It may surprise you to know that lymphatic cancers, also known as lymphomas, are quickly becoming one of the most common of all cancers, increasing in incidence far more than both lung and breast cancer.

Canadian government statistics indicate that the incidence for the non-Hodgkin's type of lymphoma in men has nearly doubled from 10.1 cases per 100,000 in 1976 to an estimated 19.9 cases per 100,000 in 2005. There is no indication that this trend is slowing down.

What is lymphoma?
Lymphatic cancers or lymphomas are cancers of the body's lymph system—part of the immune system (see sidebar). Lymphomas occur when cells divide too much and too fast, invading and destroying lymphoid tissue, the parallel channels to the veins and arteries. Lymphatic cells then metastasize (spread) to other organs, leading to the destruction and eventual failure of the organs.

There are two types of lymphomas based upon the cellular appearance of the tumours. The first is non-Hodgkin's lymphoma (NHL), accounting for about 85 percent of all lymphomas. The second is Hodgkin's Disease (HD), named after Dr. Thomas Hodgkin, who first recognized it in 1832. The lymphatic tissue in Hodgkin's disease contains specific cells called Reed-Sternberg cells that are not found in any other cancers.

Lymphoma's cause is still unknown, but some theories include heredity, an association with pollution, Epstein-Barr virus, the use of hair dyes, and exposure to pesticides and hormones found in beef and dairy products. The bacteria, helicobacter pylori, also associated with stomach and duodenal ulcers, may cause some non-Hodgkin's lymphomas of the digestive tract. Approximately 30 percent of all AIDS patients contract lymphoma.

Once diagnosed, the usual conventional treatments are radiation and chemotherapy. There are, however, safe and effective alternatives to...
New cases and Age-Standardized Incidence Rates (ASIR) for Non-Hodgkin’s Lymphoma, Canada, 1974-2003.

Note: Rates are standardized to the 1991 Canadian population.
Source: Surveillance and Risk Assessment Division, CCDPC, Health Canada

New hope?
Linus Pauling was right; the “father of vitamin C” first postulated in 1976 that high doses of vitamin C can fight cancer. More recently, a team of scientists from the National Institutes of Health in Bethesda, Maryland published the results of a landmark study on human lymphoma cells. The study argues strongly for the use of intravenous vitamin C treatment as a way of beating cancer.

This research demonstrated that, once in the bloodstream at high doses, vitamin C increases hydrogen peroxide (H$_2$O$_2$)—a natural body biochemical that destroys cancer cells while leaving healthy cells and tissues unharmed.

“Detoxification is a vital component of both prevention and treatment of all cancers, including lymphomas.”

Oral vitamin C, although beneficial for immunity, will not work to reverse lymphoma. One must get this nutrient in an intravenous form, using doses ranging from 25 to 75 grams (75,000 mg). The late Dr. Hugh Riordan studied the effects of intravenous vitamin C in cancer therapy for over 28 years. His findings and that of other independent investigators give new hope to lymphoma victims. Intravenous vitamin C will also work for practically all kinds of cancer regardless of the stage of the disease.

Is there a down side to IV vitamin C?
All cancer treatments, natural or otherwise, have potential drawbacks. While recent studies at the National Institutes of Health and elsewhere have shown no side effects or toxicities associated with intravenous vitamin C, there are some relative contraindications and theoretical dangers.

These include local pain at the infusion site, rapid tumour death (necrosis) with resulting toxemia, allergic reactions, hemolytic anemia due to hereditary glucose-6-phosphate-dehydrogenase deficiency (G6PD), and kidney stones. With the exception of G6PD deficiency, all of these issues can be successfully dealt with to achieve the treatment benefits.

To prevent kidney stones in those at high risk, vitamin B$_6$ supplementation should be taken, while blood
The lymph system

Part of the immune system, the lymph system is made up of the following:

- **Lymph**: Colourless, watery fluid that travels through the lymph system and carries white blood cells called lymphocytes that protect the body against infections and the growth of tumours.
- **Lymph vessels**: A network of thin tubes that collect lymph from different parts of the body and return it to the bloodstream.
- **Lymph nodes**: Small, bean-shaped structures that filter substances in lymph and help fight infection and disease; located along the network of lymph vessels found throughout the body and in clusters in the underarm, pelvis, neck, abdomen, and groin.
- **Spleen**: An organ located on the left side of the abdomen that produces lymphocytes, filters blood, stores blood cells, and destroys old blood cells.
- **Thymus**: An organ in the chest behind the breastbone in which lymphocytes grow and multiply.
- **Tonsils**: Two small masses of lymph tissue at the back of the throat that produce lymphocytes.
- **Bone marrow**: Soft, spongy tissue in the centre of large bones that produces white/red blood cells and platelets.

—Source: National Cancer Institute

Other cancer-fighting or immune-boosting supplements to take

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Dosage</th>
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</thead>
<tbody>
<tr>
<td>Multivitamin and mineral (without iron or copper)</td>
<td>1 daily</td>
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<tr>
<td>B complex, 50 mg</td>
<td>1 daily</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>1,000 mg or more daily</td>
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<tr>
<td>Vitamin E</td>
<td>400 IU daily</td>
</tr>
<tr>
<td>Colostrum, 500 mg</td>
<td>3 or more capsules daily</td>
</tr>
<tr>
<td>Zinc citrate</td>
<td>50 mg daily</td>
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tests can be done for G6PD deficiency before starting the IV vitamin C treatments. Calcium and magnesium supplements could also be taken if one is sensitive to the acidic effects of vitamin C. Care must also be taken by anyone adversely affected by the infusion of relatively large amounts of fluid such as might occur in people suffering from congestive heart failure. Here, the infusions can be given over a longer period of time.

What about diet?
The diet advice for those suffering from lymphoma depends on the individual case. Sugar in almost any form tends to feed cancer so it is wise to limit its consumption. The more vegetarian the diet, the more the toxins suspected of causing lymphoma are minimized.

High intake of raw organic fruits and vegetables, whole flaxseed, hempseed, legumes, and whole grains should provide all the essential amino acids, fatty acids, and trace minerals required for optimal health. Obviously, the avoidance of the toxins from cigarettes, alcohol, hydrogenated fats, trans fatty acids, and processed foods is a must.

Avoid commercial sunscreens?
Recent research has proven that there is a direct connection between vitamin D insufficiency and cancers of the prostate, breast, colon, lung, and skin as well as lymphomas. The use of sunscreens blocks the body’s production of vitamin D. The resulting deficiency not only affects bone health but is also directly related to immune system impairment.

Multiple sclerosis and other autoimmune diseases have also been linked to vitamin D insufficiency. Many doctors, both conventional and holistic, now advocate high-dose vitamin D supplementation (4,000 IU or more daily) to treat these disorders. The advice here is to ask your doctor to check your blood levels of vitamin D, especially in the winter if you live in Canada.
Detoxify or die
Dr. Sherry Rogers' book entitled Detoxify or Die (Prestige Pubs, 2002), promotes detoxification as a vital component of both prevention and treatment of all cancers, including lymphomas.

Our fat cells, muscle cells, and internal organs can hold a lot of cancer-causing toxins, most of which are impossible to clear out without actually sweating them out through our skin. The regular use of a far infrared sauna is the best way to get the job done. Other strategies include herbal liver cleanses, kidney cleanses, enzyme therapy, colonic irrigation, and juice fasting.

Take antioxidants
Vitamins A, C, E, selenium, and zinc have been proven to help fight cancer, protect healthy tissues from damage by various drugs and cancer-causing chemicals, and to prolong life. Ralph W. Moss' book, Antioxidants against Cancer (Equinox Press, 2000), dispels all the dogmas propagated by some medical authorities about taking vitamins and minerals during radiation and chemotherapy sessions.

The most important of all the antioxidants to take orally against lymphomas as well as other cancers is coenzyme Q10. Research indicates that the optimal dose to take is 400 mg daily with meals.

Studies have also found that lymphoma patients with high levels of selenium upon entering chemotherapy had a better response, could tolerate higher doses, and were more likely to have long-term survival. My usual recommendation for selenium is to supplement with at least 200 mcg daily.

There is also a long list of immune-benefiting herbs, amino acids, and hormones including echinacea, melatonin, astragalus, milk thistle, reishi, shiitake, and maitake mushrooms. Consult a naturopath or medical doctor specializing in natural treatments for a biochemical/nutritional evaluation and personalized recommendations for diet and supplements.

Zoltan P. Rona, MSc, MD, is a best selling author of several books.