

lupus  **FACT SHEET**

Lupus Canada

Cardiovascular Disease and Lupus

Systemic lupus erythematosus (SLE or lupus) can affect your heart in a variety of ways; some are life-threatening (including heart attacks) and others are much less serious. There are several risk factors for heart-related conditions, many of which can be avoided. It is important that you report any chest pain to your doctor so that together you can determine the cause and, when needed, develop an action plan to lower your risk of developing serious complications.

The lupus-heart connection

Overall, people with SLE have a five- to six-times greater risk for heart disease than people without SLE. The increased risk is most noticeable in young pre-menopausal women with lupus, who may be up to 50 times more likely to have a heart attack than women of the same age who do not have lupus.

The most common heart condition affecting people with lupus is atherosclerosis. It occurs when cholesterol and other fatty deposits clog the arteries, slowing the flow of blood and preventing the delivery of oxygen and nutrients to your heart and other organs. If atherosclerosis blocks the flow of blood to your heart, the result may be a heart attack. If the bloodflow to the brain is stopped, the result may be a stroke.

People with lupus often have one or more risk factors for atherosclerosis. A study done by researchers at the University of Toronto Lupus Clinic in 2003 found that women with lupus are more likely to have risk factors for heart disease than their counterparts without lupus. These

risk factors include diabetes, high blood pressure (hypertension), early menopause and high LDL (“bad”) cholesterol. Women with lupus may also be more likely to have sedentary lifestyles (probably because of joint pain and fatigue caused by their disease). In addition, the use of corticosteroids for lupus treatment can cause excessive weight gain, another risk factor for heart disease.

Smoking is one of the most important risk factors for atherosclerosis, and could take years off your life. **It cannot be emphasized enough that quitting**

smoking is one of the most important steps you can take for your health.

The good news is that you can take action against many of these factors and reduce your risk of heart disease.

Change what you can

You may be more likely to have certain risk factors for heart disease because of your lupus, but you can do something about the following:

High blood pressure: High blood pressure or hypertension (consistently above 140/90 mmHg) can narrow and eventually block arteries that carry blood around your body. It also strains the heart, possibly leading to heart attack. Very high blood pressure can cause blood vessels in the brain to burst, resulting in a stroke. Hypertension often has no symptoms, so be sure to have your blood pressure checked at least every two years.

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the most important steps you
can take for your health*



TAKE ACTION!

- Lead a healthy lifestyle: eat a balanced diet, be physically active and live smoke-free.
- Achieve and maintain a healthy weight.
- Examine how you deal with stress and find healthier ways to cope.
- Limit your alcohol intake to one to two drinks per day, to a weekly maximum of nine for women and 14 for men.
- Visit your doctor at least once a year for a check-up, which should include blood pressure and cholesterol monitoring and testing for diabetes. Find out what your blood pressure, cholesterol and blood glucose target levels are, and work closely with your healthcare team to meet those goals.
- If your waist measures more than 102 centimetres (40 inches) for men or 88 centimetres (35 inches) for women, talk to your doctor about weight loss strategies.
- Make healthy eating a lifestyle commitment; avoid fad diets.
- Eat a balanced diet by following the “Eating Well with Canada’s Food Guide”. Enjoy a variety of foods, and emphasize whole grains, cereals, vegetables and fruit. Avoid saturated and trans fats. Choose lower-fat dairy products, leaner meats and foods prepared with little or no fat. When you do use fats, use olive oil, which is flavourful and high in desirable monounsaturated fat rather than polyunsaturated and saturated fats.
- Control portion sizes. An easy method for determining meal portions (as recommended by the Canadian Diabetes Association) is to use two open hands as your measure for vegetables; one closed hand for carbohydrates, such as pasta or rice; one closed hand for fruit; the palm of your hand for meat or a protein alternate; and the tip of your thumb for fats, such as oil, margarine or butter.
- Live smoke-free. That includes quitting smoking and avoiding second-hand smoke.
- Try to be physically active for at least 30 minutes most days of the week.
- Here’s a fun and easy way to increase your activity level: challenge yourself to walk 10,000 steps a day. Wear a pedometer (available at drugstores and electronics stores) while doing your daily activities to measure your progress.
- Listen to your body. Talk to your doctor if any activity causes pain.
- Get help. Ask your doctor for referrals to a registered dietitian, certified diabetes educator and/or physiotherapist as needed. Check the “For more information” section on the back for helpful resources.

High blood cholesterol: LDL cholesterol (the “bad” cholesterol) and triglycerides are types of fat that can clog your arteries and lead to heart attack or stroke. High blood cholesterol levels are associated with high-fat diets, smoking, inactivity and family history. Eating a balanced diet, being physically active and smoke-free, and reducing your salt and alcohol consumption can significantly reduce your cholesterol levels. Some people may also require medication known as statins to manage their blood cholesterol.

Physical inactivity: Being inactive can double your already higher-than-average risk for heart attack and stroke. Although activity can sometimes be challenging for people with lupus, especially during a flare, you don’t have to exercise strenuously to enjoy the health benefits of active living. Start with a goal of 30 minutes of low-impact activity, such as walking or gardening, each day. Gradually increase the amount and intensity. If activity causes pain, consult your doctor.

Diabetes: More than 80 percent of people with diabetes die of heart disease, so if you have lupus, it is especially important to take steps to prevent the development of type 2 diabetes or, if you already have diabetes, to carefully manage your blood glucose levels. Contact the

Canadian Diabetes Association for information about diabetes prevention and management.

Excess weight: It is not just how much you weigh, but also the distribution of excess weight that can put you at high risk of developing heart disease, high blood pressure, high cholesterol and type 2 diabetes. People who carry extra weight around their middle (apple shape) versus around the hips (pear shape) are at greater risk for health problems. Even a modest reduction in weight – as little as 10 per cent – can significantly reduce your chances of having a stroke or heart attack or developing type 2 diabetes, and dramatically improve your overall well-being.

Smoking: The health risks associated with smoking (including exposure to second-hand smoke) are well known: it contributes to atherosclerosis, increases the risk for blood clots, reduces oxygen in the blood, increases blood pressure and LDL cholesterol, and stresses your heart. As mentioned earlier, quitting smoking is one of the most important steps you can take for your heart health.

Excessive alcohol consumption: While there is some evidence that a moderate amount of alcohol (particularly red wine) may be good

for your heart, too much alcohol can contribute to health problems. How much is too much? If you drink alcohol, limit yourself to no more than one or two standard drinks (one bottle of regular-strength beer; one 5-oz glass of wine; 1-oz of spirits) a day, to a weekly maximum of nine drinks for women and 14 for men.

Stress: Like excessive weight and inactivity, stress presents a double-whammy for people with lupus, increasing not only your risk for heart disease, but also lupus flares. In addition, many people handle stress with unhealthy strategies, such as smoking, drinking and overeating. It is important for you to learn how to reduce and deal with stress in your life. Some strategies include exercise, yoga and other forms of meditation or relaxation techniques. If necessary, talk to your doctor about counselling or medication.

What you can't change

Some risk factors for heart disease can't be changed. These include:

- **Sex:** Men over the age of 55 and post-menopausal women are at greater risk for heart disease.
- **Increasing age:** The risk of heart attacks and stroke increases as you get older.
- **Race/Ethnicity:** People of Aboriginal, African or South Asian descent are more likely to have high blood pressure and diabetes, and are therefore at greater risk for heart disease and stroke than the general population.



IS IT YOUR HEART?

Many people with lupus have chest pains at one time or another. Not all chest pains are a sign of a heart attack. Similarly, shortness of breath may not be a sign of a heart attack, but rather lack of physical fitness.

On the other hand, thousands of Canadians die each year from heart attacks and strokes because they ignore warning signs and don't receive medical treatment quickly enough. Given your increased risk for heart disease and stroke, it is vitally important that you learn to recognize the warning signs:

Angina:

- Pain: Discomfort or pain, generally in the chest, neck, jaw and/or left upper extremity, that is usually triggered by physical activity and relieved with rest and/or medications such as nitroglycerine. The pain may feel like burning, squeezing, heaviness, tightness or pressure (the pain may be more vague in women).
- Shortness of breath or difficulty breathing, with or without accompanying chest pain, generally triggered by physical activity and relieved with rest and/or medications such as nitroglycerine.

If you notice symptoms suggestive of angina, seek the attention of a doctor as soon as possible. Note that in some people, severe chest pain and/or shortness of breath, particularly with sudden onset, may signal a heart attack. Very severe, sudden symptoms should be considered an emergency, as indicated below.

Heart attack:

- A heart attack may begin with the angina-type symptoms described above (pain and/or shortness of breath). The pain is usually very severe, comes on suddenly, and does not go away with rest.
- Shortness of breath or difficulty breathing, with or without chest pain
- Nausea, indigestion or vomiting.
- Sweating or cool, clammy skin
- Feelings of fear, anxiety, denial

Stroke:

- Sudden weakness or sudden numbness in the face, arm or leg, even if temporary, especially on one side of the body
- Sudden confusion or difficulty speaking or understanding, even if temporary
- Trouble seeing in one or both eyes
- Sudden severe and unusual headache
- Sudden dizziness or loss of balance, especially with any of the above signs

- **Family history:** Your risks are higher if a sibling or parent developed heart disease before age 55 or had a stroke before age 65.

If you have any of these non-modifiable risk factors for heart disease in addition to your lupus, it is all the more important that you take positive steps to reduce your risks in other areas.



FOR MORE INFORMATION

- Lupus Canada: www.lupuscanada.org. This site includes electronic versions of the *Living Well with Lupus* fact sheets.
- *Lupus: The Disease with a Thousand Faces*, edited by Dr. Sasha Bernatsky and Dr. Jean-Luc Senécal, Key Porter Books (2004) ISBN 1-55263-603-8. Contact Lupus Canada to order this book.
- Lupus Foundation of America: www.lupus.org
- Eating Well with Canada's Food Guide: www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html
- Canada's Physical Activity Guide to Healthy Active Living: www.phac-aspc.gc.ca/pau-uap/paguide/
- Canadian Diabetes Association: www.diabetes.ca; 1-800-BANTING
- Go Smoke Free: www.hc-sc.gc.ca/hl-vs/tobac-tabac/quit-cesser/now-maintenant/1-800/index_e.html; 1-800-O-CANADA
- Heart and Stroke Foundation of Canada: www.heartandstroke.ca; (613) 569-4361
- Quit Lines (free smoking cessation support from Health Canada): www.hc-sc.gc.ca/hl-vs/tobac-tabac/quit-cesser/now-maintenant/1-800/index_e.html

Disclaimer

Systemic lupus erythematosus is an autoimmune disease that affects thousands of Canadians, mostly women in their childbearing years. Symptoms vary greatly from person to person and treatment is highly individualized. Patients are urged to contact their physician or healthcare professional with any questions or concerns they might have.

Lupus Canada

590 Alden Road, Suite 211
Markham, Ontario L3R 8N2
(905) 513-0004
lupuscanada@bellnet.ca
www.lupuscanada.org

