always our number one priority," said Parliamentary Secretary, Dr. Carrie at the Canadian Health Food Association Trade Show in Montreal. "This efficiency allows for industry innovation and growth, while still assuring consumer safety and access to a wide range of authorized natural health products."

In 2010, Health Canada brought in the *Unprocessed Product License Applications Regulations* (UPLAR) which allowed for the legal sale of lower-risk products while their applications were under review. UPLAR, brought in as a temporary measure, ended February 4, 2013. The Government has now introduced a new approach to natural health products that provides a stable, predictable regulatory environment for the efficient processing of applications. The efficiencies gained under the new approach have set the foundation for how applications are now processed.

Within the new approach, the measures in place to protect consumer safety stay the same. Companies still need to provide sufficient evidence that their products are safe and effective, and products continue to be labeled with necessary warnings.

"Many Canadians use natural health products every day and want access to a wide range of safe and effective products," added Parliamentary Secretary, Dr. Carrie.

The new approach is in keeping with the authority of the *Natural Health Products Regulations*, which have been in place since 2004 and continue to set the standard and requirements for authorizing natural health products in Canada.

Source: Health Canada, February 2013

National Network Keeping a Closer Eye on Drug Safety

A national network has been created that promises quicker responses to drug safety issues.

The Canadian Network for Observational Drug Effect Studies (CNODES) is part of the national Drug Safety and Effectiveness Network, a body that was created by Health Canada and the

Canadian Institutes of Health Research to improve post-marketing surveillance of drugs and help speed up responses to safety concerns. CNODES is a network of researchers and databases from the provinces; right now, seven are involved.

It's epidemiology on a large scale, said Dr. David Henry. He is president and CEO of the Institute for Clinical Evaluative Sciences (ICES) and a professor of medicine at the University of Toronto. ICES plays a role in producing and analyzing health services data for Ontario. He noted Canada is a leader in epidemiologic research and has a strong, internationally recognized concentration of expertise in the field.

CNODES researchers start their work after Health Canada alerts them that there are concerns about a specific drug. These concerns are raised through the traditional mode of adverse drug reports. Once a question is raised, CNODES researchers from each of the provinces look for reports from various administrative sources such as hospital discharge databases, cancer registries and more. They then produce summaries that are combined to obtain a national perspective.

An advantage of this is larger numbers. For instance, CNODES researchers are currently investigating whether certain cholesterol-lowering medications cause kidney damage. Nationally, CNODES is looking at data from 1.5 million users. No one researcher can compile that amount of data. These are big enough numbers that rare outcomes can be detected and learned about.

The current system of adverse drug reports doesn't provide enough information and is slow in terms of triggering change. Reports don't confirm whether there is a causal link between a drug and various reported effects, and there isn't information about outcomes, such as whether adverse effects cease after patients stop using a drug, or whether there is long-term damage. It can also take several years before enough information is amassed to justify taking a potentially problematic drug off the market.

With CNODES, researchers can start investigating the question right away, and answers can be available within six months, Dr. Henry said.

CNODES is still growing, but will eventually make its findings and data public, and will likely produce clinical advice—in conjunction with Health Canada. In the meantime, physicians have an important role to play.

Source: Canadian Healthcare Network, January 2013