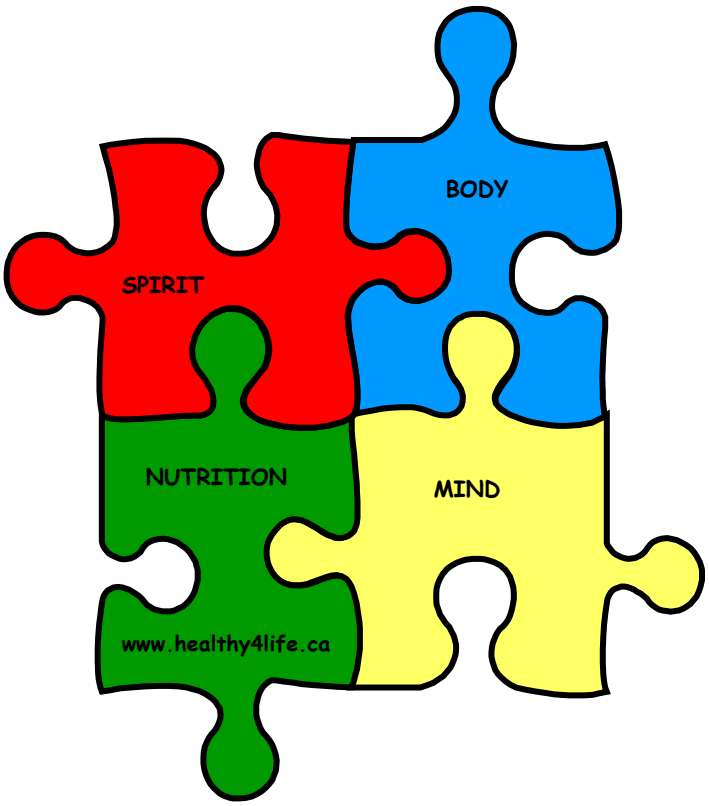
Nutrition and Lupus
Book 1: The Basics
Living Well With Lupus

KNOWLEDGE AND HOPE



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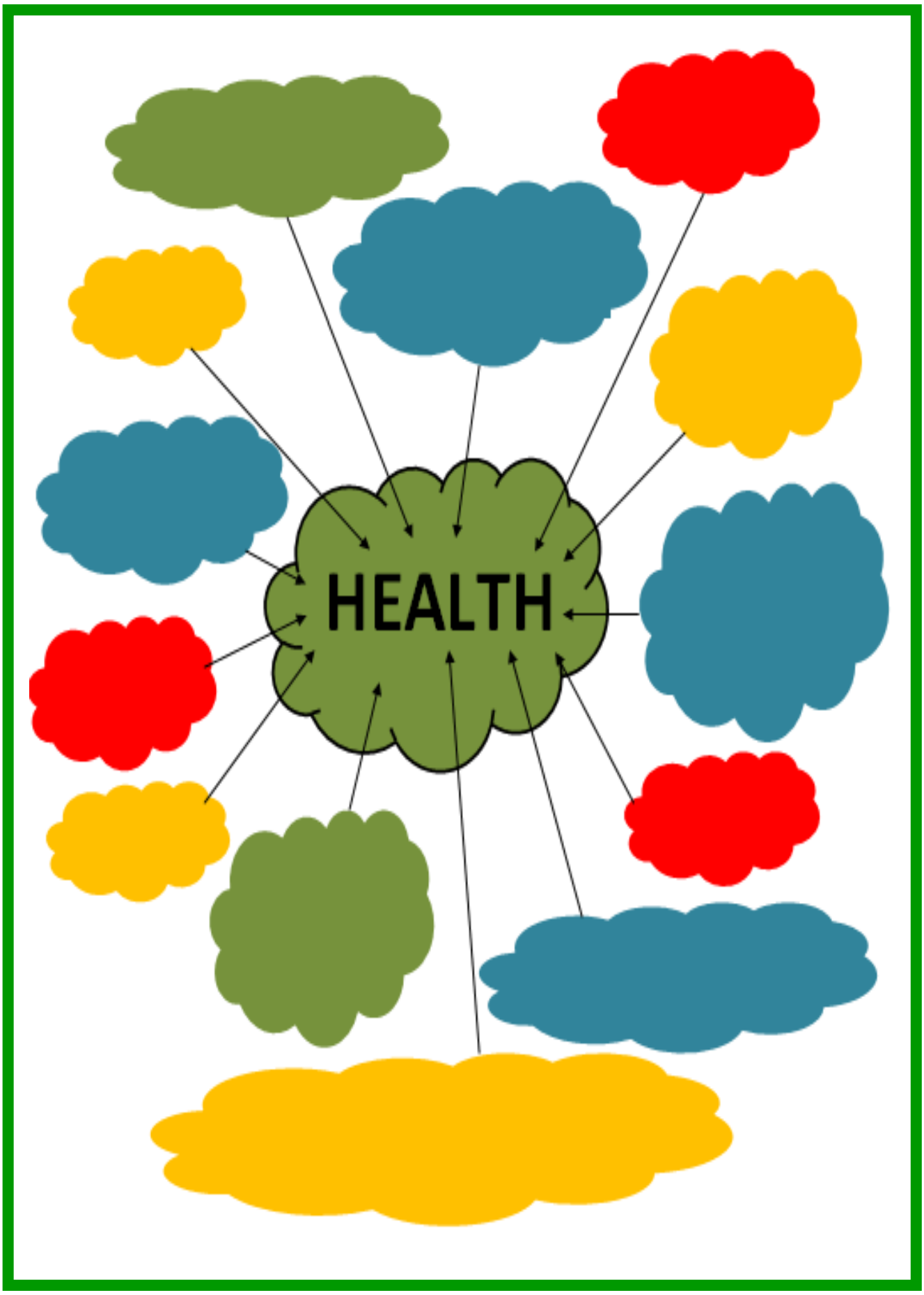
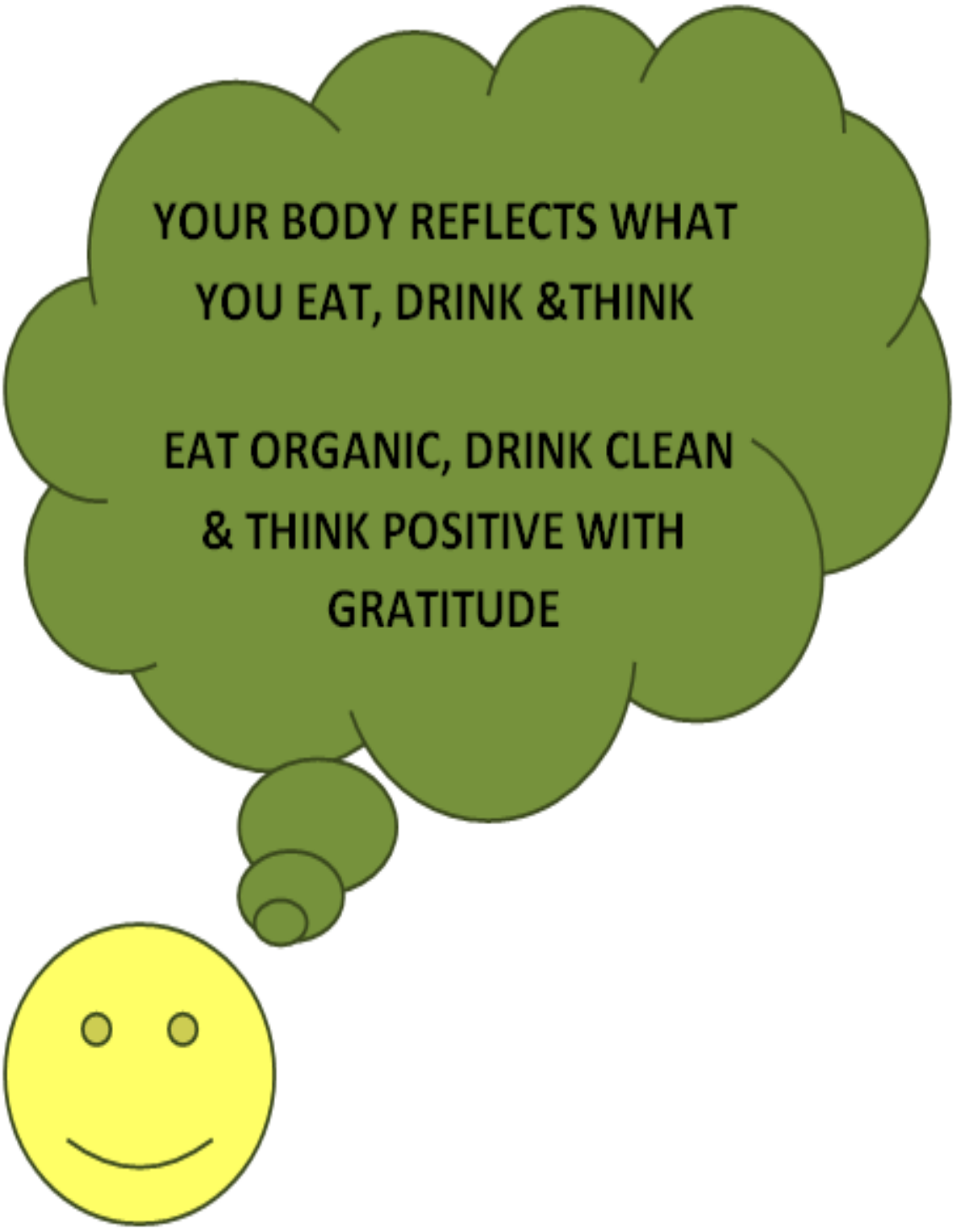

HEALTH

Nutrition and Lupus

Book 1: The Basics

1st Edition – Digital

Cathy Ferren RHN MAATO **Ferren Consulting**



ISBN 978-0-9866950-1-8

Nutrition and Lupus Book 1: The Basics

1st Edition – Digital

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Warning

This book is a distillation of current nutrition science, as interpreted by Cathy Ferren based on her understanding and experience. Its purpose is to educate and inform those who wish to better understand the role of nutrition in health. It does not diagnose any disease or ailment. The author and publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to be caused, directly or indirectly by the information contained in this book.

Dedication

This book is dedicated to lupus patients everywhere and to all of my lupus friends, treatment teams, instructors, spiritual advisors and support team members over the years.

Each of you shares in my journey with lupus with all of its challenges and rewards. I am humbled by and grateful for the wisdom and knowledge each of you has given me.

Introduction

I share this first book in the series with you, as a product of my own life experiences learning to live with chronic illness, client feedback and learning how to use holistic nutrition to improve symptoms and wellbeing.

I may not be able to control the disease process, however, I can have a beneficial effect on my physical symptoms, psychological wellness and my spirituality through good nutrition and healthy lifestyle choices.

My hope is that in these pages you will find practical ideas to incorporate into your own wellness plan so you can live well with lupus.

Other Books by Cathy Ferren

Nutrition and Lupus Book 2: Movement

Nutrition and Lupus Book 3: Relaxation Plus!

Nutrition and Lupus Book 4: Your Treatment and Support Teams

Nutrition and Lupus Book 5: Spiritual Health

Smoothies Easy and Nutritious

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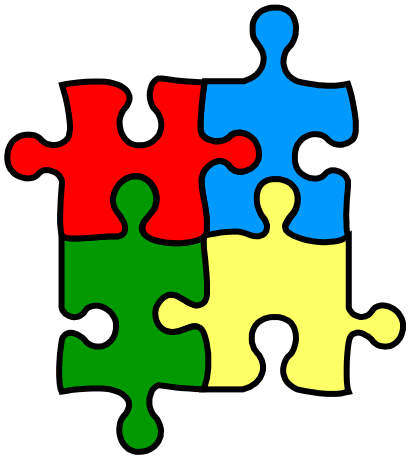


Nutrition and Lifestyle Choices in Lupus

You have choices!

If you have systemic lupus erythematosus (SLE) or lupus for short; healthy, well-balanced nutrition and lifestyle choices should be integral to your lupus treatment plan. Having lupus puts you at a higher risk than the general population for other diseases, syndromes and mental health issues such as heart and other cardiovascular diseases, kidney disease, osteopenia - the precursor to osteoporosis, osteoporosis, malnutrition, digestive disorders like GERD, IBS, diarrhea, constipation, anxiety and depression. There are others too numerous to list here, where the focus in this book is on your nutrition.

Healthy nutrition and lifestyle choices are under your control. No one else can make you decide on healthy choices and no one else can do it for you. No one else can eat and drink for you. This is one area where you have all the control. Every day you can make healthy choices that affect your body, your emotions or thinking, and your spiritual health.

Healthy, well-balanced nutrition involves whole foods and clean water, which includes as much organic food as possible given your budget and how available organic foods are in your area. If the available food is not of a high quality, you may need to take supplements for a time to correct severe nutrient deficiencies.

Healthy nutrition means eliminating hydrogenated fats, trans-fats, refined grains, refined sugars, chemical sweeteners, artificial colourings, preservatives and limiting sodium or salt, caffeine and other stimulants. Healthy nutrition is not just what you eat and drink, but how effective your digestion is, how well you absorb the nutrients and how efficient your elimination is.

Clean water helps your body function properly. You need to investigate your drinking water source and have it tested if necessary, and then filter it based on the laboratory test results. Well water needs to be tested for a wide variety of bacteria, viruses, parasites, agricultural and other chemicals. If you use a municipal water supply you can use one of the retail car-

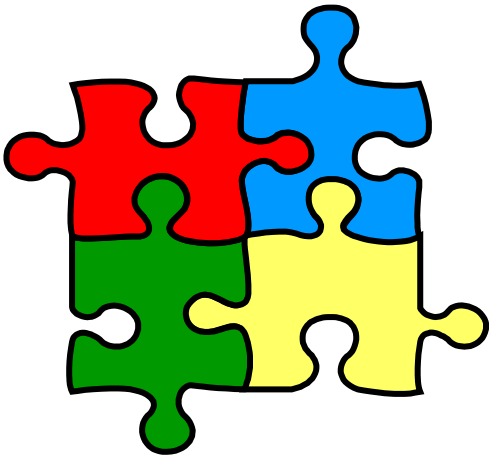
bon based devices, and other filters depending on what is in your water. For more information on water, Chapter 1 in ‘Staying Healthy with Nutrition’ by Dr. Elson M. Haas MD and Buck Levin PhD, RD will give you a good overview.

Healthy nutrition also includes limiting or eliminating food contaminants like pesticide residue, herbicide residue, chemical fertilizers, antibiotics and hormones which can be inside the food, not just on the surface.

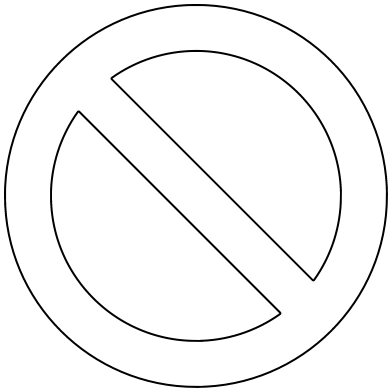
After digestion, all foods become either alkaline ash or acid ash in the body. It is not whether a food tastes acidic but rather the effect is has in the body. Acidic blood tends to cause inflammation whereas more alkaline blood tends to decrease inflammation. The media is frequently talking about alkaline or anti-inflammatory diets which are about eating foods that produce alkaline ash in the body.

Healthy lifestyle choices involve: movement, exercise, breathing exercises, relaxation techniques, meditation, attitude, language or words spoken, spiritual exercises and seeking out/accepting help and support. Healthy choices are stopping smoking, limiting alcohol consumption, limiting caffeine, managing stress, setting smart goals, and having a healthy work/life balance. Choosing activities that bring you pleasure, fun and joy are important. It also includes using eco-friendly: personal hygiene products, building materials, cleaning products, laundry products and yard care products.

You have Choices!



Foods to Avoid



Generally you may be told by articles, books and some TV segments to avoid certain foods such as fresh or dried alfalfa, Echinacea, soy products, nightshades, trans-fats and hydrogenated fats. You need to know why this is.

Alfalfa contains L-cavanine and some of alfalfa's components have an estrogenic effect. ***"Alfalfa, in its various forms, may present some health risks. Powdered alfalfa herb, alfalfa sprouts, and alfalfa seeds all contain L-cavanine, a substance that may cause abnormal blood cell counts, spleen enlargement, or recurrence of lupus in patients with controlled disease."*** [1] Lupus tends to be reactive to estrogen so an estrogen like effect from eating alfalfa could potentially trigger either a flare or a worsening of some symptoms. The vitamin K in alfalfa may decrease the effectiveness of the blood thinner warfarin (Coumadin), a concern if you take that medication. Until future research proves alfalfa to be safe in lupus patients, it is best if you avoid foods and supplements containing alfalfa. Check your supplement labels carefully and contact the manufacturer to verify if any product you are taking or are thinking of taking contains alfalfa.

Echinacea is an herb. The root and leaves are used in herbal anti-inflammatories, immune supplements and cold/flu preparations. ***"Should not be used by people who are allergic to ragweed."*** [2] The Mayo Clinic has additional safety warnings about Echinacea on their web site at http://www.mayoclinic.org/drugs-supplements/echinacea/safety/hrb-

20059246. Some lupus patients are able to benefit from Echinacea, however use of this herb must only be done under the supervision of a qualified health professional.

Soy bean products include fresh and dried soy beans, soy sauce, soy milk, tofu, miso, tempeh, imitation bacon bits, soy yogurt, soy bean oil, soy flour, soy powder, meat substitutes, soy nuts, etc., and it is often a hidden part of many

other products like salad dressings. Read labels carefully. The soy isoflavones have estrogen like properties. These phytoestrogens could trigger a lupus flare.

Nightshades refers to a plant family solanaceae which includes potatoes, tomatoes, eggplant, bell peppers, chili peppers, tomatillo, paprika, cape gooseberries, ground cherries and other species which contain potent alkaloids. Some alkaloids are toxic, some are psychoactive. Nightshades also contain the hormone calcitrol and lectins. Lectins can stick to the walls of the intestines causing or worsening leaky gut syndrome which allows larger than normal molecules to pass through the intestinal wall. In many people nightshades cause inflammation in the joints.

Trans-fats and hydrogenated fats are one step away from being plastic. Yes I am being overly dramatic on purpose. ***"Hydrogenation not only lowers the quality of the oil by removing some of its delicate unsaturated fatty acids, it actually converts some of the unsaturated fatty acids into a new form (called trans fat) that increases blood cholesterol and LDL cholesterol, as well as the risk of atherosclerosis (hardening of the arteries)."*** [3] There are additional articles at www.mayoclinic.org/diseases-conditions/high-blood-cholesterol/in-depth/trans-fat/art-20046114, www.cdc.gov/nutrition/everyone/basics/fat/transfat.html and www.webmd.com/diet/features/trans-fats-science-and-risks.

Many people with lupus have severe reactions to food additives such as MSG (often disguised on food labels as celery extract and other names), sulphites, nitrates, various red and yellow dyes, formaldehyde that celery

is dipped in for shipping, waxes on fruit and vegetables, etc.

Food allergy and food sensitivity testing can help identify foods that are problematic for you. For some people, healing the digestive tract will reduce their sensitivity to a variety of foods allowing them to get back some of the foods that previously caused symptoms.

Food sensitivity testing such as the Rocky Mountain Labs IgG screening and Rexall Hemocode can help identify your sensitivities. This is not skin prick testing from a dermatologist. Your immune cells in your skin are different from your immune cells in your digestive tract, which is why many food allergies and sensitivities do not show up on skin prick tests at the allergist's office. Your personalized food sensitivity report from IgG screening of a blood sample indicates the degree of sensitivity to the specific food, what foods/herbs/spices tested are safe for you and which ones are problematic.

Some test reports include sample menus and recipes. The cost of the test depends on how many foods are being tested. Some people get the testing partially paid for by their employer extended health care plan, so check with your health insurance company before having the test and they will advise you on what referrals and paperwork they require.

An elimination diet is an inexpensive and easy way to help figure out which foods you are sensitive to. For a period of time you stop eating foods and drinking things that are either common allergens and/or foods that you have noticed you react to. Reactions can be quite varied: fatigue, rash, gas, bloating, vomiting, GERD, insomnia, irritability, difficulty breathing, diarrhea, constipation, headaches, cramps, pain or other symptoms. You will keep detailed diet and symptom logs of both new and existing reactions. For existing symptoms you will make note of changes, either improvement or a worsening of the symptom. Then you will have the information you need to make choices that are better for you. Your doctor, naturopath or holistic nutritionist can guide you through the process of eliminating foods, recording symptoms and reintroducing foods.

Elimination Diets

Glycemic Index (GI) and Glycemic Load (GL)

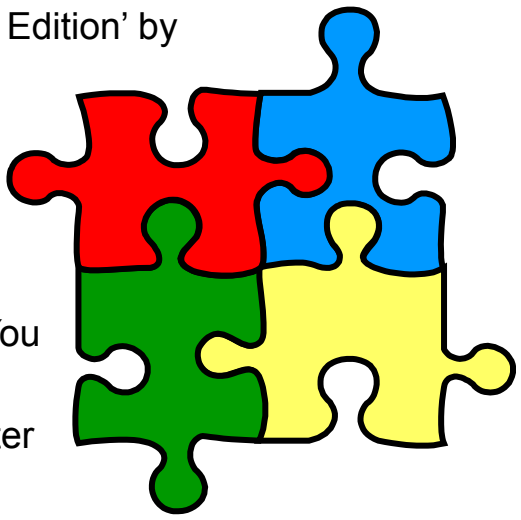
Glycemic index is a rating scale that indicates the effects of a specific carbohydrate containing food on blood glucose (blood sugar) and insulin levels. It does not take into account the amount of a food typically eaten in a serving, so by itself, GI does not clearly indicate which foods to eat.

Glycemic load is a rating of how much a food will raise blood glucose after eating it. A food can have a high GI but a low GL because the amount eaten is not large. The most common example of this is watermelon with a GI of 100 and a GL of only 10.

GI and GL are important in lupus because high blood sugar can increase oxidative stress and inflammatory processes. There are many scientific articles explaining the details about oxidative stress in lupus on the internet. For you, the more stable your blood sugar, the less it will increase inflammation. The less inflammation you have, the less swelling, pain, and tissue damage you would experience. Many authorities recommend a low GI and low GL diet for inflammatory diseases and conditions.

Lupus patients are susceptible to high blood sugar levels and diabetes from the inability to exercise, the effects of medications like corticosteroids that raise blood sugar, and extreme fatigue making food shopping and preparation difficult. By choosing low GI and low GL foods you have some control over your blood glucose levels, which can have a positive effect on lowering your level of inflammation.

Helpful books: 'The GI Diet 10th Anniversary Edition' by Rick Gallop ISBN 978-0307361530**.** 'The New Glucose Revolution Low GI Eating Made Easy' by Dr. Jennie Brand-Miller, Kay Foster-Powell and Philippa Sandall ISBN 978-1-56924-385-5, and 'The Glycemic-Load Diet Cookbook: 150 Recipes to Help You Lose Weight and Reverse Insulin Resistance' by Rob Thompson and Dana Carpenter ISBN 978-0071597395.



There are numerous Glycemic Index and Glycemic Load charts on the internet, some are listed here: http://www.health.harvard.edu/newsweek/Glycemic_index_and_glycemic_load_for_100_foods.htm, http://www.whfoods.com/genpage.php?tname=faq&dbid=32, http://www.glycemicindex.com/, http://www.webmd.com/diabetes/glycemic-index-good-versus-bad-carbs, http://www.mayoclinic.org/healthy-living/nutrition-and-healthy-eating/in-depth/glycemic-index-diet/art-20048478 and http://nutritiondata.self.com/topics/glycemic-index.

Low Glycemic Load Foods

"*Because Glycemic Load is dependent on serving size, the eGL value will change if you adjust the serving size in the Serving Size drop-down at the top of the Nutrition Facts page. Glycemic Load gives an indication of how much a serving of a food is likely to increase your blood-sugar levels. Foods with an eGL of 10 or less per serving are generally considered to have a low glycemic load. Foods with an eGL of 20 or more per serving are considered to have a high glycemic load*." [4] eGL means estimated glycemic load.

High blood sugar can lead to more inflammation. Eating a low glycemic load diet can help reduce your blood sugar levels and inflammation. Most nutritional experts consider glycemic load below 10 as low and above 20 as high.

Examples of low glycemic foods include: legumes like kidney, garbanzo, pinto, soy and black beans, lentils; fibre rich fruits and vegetables like carrots, green peas, apples, grapefruit, watermelon and tomato juice; cashews, peanuts, and whole grain products.

Movement and Exercise

Some lupus patients cannot do an aerobic workout or a spin class, however, any movement you can incorporate into your day will: improve the motility of your digestive track (the rate that food moves from your mouth to being eliminated), oxygenate your blood, increase blood circulation and burn a few calories. In Nutrition and Lupus Book 2 Movement, you will find

resources, exercises and movement ideas that anyone can do, even while confined to bed.

Relaxation Techniques, Meditation and Breathing Exercises

There are many types of relaxation techniques from autogenics, guided imagery, creative visualization, progressive muscle relaxation to mindfulness. Nutrition and Lupus Book 3 Relaxation Plus will introduce you to a variety of techniques and resources.

What does that have to do with your nutrition? Stress increases a hormone called cortisol, which can increase inflammation, increase breathing rate, disturb sleep and cause other physical and psychological reactions. Relaxation, meditation and deep breathing can reduce your cortisol levels, allow your muscles to soften or let go, and help you to detoxify your entire body by having more oxygen available and exhaling toxins from your lungs.

Food, Supplement and Medication Interactions

Your pharmacist, naturopath or holistic nutritionist, will all have the in depth training to advise you on potential interactions. They will alert you to any side effects and symptoms to look for when taking your medications and supplements, and which foods to avoid combining with specific medications or supplements. It is important that you tell them EVERYTHING you are taking, including over the counter items like vitamins, minerals, herbs, homeopathic remedies, essential oils, flower essences, etc.

Most pharmacists, naturopaths or holistic nutritionists also use continually updated computer software specific to the health professions to ensure that you receive the most up to date information about your unique treatments, combinations of medications, supplements and foods. New research comes out daily and these tools are frequently updated giving your team the most current information available. Prescription medication labels will indicate if you are to avoid a specific food known to react with the medication, an example would be to not eat grapefruit or green vegetables like broccoli with certain blood thinners.

Some medications commonly used to treat lupus are known to deplete

certain nutrients in the body. A common example is the calcium lost when taking corticosteroids like prednisone. Calcium must be properly balanced with magnesium, vitamin D3 and vitamin C in order to be absorbed to help prevent osteoporosis and osteopenia.

Calcium

Foods sources of calcium include: organic applies to everything; goat milk/yogurt/cheese, chia seeds, cow milk/yogurt/cheese, sardines with bones, pinto beans, adzuki beans, soy beans and other soy products, almonds, Brazil nuts, hazelnuts, sunflower seeds, sesame seeds, cauliflower, cooked broccoli, cooked collard greens, cooked turnip greens, garlic, arugula, rapini, sun dried tomatoes, blackstrap molasses, Barbados molasses, carob flour, tofu, citrus fruits, dried figs, dried apricots, parsley, okra, kelp, raisins, hemp seeds or hearts, chia seeds, dates, kumquats, prickly pear fruit, prunes, mulberries and ki6wi.

Oxalic acid in spinach, Swiss chard, beet greens, rhubarb and cocoa makes it difficult for your body to absorb the calcium in them. There are many other factors affecting calcium absorption which is increased by vitamin D, milk lactose, an acid environment, amino acids lysine and glycine, fat intake, exercise, a 2:1 calcium-magnesium ratio, and a 1:1 or 1:0.8 calcium-phosphorus ratio. ***"Calcium absorption is inhibited by high fat intake, high phosphorus intake, high protein intake, low stomach acid, gastrointestinal problems, lack of exercise, oxalic acid foods, phytic acid foods like whole grains, stress and vitamin D deficiency."*** [5] Quinoa is a good source of magnesium and phosphorus to assist calcium absorption. If you take calcium supplements, make sure that the product is certified lead free.

Vitamin C What it Does and What it Works With

Water soluble Vitamin C is used in the formation and maintenance of collagen so it's needed to give support and shape to the body, help wounds heal and to maintain healthy blood vessels. Collagen is found in our connective tissue such as tendon, ligament and skin, cornea, cartilage, bone, blood vessels, the gut and inter-vertebral disc.

Vitamin C is not stored in large amounts in the body. It aids the metabolism of tyrosine, folic acid and tryptophan. It stimulates adrenal function and the release of norepinephrine and epinephrine (adrenaline), the stress hormones. Vitamin C helps thyroid hormone production and aids in cholesterol metabolism increasing its elimination and lowering blood cholesterol.

Vitamin C is an antioxidant and detoxifier. In vitamin C research, it stimulates the immune system and it's antioxidant function may help in prevention and treatment of infection and other diseases. If vitamin C is taken with iron, it helps iron and other minerals to be better absorbed into the body. Vitamin C helps the absorption of calcium. Excess vitamin C is excreted. Smokers with poor diets and people with inflammatory bowel disease have lower vitamin C levels in their blood. Vitamin C is found together with vitamin P.

Food Sources of Vitamin C

Fruits – the highest vitamin C levels are in guava, papaya, kiwi, citrus fruits, rose hips and acerola cherries.

Vegetables - highest in green peppers, broccoli, brussel sprouts, kohlrabi, snow peas, cauliflower, kale, rapini, tomatoes, asparagus, parsley, dark leafy greens and cabbage.

Vitamin C is also found in sprouted grains and raw fish.

Plan your meals and snacks to include vitamin C throughout the day.

If you take vitamin C supplements, look for natural source products. Your body cannot absorb more than 500 mg of vitamin C per hour. Any more is released in urine so space out your vitamin C intake throughout the day.

Chromium

"Chromium is vital to blood sugar control. Chromium works closely with insulin in facilitating the uptake of glucose into cells. Without chromium, the action of insulin is blocked and the level of glucose rises." [6]

"In some clinical studies of diabetics, supplementing the diet with chromium has been shown to decrease fasting glucose levels, improve glucose tolerance, lower insulin levels, and decrease total cholesterol and triglyceride levels while increasing the level of HDL cholesterol." [7]

"A lack of chromium is particularly problematic for people with blood sugar issues. People with very low chromium levels can develop "glucose intolerance," a condition that can lead to type 2 diabetes. The good news? Blood sugar levels do drop in these people when they get the chromium they need." [8]

If you have hypoglycemia, hyperglycemia, high cholesterol or triglycerides, achieving balanced blood sugar through your diet is important.

The chromium content in foods is dependent on the chromium level in the soil that the food was grown in. Food sources of chromium include broccoli, barley, oats, green beans, mushrooms and whole grains.

Carbohydrates

Carbohydrates are nutrients with calories that provide energy and include vitamins, minerals and fibre. All types of carbs and the amount of carbs affect blood glucose. Refined carbs such as refined flour and sugars have all the starch without the other nutrients and fibre. Carbohydrates are essential to health including your brain function.

Complex carbohydrates are starches that break down slowly into sugars. Simple sugars break down into blood glucose almost immediately. Sugars include the natural sugars in fruit, vegetables, diary and sweeteners.

Every person needs a different amount of carbohydrates. This amount is affected by age, height, weight, physical activity or exercise, medications, current blood glucose levels and blood glucose targets. It is important to eat carbs with fibre and to try to eat a similar amount of carbohydrates at each meal.

1 serving carbohydrate = 15 grams = 1 carbohydrate choice

Most books and recipes specify carbohydrates in either servings, grams or choices.

Examples of 1 serving or 15 grams of carbohydrate: 1 slice whole grain bread, 1/4 bagel, 1/2 English muffin, 1/3 cup whole grain pasta or white rice, 1/2 cup or 125 ml quinoa, millet, brown rice, corn, carrots, frozen yogurt, fruit juice or grits, 1/4 cup or 65 ml or 2 oz lentils, beans, hemp hearts, celery, red beets, shredded cheddar cheese, 1 tablespoon or 15 ml wild rice, chia seed or flax seed, 1 teaspoon or 5 ml milk, 3 cups or 750 ml salad greens, 1 small fresh fruit, 1-1/2 cups or 375 ml green beans or broccoli, 1/2 cob of corn, 1/4 cup or 2 tablespoons or 30 ml raisins, dried fruit, granola, 1/4 large baked potato with skin.

As you can see carbohydrates are everywhere. It is the quality of the carbohydrate that counts. Some lupus medications such as prednisone can make you hungry so the quality of carbs in your meals and snacks becomes even more important.

Essential Fatty Acids (EFAs)

What makes a fatty acid essential is that the body cannot make them. EFAs must come from your diet. The optimum ratio of Omega 6 to Omega 3 in the diet suggested by research is 1:1, maximum 2:1. A typical North American diet has a ratio of 10:1 to 20:1, ***"our balance of omega-6 to omega-3 affects our health as much as any other aspect of dietary fat."*** [9]

Omega 3 EFAs are anti-inflammatory meaning they can reduce or help prevent inflammation in the body. Diabetes is a disease where your body is full of inflammation. Including more Omega 3 rich foods can help reduce your inflammation.

Omega 6 EFAs are pro-inflammatory meaning they can cause inflammation in the body. Omega 6 EFAs are everywhere in the standard North American diet. Even though they are often in "healthy" foods, you may need to reduce them and replace them with omega 3 foods to achieve an optimum omega 6 to omega 3 ratio. An example of this would be replac-

ing sunflower seeds (omega 6) with pumpkin seeds (omega 3).

Omega 9 EFAs are the third, often ignored EFAs.

Omega 3 (LNA, EPA, DHA) Sources

Fish – highest in herring, sardines, mackerel – Spanish/ Atlantic/Pacific salmon, some in halibut, tuna, swordfish, greenshell/Lipped mussels, tilefish, tuna canned light, pollock, cod, catfish, flounder, grouper, mahi mahi, orange roughy, red snapper, shark, king mackerel, hoki (blue grenadier), gemfish, glue eye cod, Sydney rock oysters, tuna canned, snapper, saltwater Barramundi, scallops, trout, eel, shrimp.

Seeds and Nuts – chia seed, flax seed, hemp seed, butternuts, canola, Persian walnuts, pecans, hazelnuts, pumpkin seed, fenugreek seed.

Oils (cold pressed, unrefined, unconditioned) – chia, flax, hemp, fish, krill, salmon, seal, and extra virgin, olive oil.

Other Proteins – omega 3 eggs, lean red meat, turkey.

Fruits and Vegetables – strawberry, kiwifruit, broccoli, black raspberry, ligonberry, perilla (shiso), camelina, purslane, winter squash, sprouts, spinach, cauliflower, arugula, romaine lettuce, green peppers, turnip greens, rapini, zucchini, yellow onions, kale, seaweeds-wakame, cabbage.

Grains and Legumes – soybeans, navy beans, kidney beans, tofu.

Omega 6 (LA, GLA, AA) Sources

Oils(cold pressed, unrefined, unconditioned) – safflower, sunflower, sesame, grape seed, borage, evening primrose, black current, poppy seed, corn, soy, peanut, some fungi, wheat germ, walnut, cottonseed.

Seeds and Nuts – walnut, sunflower, almonds, peanuts, pumpkin, pecans, cashews, pine nuts, coconut.

Proteins – turkey, chicken, eggs, buttermilk, sour cream.

Fruits and Vegetables – avocado, acai berry, spirulina, dairy cheese.

Grains and Legumes – oat germ, wheat germ, rice bran, soybeans, durham wheat.

Omega 9 Sources

Oils (cold pressed, unrefined, unconditioned) – sesame, olive, pecan, pine nut, sunflower, peanut, canola, soybean.

Seeds and Nuts – almonds, peanuts, pecans, pistachio, cashews, hazelnuts, macadamia, hemp.

Fruits and Vegetables – olives.

Fibre

There are 2 types of dietary fibre, soluble and insoluble. A healthy goal for daily dietary fibre intake is 34 grams. Most North Americans get 10 to 15 grams/day.

Soluble fibre dissolves in water turning into a gel and slows digestion. It is fermented in the colon into gases and physiologically active by-products. It can be prebiotic and viscous (gelatinous).

Insoluble fibre does not dissolve in water. It is metabolically inert and provides bulk to stools. It can be prebiotic and can ferment in the large intestine. Insoluble fibre absorbs water as it moves through the digestive tract and can move food more quickly through the stomach and ease bowel movements.

There is a lot more fibre information on the internet at www.nlm.nih.gov/medlineplus/ency/article/002136.html, www.dietitians.ca/Your-Health/Nutrition-A-Z/Fibre/Food-Sources-of-Fibre.aspx and www.diabetes.ca/diabetes-and-you/healthy-living-resources/diet-nutrition/fibre.

Fibre is plentiful in unrefined foods such as vegetables, fruits, whole grains, nuts, seeds and legumes.

Probiotics

Gut flora describes the environment of microbiota (a complex of microorganisms) that live in your digestive tract. Having healthy intestinal flora is key in preventing constipation, maintaining immunity, proper digestion and absorption of nutrients from food, and in avoiding yeast infections in the mouth or vagina. Probiotics help your body produce vitamins B12 and K.

Antibiotics kill the good bacteria along with the bad. You need both prebiotics and probiotics to restore balance to your digestive tract microbiota.

Probiotics are the bacteria that keep the natural, healthy balance of microbes in your digestive tract. They help digest food, kill harmful bacteria and fight disease. There are 400+ types of probiotics in your gut. Two common beneficial strains frequently advertised include L. acidophilus and B. Bifidum.

The Canadian Digestive Health Foundation has a good probiotic article at www.cdhf.ca/bank/health_pdf_en/39probiotics.pdf#zoom+100.

Prebiotics are foods, dietary fibre or carbohydrates that provide an indigestible home for the probiotics and they stimulate the growth of probiotics. There is an informative WebMD article titled Probiotics and Prebiotics: Ask the Nutritionist at www.webmd.com/vitamins-and-supplements/nutrition-vitamins-11/probiotics.

A balance of probiotics and prebiotics aids your digestion and absorption of nutrients and supports your immune system.

Other Important Nutrients

- Niacin (vitamin B3) and Niacinamide found in small amounts in foods. Most is converted from tryptophan. B3 is found in liver, organ meats, poultry, fish and peanuts.
- Biotin (vitamin B7) is only in trace amounts in foods and is found in chicken egg yolks, liver, brewers yeast, unpolished rice, peanuts, almonds, carrots, tomato, chard, onion cabbage and cow milk.
- Pyridoxine (vitamin B6) is destroyed by cooking and is found in organ meats, whole grains, fish, poultry, dried beans, egg yolk, walnuts, bananas, prunes, potatoes, cauliflower, cabbage, collard, turnip, mustard greens, garlic, mushrooms, spinach, bell peppers and avocado.
- Cobalamin (vitamin B12) found in meat, most fish, crab, scallops, shrimp, oysters, chicken egg yolk, cow milk, and fermented foods such as live culture yogurt, kefir, tempeh and miso.

- Natural vitamin E (d-alpha tocopherol) is the most potent form which is more active than the synthetic dl-alpha tocopherol. **"*The best sources of vitamin E are the oil components of all grains, seeds, and nuts, which contain tocopherol.*"** [10]
- Manganese found in nuts and whole grains and leafy greens if they are grown in manganese rich soil
- Magnesium is a component of chlorophyll found in dark green vegetables, most nuts, seeds, legumes, whole grains, avocado and dried apricots.
- Potassium is found in green leafy vegetables, broccoli, peas, lima beans, tomato, potato skins, citrus fruits, bananas, apples, avocado, raisins, apricot, whole grains, seeds and nuts.
- Zinc is found in oysters, red meats, herring, chicken egg yolks, whole wheat, rye and oats.
- Flavonoids (polyphenols) are one of the phytonutrients (plant based) that give colour and taste to food. The properties are antioxidant, antibiotic, cancer preventative, anti-inflammatory, tissue supportive and tissue protective properties. There are sub types including flavonols, dihydroflavonols, flavones, flavonones and anthocyanidins. They are found in high amounts in bilberries and aronia berries.
- APDS (allyl propyl disulfide) and allicin (diallyl disulfide oxide) are found in onions and galic.
- Charatin and polypeptide-P (an insulin like polypeptide) are found in unripe bitter melon.
- Gymnena components (gymnemic acid) is available as an extract of the leaf of gymnema sylvestre and should only be used under the direction of a doctor specializing in orthomolecular medicine, a naturopath or a registered holistic nutritionist.
- Trigonelline, nicoyinic acid and coumarins are found in fenugreek seeds and defatted fenugreek seed powder.

- Epicatechin is found in green tea and pterocarpus marsupium.
- Ginko flavoglycosides are found in ginko biloba leaf extract standardized 24% and should only be used under the direction of a doctor specializing in orthomolecular medicine, a naturopath or holistic nutritionist.

Your Digestive System

It is important for you to understand what the parts of your digestive system are and how they work to break down and absorb nutrients, regulate immunity and facilitate good elimination of wastes.

There are many parts to your digestive system including your mouth, teeth, salivary glands, pharynx, esophagus, stomach, liver, gall bladder, pancreas, small intestine, cecum, appendix, various ducts, large intestine, rectum and anus. Stomach acid and enzymes are two essential substances you produce to help break down foods.

Enzymes are proteins produced by the human body and they are essential for you to break down foods. Heat, oxidation, preservatives, medications, x-rays and other chemicals all destroy enzymes. 'Enzymes The Sparks of Life' by Anthony J. Cichoke DC, PhD ISBN 1-55312-036-1 published by Alive Books explains in an understandable way how they work and what happens when you are enzyme deficient. This book also includes recipes to increase your enzyme intake.

There is an easy to read book, 'Eating Alive Prevention Thru Good Digestion' by Dr. John Matsen ND, ISBN 978-0-9693586-0-2 with a lot of helpful illustrations to learn more about how your digestive system works. In order to understand how well you are eliminating wastes, or the scoop on poop, I recommend you review the Bristol Stool Chart. There are many versions available for free on the internet.

Detoxification

"Since virtually everyone with a health problem is "toxic", detoxification programs are very important to nutritional results. Cells cannot absorb the nutrients they need if they are strangled in their own metabolic waste products." [11]

Our world is full of toxins. They are in the air we breathe, the food we eat and the water we drink. There are: toxic metals in mercury amalgam dental fillings; lead in paint; multiple toxins in cigarette, cigar smoke and electronic cigarette vapors; agricultural and industrial chemicals, parasites, bacteria and viruses in drinking water; off gassing in homes and retail stores from building products; hormones, pesticides, herbicides and genetically modified material in our food supply; toxins made by the body in response to stress; electromagnetic toxins; geopathic stress and others. Poor digestion, slow motility, dehydration, constipation or poor elimination can also leave toxins in your body to putrefy or to be reabsorbed and recirculated through your body causing an increased toxic load and symptoms.

What you can do to limit your exposure to toxins is: quit smoking; have your drinking water tested; buy organic meats, fruits, vegetables, grains and herbs; and exercise to improve lymphatic drainage, improve blood circulation and better oxygenate your body to help eliminate the toxins. You can select environmentally friendly, non-toxic building materials, personal care products, cleaners, office supplies, green fuels, green energy and use your voting power to affect policy at all levels of government and to change what products are available.

Discuss what type of detoxification program is appropriate for you, if any, with your doctor, naturopath or nutritionist. Do not do it on your own. You could induce serious symptoms, organ damage or worse. You need the right program for your current state of health, not the one you may have done last year or ten years ago.

There are many books, web sites, TV shows and articles trying to sell you a particular mass marketed detoxification or cleansing program. Do not be convinced that one size fits all. Again, seek the advice of your health care professional.

Although I agree that detoxification is important, it is important that you do not start a cleanse or detoxification program unless you are being closely supervised by your doctor, naturopath or nutritionist.

Every detoxification program must be tailored to the individual, taking into

consideration your general state of health, the efficiency of your organs of elimination such as your skin, liver, kidneys and gall bladder, your medications, your ability to take time of work if necessary, and how much support you will receive at home and from friends.

Many people experience a temporary increase in symptoms or a healing crisis when they undertake a detoxification program. Your health care professional will modify your detoxification program to minimize any negative effects of your cleanse.

What you can do starting today, is limit your exposure to toxins and make healthy lifestyle choices including stress management. Green smoothies containing both soluble and insoluble fibre can help your body eliminate toxins.

Talk to your family, friends or coworkers about your change to living a more environmentally friendly lifestyle and try doing it together. The extra support may help you stick to your new habits, especially when you are at work or out with friends.

Hydration

Clean, pure water is needed by every cell and process in your body.

Some medications, exercise and caffeine can all increase your need for extra water.

If you have lupus kidney involvement, you may be advised to increase or decrease your water intake depending on the nature of your kidney problem.

A good target is 2 litres or 2 quarts of water per day from food and liquids. For each cup of caffeinated beverage or alcohol you consume, you need to drink an extra 250 ml or 8 oz of water to balance the diuretic effect of the caffeine or alcohol.

When you exercise you need to drink more water based on the type of exercise and the intensity of exercise.

Your Treatment and Support Teams

Medical Treatment Team

The members of your medical treatment team might include: a general practitioner (family doctor), rheumatologist, nurse practitioner, neurologist, nephrologist, naturopath, osteopath, physiotherapist/kinesiologist, homeopath, massage therapist, psychologist, holistic nutritionist, dietician, psychiatrist, psychotherapist or social worker.

Nutrition and Lupus Book 4 Your Treatment and Support Teams will provide a more in depth discussion of your teams.

Support Team

Your psychological and spiritual support team might include: peer support groups, family, friends, spiritual director, life coach, health coach, patient education program teachers, your Community Care Access Center (CCAC) coordinator/CCAC personal support workers, service clubs and other community volunteers.

Accessible or Barrier Free Design

In addition to the NBCC the National Building Code of Canada and your provincial/territorial building code, for example, the OBC Ontario Building Code, there is a reference standard published by CSA the Canadian Standards Association entitled CSA B651-12 (current edition is 2012) Accessible Design for the Built Environment.

CSA B651 covers many aspects of design and construction for both buildings and sites. It is intended to help accommodate physical mobility, visual impairments, hearing deficits, perception disabilities and environmental sensitivities.

Minimum dimensions and strengths of materials and equipment are given to cover everything from corridor widths and mounting heights of operating devices, elevators, stairs, ramps, kitchens, bathrooms, door hardware, to visual and audible alarms, landscaping hazards, and indoor air quality.

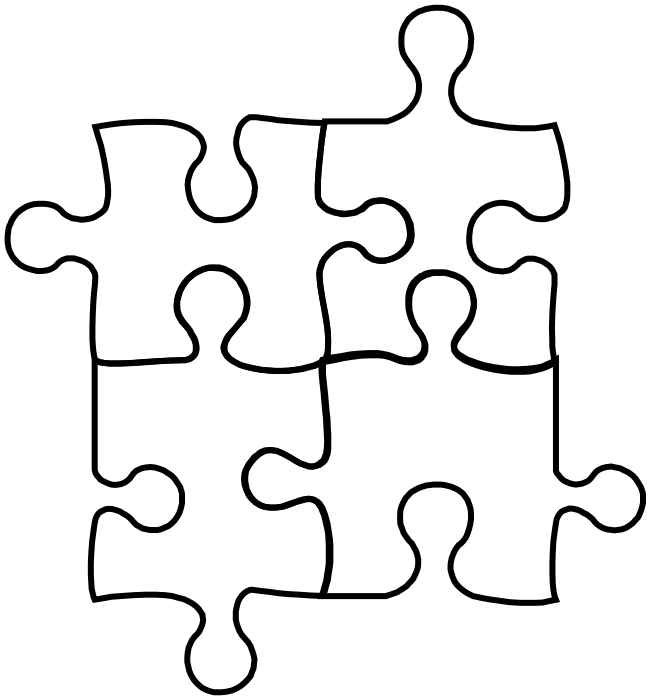
Options are given for canes, walkers, manual wheelchairs, electric wheelchairs, scooters, tactile surfaces, high contrast visual surfaces and many more requirements.

This national standard is important to comply with when renovating your home, yard, office, school, playground, park or place of worship.

In addition, many municipalities have their own additional barrier free design standards. These are often in addition to the local by-laws and need to be complied with during any design or construction.

These design standards help make built spaces easier to for you to use when you have any kind of physical or perceptual challenges.

If you apply for a building permit for renovations, your designer is required to meet these requirements.



A Blood Glucose Log is helpful if you have metabolic syndrome, hypoglycemia, pre-diabetes or diabetes. See page 27.

An Activity or Exercise Log is helpful if you have decreased strength or mobility, want to lose weight or want to gain muscle. See page 28.

The Effects of Food on the Super-Critical Acid/Alkaline Biochemical Balance

Most Alkaline	Medium Alkaline	Low Alkaline	Foods	Low Acid	Medium Acid	Most Acid
	bell pepper cauliflower parsnip endive ginger root sweet potato cabbage celery carrots asparagus	Brussels sprouts beets tops & roots tomatoes & tomato juice fresh peas dark lettuce all mushrooms fresh potato w skin pumpkin squash tempeh	**Vegetables** **Beans** **Legumes** only use non GMO foods	corn lentils peanuts w skin organic peanut butter soy protien poweder beans: kidney, lima, navy, pinto, white, black, soy peas: green, split peas, chick peas, tofu (extra firm) edamame	salted peanut butter	processed soybeans salted & sweetened peanut butter
cantaloupe, honeydew raisins nectarine raspberry watermelon fresh black cherries black olives in oil	apple avocado pink grapefruit lemons, limes mangoes pear peach	fresh pineapple apricot grapes blueberry strawberry blackberry paypaya	**Fruits**	dried fruit, natural figs, dates, prunes banana unsweetened canned fruit, natural fruit juice unsweetened jams unsweetened preserves	olives, pickled sweetened fruit juice sweetened canned fruit sweetened jams sweetened preserves	cranberry dried fruit, sulfured
Celtic sea salt Antarctic sea salt miso & natto cayenne ashwagandha gotu kola ginkgo biloba baking soda (sodium bicarbonate)	cinnamon ginger dill, mint peppermint turmeric rhodiola basil oregano licorice root Siberian ginseng	most herbs curry mustard powder kola nut tamari milk thistle maca astragalus suma echinacea	**Seasonings** **Herbs** **Spices**	tahini carob cocao regular table salt	vanilla nutmeg mayonnaise ketchup	black pepper MSG soy sauce brewer's & nutritional yeast
electron rich alkaline water plasma activated water (PAW)	Teas: green, matcha green, ginger, rooibos, chamomile water ozonated water ionized water	dry red wine unsweetened almond milk distilled water draft beer or dark stout black organic coffee	**Beverages**	unsweetened soy milk unsweetened rice milk black tea black coffee decaf coffee	coffee w milk & sugar	alcoholic drinks soft drinks
bee pollen soy lecithin granules dairy free probiotic culture	aloe vera juice	whole oats quinoa wild rice millet & spelt plain hemp protein powder	**Grains** **Cereals** **Other**	brown & basmati rice wheat & buckwheat kasha, amaranth whole wheat & corn pasta whole grain bread	plain rice protein powder rolled oats & oat bran rye white bread white pasta, white rice	barley pastries cakes tarts cookies
pumpkin seeds almonds w skin plain almond butter w skin all sprouts wheat grass alfalfa grass, barley grass	extra virgin olive oil borage oil primrose oil chestnuts, Brazil nuts light & dark flaxseeds macadamia nuts black currant oil	hazelnuts flaxseed & sea buckthorn oils hemp seed & oil sesame seeds & oil sunflower seeds & oil fresh coconut & oil	**Nuts & Seeds** **Grasses & Sprouts** **Oils** only use cold pressed oils	popcorn canola oil grape seed oil pine nuts safflower oil	cashews pecans walnuts	pistachios trans fatty acids acrylamides
	wild ultra pure omega3 fish oil CLA conjugated linoleic acid	cod liver oil	**Meats Fish & Sowl**	fish, turkey venison wild duck, seafood	chicken lamb, pork veal	beef lobster
human breast milk	dairy probiotic cultures whey protein isolate powder	soft goat cheese fresh goat milk	**Dairy** **Eggs**	cow's milk, cream, yogurt butter, buttermilk white of chicken eggs	soy cheese & soft cheese ice cream whole chicken eggs	processed cheese hard cheese yolk of chicken eggs
	blackstrap molasses (unsulfured)	stevia, brown rice syrup pure maple syrup unpasteurized honey	**Sweeteners**	commercial honey	corn syrup, fructose high-fructose corn syrup, sugar	artificial sweeteners

Diet Diary or Food Log

A diet or food log keeps track of all your foods and beverages for each day including snacks. In order to do an elimination diet, you first need to know what types of foods you are eating and any reactions or symptoms you have. Food sensitivities may not be immediate and they can take several days to show up. The diet/food log also gives you an idea of what nutrients you may not be getting enough of such as protein, carbohydrates, healthy fats, enzymes from raw foods, vitamins, minerals, fibre, etc. It will also show you which foods you may be having too often or too much of.

The following is a typical example of a diet or food log. Normally you would keep the log for 2 to 4 weeks. One week of information is not enough data to accurately assess your eating habits. Try keeping a log for 2 weeks and take an honest look at what and when you are eating. Adjust your intake if necessary.

Name _____ Food Log Week of _____

Date & Time	Breakfast	Snack	Lunch	Snack	Supper	Snack

Food and Mood Log

Food and drinks affect your mind as much as your body. The following is an example of a typical log with space for writing down changes in moods, thoughts or feelings.

Name ______________________ **Food and Mood Log** Week of _______________

Date	Food, Drink or Supplement	Time Food Was Eaten	Time of Changes	Mood, Thoughts or Feelings

Finding A Holistic Nutrition Professional

You can find a holistic nutritionist through CAHN-Pro the Canadian Association for Holistic Nutrition Professionals http://cahnpro.org/ or through CSNNAA the Canadian School of Natural Nutrition Alumni Association http://www.csnnalumni.org/. Both maintain lists of qualified nutritionists.

Holistic Nutritionists are not currently covered in Ontario by OHIP, however, a number of employer extended health plan benefits do cover them if they are members in good standing with CAHN-Pro or if you belong to an employer wellness plan such as 321Well at www.321well.com.

If you live outside of Ontario, check with your provincial or territorial health care plan to see if holistic nutrition coverage is available for you.

If you cannot find a holistic nutritionist in your area, consider seeing a naturopath or MD with specialized training in orthomolecular medicine.

What is a Registered Holistic Nutritionist?

Registered Holistic Nutritionist (RHNs) are professionals trained in Natural Nutrition and complementary therapies, whose principal function is to educate individuals and groups about the benefits and health impact of optimal nutrition.

Mainstream western medicine does not emphasize the significance of poor nutrition as a major cause of a wide range of health disorders. Although most people are aware of the benefits of sound nutrition, the range of conflicting information available to the consumer is often confusing. RHNs guide their clients through the maze of information from books, magazines, supplements and diets on the market. They work with clients to identify and help correct the nutritional causes of diseases and they are qualified to design personalized diet and lifestyle programs that optimize health.

A RHN provides specific food recommendations, individualized menu plans, lifestyle modifications, supplement suggestions, education and personal coaching to help you work toward your personal goals.

RHNs perform an in depth assessment with questionnaires, an interview

and visual exam to assess your current symptoms or concerns, the state of your digestion and absorption, your level of physical activity and your typical lifestyle behaviours. RHNs make individualized recommendations to help you achieve your health and wellness goals to live a healthier life.

Natural nutrition encourages using good quality foods that are whole and alive in order to eat to enhance health while creating flavourful meals suited to your individual needs. This includes healthy alternatives to processed, refined and packaged foods and discourages toxic lifestyle choices. RHNs consider the body, mind and spirit; the whole person in connection with food and health, as well as your relationship to the world and the ecology of the earth.

RHNs are granted their designation after completing a demanding course of study set by the Canadian School of Natural Nutrition, together with case studies, subject specific, board and oral exams. RHNs must adhere to a strict code of ethics or face consequences like losing their designation and right to practice. Due to their level of knowledge, holistic nutritionists are valuable contributors to the health care team and work alongside medical professionals. For more information on curriculum to www.csnn.ca.

The CAHN-Pro Code of Ethics is available at www.cahnpro.org.

Cathy Ferren RHN (RHN registration #N665514) is also a member in good standing (#M0000163), of CAHN-Pro the Canadian Association of Holistic Nutrition Professionals and a Registered Lifestyle Wellness Service Provider with 321well.com for multiple disciplines.

Nutritious Foods

Lifestyle Choices

Blood Glucose Log

Name: ______________________________ Start Date: ____________________

	Morning	Breakfast		Lunch		Dinner		Bedtime
	Fasting	Before	2 hrs after	Before	2 hrs after	Before	2 hrs after	
Monday								
Tuesday								
Wednesday								
Thursday								
Friday								
Saturday								
Sunday								
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Sunday								

Notes

Glucose TARGETS (in mmol/L): Before Meals: 4.0-7.0

2 hrs After Meals: 5.0-10.0 or 5.0-8.0 if A1C target is not being met

Activity Log

Client Name

Day	Time	Activity	Minutes
Monday			
		Monday Total	
Tuesday			
		Tuesday Total	
Wednesday			
		Wednesday Total	
Thursday			
		Thursday Total	
Friday			
		Friday Total	
Saturday			
		Saturday Total	
Sunday			
		Sunday Total	
		Weekly Total	


NUTRITION
PEACE
SPIRITUALITY
JOY
NATURE
EXERCISE
HEALTH
QUALITY SLEEP
LOVE
DETOX
DIET
ECO LIVING
HEALTHY HABITS
STRESS MANAGEMENT

Summary

Nutrition

What you eat and drink is one area of your life that you have almost total control over. The only limit is what organic foods are available where you live. Everything else you have some ability to affect.

Cooking

Whether you cook yourself, have a family member or friend help, use a food service like meals on wheels or make use of community volunteers from service clubs, high schools or college/university students, the person preparing food can choose fresh, local ingredients and use cooking methods that preserve nutrients.

Exercise and Fitness

Movement helps your body and mind. You can move your hands and feet once an hour or every few minutes. If you are able to, you can stand or stretch once an hour.

Psycho-Spiritual Self Care

Pacing yourself and setting priorities can help you through flares and sometimes help you prevent flares. When your emotions, thoughts, feelings and spiritual life are balanced, you will experience a greater sense of peace.

Mindfulness, or awareness of your symptoms, whether they are physical, psychological or spiritual can help you know what is going on and seek out the help and support you need.

One of your challenges is to learn to ask for help when you need it and then to accept the help with gratitude.

Your Goal: Living Well With Lupus!

Footnotes

[1] NYU Langone Medical Center. ”Alfalfa” Available: http://www.med.nyu.edu/content?ChunkIID=21465

[2] Phyllis A. Balch, *Prescription for Nutritional Healing Fifth Edition* (New York: Penguin Group, 2010), 110.

[3] Elson M. Haas MD and Buck Levin PhD RD, *Staying Healthy With Nutrition 21st-Century Edition The Complete Guide to Diet and Nutritional Medicine* (Berkley: Ten Speed Press, 2006), 67.

[4] Nutrition Data. “Estimated Glycemic Load” Available: http://nutritiondata.self.com/help/analysis-help#estimated-glycemic-load

[5] Elson M. Haas MD and Buck Levin PhD RD, *Staying Healthy With Nutrition 21st-Century Edition The Complete Guide to Diet and Nutritional Medicine* (Berkley: Ten Speed Press, 2006), 154-161.

[6] Michael T. Murray ND, *Diabetes & Hypoglycemia, Your Natural Guide to Healing with Diet, Vitamins, Minerals, Herbs, Exercise and Other Natural Methods* (New York: Three Rivers Press, 1994), 92.

[7] Anderson RA: *Chromium, Glucose tolerance, and diabetes*. Biological Trace Element Research 32:19-24, 1992.

[8] Rodale News. “Control Cravings and Blood Sugar Levels with 5 Chromium-Rich Recipes” Available: http://www.rodalenews.com/chromium-sources.

[9] Elson M. Haas MD and Buck Levin PhD RD, *Staying Healthy With Nutrition 21st-Century Edition The Complete Guide to Diet and Nutritional Medicine* (Berkley: Ten Speed Press, 2006), 68.

[10] Elson M. Haas MD and Buck Levin PhD RD, *Staying Healthy With Nutrition 21st-Century Edition The Complete Guide to Diet and Nutritional Medicine* (Berkley: Ten Speed Press, 2006), 102.

[11] David W. Roland PhD, *How to Give Nutritional Advice Legally* (Parry Sound: Roland Publications, 2009), 20.

Building Blocks of Health

Nutriton

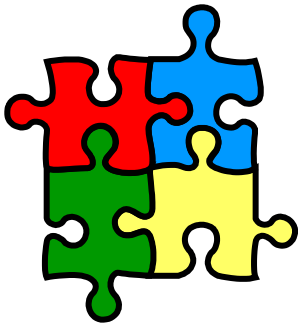
Diet

Exercise

Lifestyle

Self Nuturing

Body Mind Spirit



About The Author

Cathy Ferren RHN MAATO is a registered holistic nutritionist, life skills and health coach and instructor, certified Personality Dimensions® instructor, relaxation techniques coach and prayer minister working across Canada. She incorporates her over 35 years of experience in architectural technology into barrier free design consultations for her clients to help them meet their mobility needs.

As a lifelong volunteer in many non-profit organizations, she brings her experience, compassion and focus to her clients. She is passionate about helping people improve their wellness in all areas: body, mind and spirit.

KNOWLEDGE AND HOPE

$8.99 ISBN 978-0-9866950-1-8