

lupus  **FACT SHEET**

Lupus Canada

Nutrition, Diet and Lupus

If you have systemic lupus erythematosus (SLE or lupus), a well-balanced diet should play an integral part in your overall lupus treatment program. Your disease puts you at high risk for a number of medical conditions, including osteoporosis and heart and kidney disease. A healthy lifestyle can reduce the likelihood of developing these problems. If you take corticosteroids for the treatment of lupus, a healthy diet is particularly important, as this medication often causes increased appetite and weight gain.

There is no such thing as a “lupus diet,” but there are general guidelines and tips for healthy eating that will benefit anyone with lupus regardless of their disease state. In general, the best meal plan is one that is low in fat, low in sodium, high in fibre and low in refined sugars.

Diets that are high in protein may not be appropriate, in part because people with lupus tend to have compromised kidney function. A high-protein diet can put stress on the kidneys.

If you have questions about your diet, find a dietitian in your area who has experience with lupus. You might ask your doctor for a referral. You can visit the Dietitians of Canada website at www.dietitians.ca to find a dietitian close to you. Health Canada has recently come out with a new food guide titled “Eating Well with Canada’s Food Guide”. Visit the website to make sure you’re doing everything possible to maintain a well-balanced diet.

Well balanced is best

Despite evidence that suggests some nutrients play an important role in lupus management, experts agree that a well-balanced diet offers the greatest benefits. Follow these recommendations as you make choices about what to eat each day:

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- Include rich sources of calcium, especially if you take corticosteroids, which interfere with the absorption of calcium and can lead to osteoporosis. Foods high in calcium include milk and milk products, and, to a lesser extent, broccoli, greens (chard, okra, kale, spinach, etc.), sauerkraut, cabbage, rutabaga, salmon and dry beans. To increase absorption, consume calcium with an acid-containing food or vitamin C. Most women do not include enough calcium in their diet and require a supplement. Discuss with your doctor, especially if you have kidney disease.
- Consume rich sources of iron. To increase absorption, you can consume iron with an acid-containing food or one with vitamin C. Sources of iron include cream of wheat, liver, beef, lamb, pork, chicken, turkey, eggs, fish, beans, black-strap molasses, prunes, apricots, green peas and enriched breads and cereals. Keep in mind that taking calcium with iron decreases iron absorption. You should only take iron supplements if advised by a doctor.
- Enjoy lots of foods high in vitamin C. These include fresh tomatoes, broccoli, oranges and other citrus fruits, strawberries, cauliflower, cantaloupe, cabbage and green peppers.

Cooking or processing these foods quickly depletes their vitamin C content.

- Include foods rich in vitamin B6 (pyridoxine). These foods include whole grain cereals and breads, fish, poultry, meats (especially liver), bananas, nuts, avocados, green beans, potatoes, and green leafy vegetables such as spinach.
- Include foods rich in vitamin D to improve the absorption of calcium and reduce your risk of osteoporosis. These foods include eggs, fish oils and fortified foods including milk and some cereals; check the labels. Many people, especially in colder parts of North America, are vitamin D deficient and require a supplement. Discuss with your doctor.
- To reduce your risk of heart disease, follow a diet low in saturated fat and cholesterol. Some research suggests that a low-fat diet may decrease an over-active immune system. Low fat intake also decreases your risk of certain cancers. When you do use fat in cooking, choose olive or canola oil.
- Eliminate "trans saturated" fats as much as possible. They are often an ingredient in baked goods and other processed foods – read the label! If you see "partially hydrogenated oil" on the label, it means the product contains trans fat. β Omega-3 fatty acids have anti-inflammatory properties. Ground flaxseed, flaxseed oil and walnuts are high in omega-3 fatty acids. Fish with high omega-3 fatty acid content include mackerel, salmon and sardines. Caution however, as some fish, including tuna and mackerel, can contain high levels of mercury or other toxins.
- Tomato products, especially tomato paste, have high levels of lycopene, which may decrease the risk of heart disease and certain kinds of cancer.

Weight control, hunger management and portion sizes

It's simple math. People gain weight when they eat more calories than they expend. Therefore, the number of calories consumed is integral to weight management.

The Eating Well with Canada's Food Guide recommends the types of food you should eat (dairy products, fruits and vegetables, grains, and meat and alternatives) as well as the number of portions from each good group per day.

It's important to pay close attention to portion sizes, which have increased significantly over the past two decades. Controlling portion sizes helps limit calorie intake, particularly when eating high-calorie foods. For example, bagels or muffins are often sold in sizes that constitute at least two servings, but people often eat the whole thing, thinking that they have eaten one serving.

Here's a "handy" way to measure portion sizes. When choosing a grain product, such as bread, rice or cereal, one portion equals the size of your fist. Similarly, a portion of fruit should be the size of your fist. For a serving of vegetables, consider one portion to be as much as you can hold in both hands. And a serving of meat or fish should be no bigger than your palm and no thicker than your little finger. If you choose to add fat, such as butter or margarine, limit the amount to the size of the tip of your thumb.



FOODS TO AVOID

Certain foods or supplements can theoretically aggravate lupus symptoms.

These include:

- Alfalfa sprouts and supplements that contain alfalfa
- Echinacea
- Soy products

In addition, there are certain foods that can aggravate migraines, a common condition in lupus. If you suffer from migraines, be sure to talk to your doctor about your diet.

Another easy way to avoid “portion distortion” is to divide your dinner plate into three sections. Fill half of your plate with at least two kinds of vegetables, one quarter with a starch (such as potato, rice or pasta) and the remaining quarter with protein (fish, lean meat or chicken). Add a glass of low-fat milk and a piece of fruit for a well-balanced meal.

It is also important to control eating between meals. If you feel hungry between meals and need a snack, try one of the following: raw vegetables, lightly dressed salad, a glass of low-fat milk, a plain rice cake or plain popcorn, or a piece of fruit. Other tips for weight management include:

- Divide the contents of one large package into several smaller containers to avoid eating too much at once.
- Instead of eating straight from the package, transfer a reasonable portion to a bowl or container.
- Keeping food out of sight keeps it out of mind. For instance, when buying in bulk, store the excess in an inconvenient place, such as the garage or basement.
- If you must keep tempting high-calorie foods, such as cookies, chips or ice cream, in the house, put them on a high shelf or at the back of the freezer and move healthy food to the front at eye level.

Corticosteroids and nutrition

One of the most devastating side effects of corticosteroid therapy is its interference with the absorption of calcium,

which can lead to osteoporosis. The drug can also stop the absorption of nutrients such as vitamins B6, C and D, zinc and potassium and interfere with cells' ability to use them. In addition, corticosteroids can cause loss of muscle protein, change the body's ability to handle blood sugar (glucose) and increase fat deposits and sodium retention. In order to counteract

the nutrition-zapping effects of corticosteroids, be sure to follow a highly nutritious diet. It's especially important that you consume plenty of calcium and vitamin D (aiming for three dairy products each day, if you can) in order to prevent osteoporosis. Currently, doctors recommend calcium and vitamin D

supplements when taking high-dose corticosteroids.



CHEW ON THIS

Researchers are constantly studying the effects of certain foods on human health. Much more study is needed before we can definitively state that certain foods or nutrients are beneficial or harmful for people with lupus. Consider the following research, but at the same time, try keeping a journal of the foods you eat and your disease activity. You may see a pattern that will help you manage your lupus and reduce flares.



ADVICE FROM THE NEW CANADA'S FOOD GUIDE:

- Eat at least one dark green and one orange vegetable every day
- Have vegetables and fruit more often than juice
- Make at least half of your grain products whole grain each day
- Drink fortified soy beverages if you do not drink milk
- Eat beans, lentils and tofu often
- Eat at least two food guide servings of fish every week
- Satisfy your thirst with water

Vitamins and supplements:

Some evidence suggests that vitamins may play a role in influencing autoimmunity. For example, vitamin D deficiency has been reported to aggravate autoimmunity; some research also suggests that low intake of vitamin A, beta-carotene and vitamin C may increase the risk of lupus. Preliminary studies suggest that vitamin E supplementation might decrease lupus activity. Theoretically, moderate doses of vitamins A and C and beta-carotene might also decrease inflammation, and evidence suggests that omega-3 fatty acids may reduce chronic inflammation.

Evening primrose oil and fish oil may be useful in the management of some autoimmune diseases, such as lupus.

Hormones: Hormones have effects on immune function. Some legumes, grains, fruits and nuts contain hormones called phytoestrogens. They may increase immune function, but at this point we know little about the effects of regular dietary phytoestrogen intake. However, soy products contain phytoestrogens known as isoflavones and lignans; these are similar in structure to estrogen hormones and, since estrogen may drive lupus activity in some individuals, there is some rationale that soy products should be avoided by people with lupus.

On the other hand, evidence suggests that the hormone dehydroepiandrosterone (DHEA) may be helpful for the treatment of lupus and that DHEA supplements of 200 mg per day may improve symptoms in women with mild to moderate lupus. Further studies are needed to determine whether DHEA is safe and effective for both men and women with this condition. The production of “natural” medicines is not yet regulated, and there is concern that the potency and consistency of these products may vary widely.



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.
- Eating Well with Canada's Food Guide: www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html
- Dietitians of Canada interactive online tool EATracker helps people to track their daily food and activity choices: www.dietitians.ca/eatracker
- Helpful tool for guidance on using the Nutrition Facts table: www.healthyeatingisinstore.ca
- Healthy Eating messages from dietitians: www.dietitians.ca/eatwell
- The Arthritis Foundation: www.arthritis.ca
- Lupus Foundation of America: www.lupus.org
- Eat Right Ontario: www.healthyonario.com/EatRight_Ontario.htm

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.

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