Chronic Lymphocytic Leukemia
Workshop Overview

- Introductions
- What is CLL?
- Symptoms & Diagnosing
- Communicating with your Health Care Team
- Treatment Options
- Clinical Trials
- Living with CLL
Tips For Living In This Strange New Land

You or your loved one may have been diagnosed with cancer, but that doesn’t mean that “cancer has you”

- Educate yourself
- Get support
- Have hope and courage
What is CLL?

C = Chronic. This type of cancer grows slower than acute types, which grow quickly.

L = Lymphocytic. The disease begins with a change to a lymphocyte, which is a type of cell that fights infection. These cells are located in the interior of bones, called marrow. The other main type of leukemia is “myeloid,” which also begins in the bone marrow, but in a different type of cell.

L = Leukemia. Changes in the cell make it unable to fight infection, and also make it grow out of control, multiplying into many cells that crowd out the normal cells. The other major types of leukemia are acute lymphocytic leukemia (ALL), chronic myeloid leukemia (CML), and acute myeloid leukemia (AML).
What is CLL? (Cont.)

- CLL may be a slow-developing, ongoing condition. In fact, some people with CLL do not need any therapy right away, and may never need medical treatment.

- Other people will have a form of CLL that grows more quickly, and they will need to begin therapy as soon as they are diagnosed with the disease.

- Most people eventually need to be treated, and will be treated on and off for years

- There is currently no cure for CLL—but it is possible to live a healthy life with the disease and continue to do many of the activities in your daily life.
How Common is CLL?

- CLL is the most common type of leukemia in adults, making up around a quarter of new cases.

- 6.75 per 100,000 men and 3.65 per 100,000 women in the US

- In the United States this year, there will be more than 20,000 new cases of CLL.

- The average age of someone at diagnosed with CLL is 71. It is rarely seen in people under age 40 or in children.
Symptoms of CLL

• Many people who have CLL do not have any symptoms at all.

• If a person who has CLL has any symptoms of CLL, they may include:
  o Tiredness
  o Feeling out of breath
  o Weight loss
  o Infections of the skin, lungs, kidneys or elsewhere
  o Swollen lymph nodes or spleen
  o Aches, fever or night sweats (B symptoms)

NOTE: These symptoms are more likely to be caused by other health problems, and do not mean you have CLL.
Diagnosing CLL

• Since many people who have CLL do not have any symptoms, they may find out they have the disease when a medical blood test—ordered as part of a routine physical exam or for another unrelated condition—shows something is wrong with certain blood cells.

• A high level lymphocytes (white blood cells) without another explanation is commonly what leads a doctor to suspect CLL.

• Because there often are no symptoms of CLL, and if there are symptoms, some are the same as other illnesses, it may several tests to diagnose CLL.
Choosing Your Health Care Team

- Because communication is so important, you need a health care team you can trust, with expertise in treating this disease.
- It is important that you feel respected and listened to by your health care team and ensure that your goals are properly aligned.
- Your choice of a health care team depends on personal preferences.
- Blood cancers are uncommon diseases, so it can be to your advantage to be treated by a doctor specially trained to focus on treating patients with blood cancers: a “hematologist-oncologist”. You could consider seeing a doctor who focuses on CLL specifically.
Communicating with Your Health Care Team

• Discuss the use of the following:
  – Over-the-counter medications including vitamins, herbs and other supplements
  – Alternative and complementary treatments
  – Medications prescribed for other medical conditions

• Discuss, with your doctor, what potential benefits you expect to arise from using these medications

• These may interfere with the effectiveness of treatment
Watch & Wait

- Because CLL has a slower progression than other types of leukemia, many patients do not have any symptoms or risk factors that require any treatment immediately.

- These patients can be closely monitored but not treated for years with an approach known as “watch-and-wait”—also called “watchful waiting” or “active surveillance.”

- During this phase, patients will undergo medical examinations, testing, and counseling about what to do if they develop signs of infection or other illness.

- Some patients will not develop symptoms for many years, or even decades, and will never need any treatment for CLL.

- Note: CLL can change behavior and any new symptom needs to be discussed with the provider.
Watch-and-wait may seem like doing nothing, but it is a very effective approach:

- Studies have shown that immediate treatment for CLL does not provide any benefit over watch-and-wait
- Patients may build up resistance to drugs used for treating CLL, so they might not work later
- Early treatment comes with some risks, including side effects
- When—or if—CLL begins to progress, a patient would then return to active treatment.
To Treat or Not to Treat?  
When to Begin Treatment

• The decision to treat a person with CLL is based on symptoms related to the disease, which include:
  – Enlarging lymph nodes
  – Enlarging spleen
  – Fatigue
  – Anemia getting worse
  – Thrombocytopenia (low platelets) getting worse
  – Weight loss
  – Fever
  – Night sweats

• The decision to start treatment of CLL is also made by looking at blood test results:
  – Low red blood cell or platelet counts

• For patients in watch-and-wait, treatment begins when CLL appears to be worsening. Patients with symptoms or worrisome blood counts may begin treatment soon after being diagnosed with CLL.

• While some people with CLL can live for years without treatment, most eventually need to be treated.
The goals for what your treatment will accomplish may include:

- Slowing down the growth of the CLL cells
- Maintaining your lifestyle
- Keeping you feeling well enough to carry on your day-to-day responsibilities
- Bringing your white blood cell, red blood cell and platelet counts to normal levels

Note that unlike treatment for some other cancers, treatment for CLL is not intended to cure the disease.

Even if there are no signs of leukemia after treatment, it is likely to come back again at some point and treatment may begin again.

Most people with CLL are treated on and off for years.
Treatment Options for CLL

- In addition to watch-and-wait, the main treatments for CLL include:
  - Chemotherapy
  - Targeted therapy
  - Radiation therapy
  - New treatments being tested in clinical trials, such as:
    - Chemotherapy with stem cell transplant
    - Biologic therapies, such as monoclonal antibodies

- A treatment regimen (schedule) can be a single therapy or a combination of therapies, usually given in repeated cycles over a period of time
Questions to Discuss with Your Doctor

- How much experience do you have in treating CLL?
- Will my insurance cover the cost of my care?
- Will I receive care at this facility or elsewhere?
- Is there an oncology nurse or social worker I can consult with?
- What other support services are available for me and my family?
- Are you up-to-date with treatments and clinical trials?
- Can you recommend a CLL expert for a 2nd opinion?
Treatment Considerations

Planning treatment for CLL depends on several factors, including:

• Risk category of CLL: low, intermediate or high risk
• Physical exam
• Lab test results, including how quickly the lymphocyte (white blood cell) numbers are increasing, chromosome changes in the cancerous cells and proteins on the surface of the cancer cells
• Overall health
• Age (for some treatments)
• The benefits of the treatment vs. the possible side effects
Getting a Second Opinion

• Getting a second opinion is highly recommended to give you more information and feel more confident about your treatment plan.

• Your doctor may refer you to one or more specialists.

• You can call the Cancer Information Service of the National Cancer Institute at 1-800-4-CANCER.

• The Leukemia & Lymphoma Society at www.lls.org can recommend board-certified hematologist-oncologists in your area who are experienced with CLL.
Chemotherapy

- Chemotherapy uses drugs to damage or kill cancer cells, usually by stopping the cells from growing or dividing.

- These drugs can also damage healthy cells in your body, which causes side effects.

- These are the most commonly used drugs for chemotherapy:
  - Fludarabine (Fludara), most common for people with CLL
  - Pentostatin (Nipent)
  - Cladribine (Leustatin)
  - Chlorambucil (Leukeran)
  - Cyclophosphamide (Neosar)
Targeted Therapy

• Unlike standard chemotherapy drugs, which attack rapidly growing cells in general—both cancerous and healthy—targeted therapy drugs focus their attack on specific targets on, or inside, cancer cells.

• This type of treatment blocks the growth and spread of leukemia cells, but limits damage to healthy cells.

• The most commonly used drugs for targeted therapy include:
  – Ibrutinib (Imbruvica)
  – Idelalisib (Zydelig)
  – Lenalidomide (Revlimid)
  – Venetoclax (Venclexta)
Monoclonal Antibody Therapy

- Monoclonal antibodies are man-made versions of immune system proteins (antibodies) that attach to specific proteins on the surface of cancer cells.

- These drugs can help your immune system react and destroy the cancer cells, and some fight cancer in other ways.

- The most commonly used monoclonal antibodies are:
  - Alemtuzumab (Campath)
  - Obinutuzumab (Gazyva)
  - Ofatumumab (Arzerra)
  - Rituximab (Rituxan)
Stem Cell Transplant

• This treatment is not commonly used in treating CLL, but its usefulness for this type of cancer is being studied in clinical trials.
• A stem cell transplant is sometimes used so that doctors can use higher doses of chemotherapy, sometimes along with radiation therapy, to treat CLL.
• These stronger treatments kill the cells in the bone marrow, so when the treatment finishes, the patient receives an infusion of the cells that will form new blood cells in the marrow.
• These blood-forming stem cells used for a transplant can come from:
  – blood (for a peripheral blood stem cell transplant, or PBSCT)
  – bone marrow (for a bone marrow transplant, or BMT)
  – umbilical cord blood
• Bone marrow transplant was more common in the past, but now PBSCT is far more common.
CAR-T cell therapy

- This is a new treatment that uses patients’ own immune cells to fight CLL cells.
- Immune (T cell) are engineered in the lab to make them recognize cancer cells.
- Promising, with reports of long lasting remissions.
- Still in clinical trials for CLL.
Clinical Trials

• Clinical trials are studies done by doctors to test:
  – new drugs or treatments
  – currently used drugs or treatments for CLL, combined or delivered in new ways
  – drugs or treatments that are already approved for other conditions to see if they could work for CLL

• You may benefit directly from participating; and the information learned can help people with CLL in the future.

• Clinical trials are highly regulated and patients are fully informed of all risks/benefits.

• There are a number of different types of clinical trials for CLL, including for:
  – Newly diagnosed CLL patients
  – CLL patients who do not get a good response to treatment
  – CLL patients who relapse after treatment.
Questions About Clinical Trials

• Am I eligible for a Clinical Trial?
• What is the purpose of the study?
• What are the benefits and risks?
• What tests and treatment(s) does the study involve?
• Will I know what treatment I receive, either the standard or the new drug? (If the answer is “no,” ask why this is a good idea.
• How could the study affect my daily life?
• How can possible side effects be controlled?
• Are there costs I would have to pay (such as additional tests, medications, or other treatments)? Will my insurance cover these costs?
• What type of long-term follow-up care is part of the study?
Be Prepared

• Learn about potential side effects BEFORE you begin treatment
• Traditional side effects (nausea, diarrhea, constipation, low blood counts, mouth sores) may or may not be a part of your treatment
• They are generally highly treatable/manageable with medication
• New targeted treatments and immune therapies offer new challenges. Make sure you understand what to expect – and what might happen.
• Everyone reacts differently to treatment – being prepared helps whether you experience problems or not.
Common Side Effects & Tips

• Fatigue
  – Sometimes fatigue is a symptom of CLL and sometimes it is a result of CLL treatment. Often, energy will return shortly after treatment is done.
  – Drink water, exercise lightly, nap, seek help from loved ones, report fatigue to your doctor.

• Depression
  – Living with cancer can be challenging and may cause you or your loved to feel depressed.
  – Think about whether you may be suffering from symptoms of depression. Be sure to talk to your doctor, as depression is treatable.
Palliative Care

- Palliative—or supportive—care focuses on providing patients with relief from symptoms, pain, and stress of a cancer diagnosis. Palliative care can be delivered at the same time as anti-cancer therapy.

- The goal is to improve quality of life throughout the illness experience

- It is provided by a team of health care professionals who work together with a patient’s other doctors to provide expert symptom management to the patient and support to the entire family unit

- Hospice care, which is different from palliative care, refers to care delivered in the last few months of life
Palliative Care for CLL

Palliative treatments for CLL include:

• Antibiotics, vaccinations and immunoglobulin to help fight infections
• Blood transfusions or red blood cell growth factors to increase red blood cell count and help with fatigue or abnormal bleeding
• High doses of corticosteroids or immunoglobulin to prevent your own antibodies from destroying red blood cells
• Growth factors to improve low white blood cell counts
• Radiation therapy to relieve pain caused by a swollen lymph node or spleen resulting from CLL
• Splenectomy – if the spleen has become much larger due to CLL, it is sometimes removed
Follow-Up Care

• Because CLL is rarely able to be cured, care for people diagnosed with CLL doesn’t end when active treatment has finished
• Most people with CLL live for many years with the disease
• Follow-up medical care includes:
  – Checking to ensure CLL hasn’t returned
  – Managing long-term and late side effects, which can be both physical and emotional. (If you had a treatment known to cause specific late effects, you may also have certain tests to help identify and manage them.)
  – Monitoring for any second cancers—if you have CLL, you are at an increased risk of a second cancer, most commonly:
    • Skin cancer (melanoma)
    • Lung cancer
    • Colon cancer
    • Other types of leukemia, lymphoma, and other blood cancers
Your Role as a CLL Patient

• CLL is rarely able to be cured—learning to live with a cancer that never goes away can be challenging and stressful, but there are many things you can do to minimize your risk.
• Be aware of the increased risk of CLL returning, long-term and late side effects and second cancers, and report any new symptoms to your doctor so that the cause can be found and treated, if needed.
• Go to your follow-up doctor visits
• Keep your health insurance.
• To help maintain good health, and possibly reduce the risk of second cancers:
  – Avoid tobacco smoke
  – Achieve and maintain a healthy weight
  – Exercise at whatever level you can, and try to keep active in your everyday life
  – Eat a healthy diet, with an emphasis on adding a variety of colorful plant foods
  – Limit consumption of alcohol (no more than 1 drink per day for women or 2 per day for men)
Universal Challenges of Living with Cancer

- Loss of hope
- Loss of control
- Living with uncertainty
- Unwanted aloneness
Challenges Unique to Living with CLL

• Every survivor of CLL has individual concerns and challenges, but one aspect shared by all is the nature of the disease being long-term and incurable, with long periods of relative health between times with symptoms and treatments.

• You may deal with lingering side effects, such as fatigue, or become exhausted and discouraged about the lack of a cure for CLL.

• During periods of watch-and-wait, friends and family may have a hard time remembering that you have leukemia (and might be more tired or anxious that others)—they may not realize that it is a long-term, chronic condition, like diabetes.

• You may have overwhelming anxiety about your life expectancy, finances, relationships and other quality of life issues related to potentially going through repeated rounds of treatment for the rest of your life.
What To Do About the Challenges of Living with CLL

• Living with a chronic cancer is not about going back to your “normal” life prior to diagnosis, but figuring out what is a new normal for you.

• It is critical to remember that many people will CLL live long lives, though of course there may be adjustments around symptoms and treatment schedules. CLL is a chronic disease that can be controlled over a long period of time.

• Getting some kind of support is critical: family, friends, cancer support groups, church or spiritual groups, online support communities, or one-on-one counselors—whatever suits you best

• Talk with family and friends about how you feel and they will understand more about what you are experiencing.

• If you feel sad or depressed and your mood does not improve over time, seek medical help.
Living with Uncertainty

- Be informed.
- Be aware that you do not have control over some aspects of your cancer.
- Be aware of your fears, but practice letting them go.
- Express feelings of fear or uncertainty with a trusted friend or counselor.
- Enjoy the present moment rather than thinking of an uncertain future or a difficult past.
- Make time for what you really want.
- Work toward having a positive attitude, which can help you feel better about life even if a cure is out of reach.
- Use your energy to focus on what you can do now to stay as healthy as possible.
- Find ways to relax and enjoy time alone and with others.
- Exercise and be as active as you realistically can.
- Control what you can.
Questions & Answers
Naturopathic Approaches for Supporting Those with CLL

Presented to Gilda’s Club Twin Cities
by
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September 20, 2018
Overview

• Diet
• Supplements
• IV and other Injection Therapies
• Other Therapies
• Addressing Symptoms of CLL
• Prevention
• Mental, Emotional, & Spiritual
• Eat Organic foods as much as possible.
• Include Omega-3 fats, Olive oil, Flaxseed oil.
• Include ample plant foods rich in Fiber.
• Use spices with your meals.
• Eat moderate amounts of whole grains in their natural (unprocessed state), with an emphasis on the non-gluten grains.
• Enjoy moderate amounts of fruits with an emphasis on berries.
Diet

• Yale University researchers followed more than five hundred women with non-Hodgkin’s lymphoma for 8 years.
• Those who started out eating 3 or more servings of vegetables daily had a 42% improved survival rate over those who ate less.
• Interestingly, green leafy vegetables and citrus fruits appeared most protective.

*Leuk Lymphoma, 2010*
Diet

• Sulforaphane (in cruciferous vegetables) induces cell cycle arrest and apoptosis in human leukemia cells and does not impact healthy cells negatively.
• Purple cabbage, berries, walnuts (and more) contain antioxidants, and higher dietary intake of antioxidants is associated with lower lymphoma risk.

PLOS One, 2012
Diet

- Cardamom (Elettaria cardamomum) is a plant that is native to Southern India. It was used by the ancient Egyptians, Greeks, and Romans for medicinal purposes as well as an aromatic spice.
- It increases Natural Killer (NK) cell activity.
- Researchers found that up to 10 times more lymphoma cells were eradicated by NK cells when cardamom was added to the test medium.

*J Med Food, 2010*
Diet

Support the bone marrow, because it is what will make your healthy blood cells.

- Drink plenty of water
- Avoid/Eliminate SUGAR, Artificial Sweeteners, and Alcohol
- Eat legumes
- Eat dark leafy greens
- Eat nuts and seeds
- Eat dried fruits
- If you eat meat/fish, eat high quality, grass-fed or wild caught
- Supplement with B-12, Folate, Copper, and Iron
- Chinese Herbal Formula = Marrow Plus

Suggestion: Review material from Livestrong.com on “Foods to Eat to Increase Red Blood Cells”
Macrobiotic Diet and Lifestyle

- Credited to George Ohsawa in the 1920’s
- Michio Kushi was a prominent student, who became an author and lecturer
- Kushi retells a story of Dr. Akizuki in Nagasaki, Japan after the atomic bomb was dropped on August 9, 1945.
- Dr. Akizuki reasoned that the bomb’s rays probably destroyed bone marrow tissue and hematogenic tissue.
- He gave the cooks and staff strict orders to never use sugar or sweets, because they would destroy the blood.
- The cooks were to make unpolished whole-grain rice balls, salty thick miso soup at each meal, with pumpkin and wakame (a sea vegetable).
- The result was that he, the hospital chaplain, the head nurse, staff members, and in-patients kept on living on the lethal ashes of the bombed ruins, overcoming fatigue and survived the disaster.

*The Cancer Prevention Diet*, 1983, Kushi
Diet

- Drink herbal teas like organic Green Tea
- Avoid excessive salt
- Avoid foods with preservatives
- Avoid soft drinks with HFCS
- Avoid peanuts and peanut butter

Eat an “Anti-Inflammatory Diet” for more ideas of what to include and what to exclude.
Eat Organic

- Avoid foods that have been treated with pesticides
- Avoid the use of herbicides on your lawn or in your garden
- In the publication *Veterans and Agent Orange, Update 2002* (US Dept of Veteran’s Affairs) it was concluded that there was sufficient evidence of an association between exposure to herbicides during military service and CLL.
Fiber and Beneficial Bacteria

The fiber in plant foods that we cannot digest is digested by our gut bacteria. Research studies have shown that chemotherapy works better in humans and animals when beneficial bacteria are present and less well when the gut has been "sterilized" by antibiotics. Include prebiotics and diverse probiotics.
Supplements

- Green Tea – EGCG
- Turmeric – Curcuminoids
- Resveratrol – from Japanese Knotweed
- Quercetin – from yellow onions, garlic
- L-Carnitine – naturally found in meat
- Chinese Herbal Medicine
- CBD from Hemp
Green Tea (Camellia sinensis)

- Green tea contains the polyphenol EGCG, or epigallocatechin gallate
- Inhibits tumor cell proliferation
- Induces cancer cell death (apoptosis)
- A study published in 2009 in the *Journal of Clinical Oncology* looked at EGCG given to people with CLL and found 33% of the people had reduction in absolute lymphocyte count and 92% had 50% or more reduction in lymph node swelling.
Turmeric

• This spice has been used in India and China for centuries.
• Reduces pain (anti-inflammatory) and is anti-proliferative via regulation of cell-signaling pathways such as Nrf2 and NF-kB
• Activates apoptosis
• Changes gene expression to become unfavorable to cancer growth
• Has anti-platelet properties, so do not use high doses (8000 mg per day) if you are experiencing easy bruising.

Molecular Nutrition and Food Research, 2008
Resveratrol

• A polyphenol found in plants such as red grapes and Japanese knotweed
• Displays antiproliferative effects on leukemic cells
• Induces apoptosis
• Does not affect normal blood cells

Quercetin

- This is a plant pigment or flavonoid.
- Inhibits cancer cell proliferation.
- Inhibits genetic expression of genes that contribute to cancer growth and metastasis.
- Causes cancer cell apoptosis.
- A 2013 article in the *Journal of Hematology*, Aysun Adan Gokbulut, et. al. reveal that resveratrol and quercetin induce caspase 3 activity in human CLL cells.
- FYI: Caspase 3 is an enzyme that plays a key role in programmed cell death.
L-Carnitine and Acetyl-L-Carnitine

• An amino acid derivative that “shuttles” or “escorts” fatty acids across the mitochondrial membrane for energy production

• Used to protect the heart from harmful effects of certain chemotherapeutic agents

• Reduces nerve pain (neuropathy) and supports regeneration of nerve tissue

• Promotes differentiation of a specific leukemic cell line into normal mature cells, thus reducing the number of undifferentiated cells, which are incapable of carrying out the functions of fully mature cells.

*Haematologia, 2002*
Chinese Herbal Medicine

A Taiwanese nation-wide population study from 2000 to 2011 showed that CHM improved the survival of people with CLL. Improvement was seen if the people were receiving standard Western treatment, and even more improvement in the “treatment naïve” people. Remaining on the herbs for more than 180 days showed the best response.

A case report from 2003 mentioned full remission in one patient following the use of CHM and...
CBD Oil

- Derived from Hemp (*Cannabis sativa*)
- Currently controversial even though it has very low psychoactive properties
- Lowers cancer-triggering inflammation
- Improves immune function
- Benefits pain, anxiety, and sleep
- Decreases nausea and improves appetite
- Well tolerated and safe, even at high doses
- Typically start low with 8 to 10 mg/day and increase from there

*Outside the Box Cancer Therapies © 2018, Stengler & Anderson*
Other Supplements

- Honokiol from *Magnolia officinalis* induces paraptosis, apoptosis, caspase dependent cell death in B-CLL cells, and more.
- Honokiol is synergistic with chemo drugs, such as imatinib, fludarabine, chlorambucil, and bortezomib.
- Modified Citrus Pectin activates NK (Natural Killer) cells to cause death to leukemia cells.
- MCP reduces apoptosis resistance in leukemia cells, by binding to Galectin-3 molecules which may be over-expressed.

*Blood*, 2012. Clark
Other Supplements

- Artemisinin
- Berberine
- Coriolus
- Vitamin D3
- Fish Oil
- Genestein
- Vitamin K2
- Mixed tocopherols/tocotrienols (Vitamin E)
- Melatonin
- Poly-MVA
- Proteolytic Enzymes

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IV and other Injection Therapies

- Poly-MVA + DCA protocol
- Mistletoe
- Curcumin or Quercetin
Other Therapies

- Hyperbaric oxygen therapy once to twice weekly
- THC (if legal) to go with the CBD
- Low Dose Naltrexone
- Hyperthermia
Taking Charge of Your Mouth

• Choose to see a holistic dentist.

• Have your amalgam fillings removed and replaced with healthier composites.

• Currently controversial: consider having teeth with root canals in them removed.
Vaccinations

• On the Rituxan website it states: “You should not receive certain vaccines before or during treatment with RITUXAN.”

• Information on Chlorambucil on the web states: “Do not have any vaccinations without talking to your doctor.”

• Regarding Fludarabine, it states: “Talk to your doctor before receiving any vaccinations during your treatment with fludarabine injection.”
Addressing Symptoms of CLL

• Fatigue
  Examples = Acetyl-L-Carnitine, CoQ10

• Easy bruising
  Examples = Papaya Leaf Extract, Vit. C

• Sick all the time
  Examples = Colostrum, Echinacea, Vit. C

• Enlarged spleen (splenomegaly)
  Examples = Red Root, Dandelion Root
Prevention:

- Ingest clean foods and fluids
- Remove environmental toxins
- Exercise and do your mind-body work
- Eat a low glycemic/very low sugar diet
Prevention

- According to Michael Greger, M.D., University of Oxford researchers found that people who ate a plant-based (vegetarian) diet were less likely to develop blood cancers at a rate of nearly half that of meat eaters.

- A study at the Mayo Clinic found that those who ate 5 or more servings of green, leafy vegetables a week had roughly half the odds of getting lymphoma compared with those who ate less than one serving a week.

- The Iowa Women’s Health Study (followed more than 35,000 women for decades) found that higher broccoli and other cruciferous vegetable intake was associated with lower risk of getting non-Hodgkin’s lymphoma in the first place.

BR J Cancer, 2009
Int. J. Cancer, 2012
Prevention

Pet companionship is associated with lower rates of lymphoma.

Cancer Epidemiol Biomarkers Prev, 2008
Coping with a new diagnosis

• Read the materials your oncology clinic gives you, and educate yourself even further.
• Ask for support from family and close friends; it’s okay to talk about your feelings and get help around the house, etc.
• Do what feels right for you in letting others know about your diagnosis.
• Do not isolate yourself or increase your stress level.
• Exercise to release harmful stress hormones and build your muscles and bones.
• Be with people you love, show them your love, and receive their love.
• Love yourself by eating well and getting your necessary sleep.
• Have some daily quiet time for rest and reflection. Read books and/or listen to audio material that is calming.
• Treat yourself to a facial and some healing touch.
• And in the spirit of Gilda Radner, laugh, play games, and be silly!
Visiting your Doctor

- Whenever possible have a companion with you to support you and be another set of ears.
- If you have a list of questions, ask the doctor when is the best time during the visit to present them.
- As a naturopathic doctor I appreciate questions that are about diet, nutritional supplements, herbs, homeopathy, drug-herb interactions, and so forth because those are areas that NDs study both in school and in our continuing education.
- Most doctors will refer you to another health professional if they do not know the answers to your questions.
Mind-Body Approaches

Benefit quality of life and improve cancer outcomes

• Relaxation therapies
• Biofeedback and Hypnosis
• Meditation
• Yoga
• Art and Music Therapy
• Tai Chi
• Qigong
• Psychotherapy
Mental, Emotional, & Spiritual

• Look at yourself and your life to see where the harmful stressors are and reduce them.
• Visualize regression, both gradual or spontaneous (have a talk with your gene switches and mitochondria).
• Visualize the complete absence of: lymphadenopathy, splenomegaly, thrombocytopenia, anemia, and any other CLL symptom.
• Uninvite negativity and harmful habits.
• Instead invite health, love, balance, energy, and joy back into your life.
• Meditate and Pray and Be Gentle with Yourself.
• Be committed.
Thank You!