

**Lymphoma Survival**  
**December 2021 Newsletter**



*Tranquility*

Photo by Svet

...A note of appreciation to say *thanks* to our members who make our work possible.

# 1. Follicular Lymphoma Update on Developments from 2021

## Review of Key Basic Concepts

Starting around 2010, our perspective on the effective management of indolent/follicular (FL) lymphoma changed significantly in response to three “New Era” insights, as follows:

1. Declaration by the National Cancer Institute (NCI) that *“cancer is a genetic disease...caused by certain changes to genes that control the way our cells function”*.

See Concept #1 at <https://lymphomasurvival.com/follicular-lymphoma-core-concepts/>

This powerful statement helped to clarify widely variable traditional and popular views of cancer, while also setting the stage for new ways to make progress in managing the disease.

2. The rise of epigenetics.

Proceeding from confirmation that cancer is a genetic disease and picking up on key words from the NCI stating *“changes to genes”*, we note a rapid increase in scientific data from several disciplines regarding the role of epigenetics. (Translational Medicine).

In other words, it’s not whether we have a cancer gene or not – since all humans have the same genes. It’s **changes within genes** that count, these changes referring to **variable gene activity** or gene expression taking place in the body 24/7.

So, what alters gene expression?

**Well, I’ll be darned if lifestyle** isn’t the main factor, including all four Pillars in our 4PEP program in Article #3, which of course are in addition to fresh clean air, and water, along with sunshine...while

enjoying life in an environment with minimal exposure to toxic chemicals.

Adverse expression of cancer-causing genes (oncogenes such as Myc), promote malignant growth. But healthy **normal cells create tumor suppressor and DNA repair genes.**

Yeah...DNA REPAIR! Did you know that? That's the ticket needed to overcome FL. CRISPR can do it in a test tube. We have the potential to do it in our body.

### 3. Recognition of the Gut Microbiome.

FAR FAR more than a “exit tube”, the human gut hosts at least as many (probably more) cells than the total in the rest of our body.

Of all new developments to arrive on the scene over the past five years, involving not just cancer but virtually all major diseases, the one that overrides them all is the status (gene expression) of the trillions of cells in our gut.

Vigorous activity of our gut microbiome (24/7) becomes the “second engine” in our body. *In that regard, we are a hybrid machine!*

The vagus nerve connects the gut directly to the brain.

The gut harbors 70+% of our immune system. Lymphoma is defined as an immune system cancer. Those two dots are easy to connect.

Now then, once we have assimilated the New Era insights noted above, we're ready to make **unprecedented progress toward managing FL.**

And with a little help from those DNA repair genes, we can be on the “pathway to cure/overcome FL”. Every case will be different. But now we have a better chance than ever to succeed.

Hearing regularly from so many of our members doing well, maybe this slippery, controversial disorder isn't quite as incurable as what we used to believe.

## Review of Priority Topics Covered During 2021

### ● The Eradication → Rejuvenation Plan



Confidence in the merits of the Eradication → Rejuvenation plan was reinforced further during 2021 based on my personal experience and also what we heard (albeit anecdotal) from many of our members doing well for longer than would be expected historically.

It is important to note that this plan represents a **fundamental shift** from what we suggested several years ago regarding conventional treatment.

Prior to understanding the epigenetic mechanisms regulating gene activity that take place during the Rejuvenation Phase, we used to suggest that survivors “go slow” with early conventional treatment, saving the big guns for later if needed, including treatment for possible transformation.

But now, with “New Era” knowledge linking selected lifestyle factors (ie. the 4 Pillars) to the health of our normal cells – the ones that produce tumor suppressor and DNA repair genes, and immunity in the gut – we can see how the Rejuvenation Phase can work toward overcoming FL.

Therefore, knowing that favorable gene activity will work better during the Rejuvenation Phase when tumor burden is reduced, it now appears worthy of thought to **consider treatment at an earlier time than in past years.**

However, it MUST be noted that **each case is uniquely different**. Medical consultation re treatment options as to timing and choice of procedure must always govern the final decision.

*We battle FL with Eradication. We win the contest with Rejuvenation.*

## ● **Bile Acids**

There is reason to suspect that many people in 2021 have gut problems (leading also to other issues) that can be traced to **deficient bile acids**.

Bile is a substance produced in the liver that affects trillions of bacteria, fungi and virus microorganisms in the gut. It is critical to the digestion and absorption of fats. Bile also controls **cholesterol level**.

As noted above, the gut harbors 70+% of our immunity. So, if a person with FL has gut issues, it will be difficult to make progress in managing their lymphoma no matter what lifestyle strategies are adopted.

A key issue regarding bile acids is that they depend on the presence of amino acids **taurine and glycine** in the diet.

The main source of **taurine is animal foods**.

An ample level of **glycine**, required for muscle, brain and energy functions may be **hard to maintain**. An excellent food source is **bone broth** which contains **collagen**, much heralded these days for its plausible health benefits summarized in this data from Medical News Today. [LINK](#)

Vegetarians, including those a plant-based diet may be challenged regarding sustained optimal daily production of bile acids.

Lightness in the color of stool, which may be accompanied by lethargy, is a strong indicator that bile acids need attention.

In view of the significance of this topic, and since it has received little general attention, we strongly suggest that members re-read content in the [July 2021 Newsletter](#) .

Optimal bile acids are seen as an essential requirement for making progress during the Rejuvenation Phase.

### ● Maintenance Rituximab

Maintenance rituximab (MR) is an optional treatment following completion of most chemo programs used to treat FL (which also include rituximab R).

MR has become a controversial procedure over the last five years, particularly regarding its **inability to extend overall survival (OS) time**.

In addition to the OS concern, it has also become apparent that MR often seriously lowers a patient's **immunity**, notably immunoglobulin levels IgA, IgG and IgM. (See Article #3 Section C-2). In some cases, the loss of natural immunity may be permanent, specifically regarding IgA which is not included in special infusions that are often required during/after MR.

Before choosing to take MR, we strongly recommend that survivors read the item *Learning How Maintenance Rituximab Relates to Overall Survival* in the [November 2021 Mid-Month Newsletter](#) .

### ● Sunshine

It's often stated that vitamin D is the "sunshine" vitamin. Hmm...not really. The statement needs clarity.

Sunshine under the right conditions can create vitamin D in the body. But contrary to the statement above, the opposite way around, vitamin D cannot create any of the many benefits of sunshine.

We regard the unique features of sunshine as essential both for good health and to create favorable gene expression and immunity in our normal and gut cells required to effectively manage FL.

Building on the item *Sunshine Has No Equal* in the [September 2020 Newsletter](#), the [June 2021 Mid-Month Newsletter](#) has an item *SARS Meets Sunshine. And it's NOT About Vitamin D*.

*Flowers turn their petals to follow the sun. We should be so wise.*

## ● T Cells – Masters of Immunity and Predictors of FL Survival

Historically it was stated that “*all roads lead to Rome*” in recognition of the impressive infrastructure in place at the time.

Nowadays, re the human body, “infrastructure” can be evaluated according to a person’s health status, both physical and mental. In that regard, it can be stated that “*all roads lead to T Cells*”.

T cells can be thought of as the immune system’s lieutenant commanders. Every organ in the body, including the brain, requires support from T cells to sustain its proper function.

T cells originate in the bone marrow, mature in the thymus gland (which shrinks substantially with age) and they propagate in the gut, spleen and our (600+) lymph nodes.

In the case of FL, the presence of T cells in the lymph node microenvironment was cited in 2004 by the National Cancer Institute to be the **determining factor governing FL survival time**.

In the case of COVID, the National Institute of Health indicates that all COVID T cell responses should recognize new variants of SARS-Cov-2.

Our level of T cells, as you would expect are governed by numerous, favorable lifestyle activities.

*“Just ain’t no compromise here”.*

For details on **how to generate optimal T cells** see the [September 2021 Mid-Month Newsletter](#) . For review, see also details re **natural regression of FL involving T cells** in the [October 2020 Newsletter](#) .

- **Guidance for the Newly Diagnosed Survivor**

It’s a time in life we will never forget, when we need reliable, balanced, unbiased support. The [May 2021 Newsletter](#) compiled data to help guide newly diagnosed survivors.

- **Iron and Anemia Concerns**

Many indolent lymphoma survivors encounter a concern with anemia. The [October 2021 Newsletter](#) has 13-page detailed coverage of *Anemia, Iron and Lymphoma*.

- **Optimizing Chemotherapy**

Most survivors require chemo at some point in their journey. We only get a limited number of chances. Resistance sets in fast. It’s obviously important to be fully aware of how to achieve an optimal result that will also maximize durability.

Chemo on its own won’t be sufficient to hold FL in check indefinitely,

However, it plays a key role in reducing tumor load to enable the follow up essential Rejuvenation Phase to work better.

The lead item in the [November 2021 Newsletter](#) was *Chemo – Optimal response for a Clear pathway Ahead*.

**BE SURE to know about the importance of clearing out tumor debris during treatment, about resolvins, and what to do about it.**

## ● Scanning Data

Many survivors are not clear regarding the pros and concerns associated with PET scans (which now usually accompany a CT scan).

These factors include accumulated radiation exposure, scanning options, how to possibly minimize radiation and relevance of readings to the timing of a COVID vaccine. See the [July 2021 Mid-Month Newsletter](#).

BE SURE also to check out how the **SUV reading** from a PET scan can influence the **choice of treatment**, specifically re CHOP. See the [July 2021 Newsletter](#) .

## ● Omega 3's, Mushrooms, Elderberry

During the course of 2021, several newsletters covered dietary items, providing an update to content in the Nutritional Pillar in Article #3.

These were:

Omega 3's – Update on a Vital Nutritional Factor [September](#)

Mushrooms [November](#)

Elderberry – Benefits for Lymphoma Survivors

...oh, so delicious. And the elderberry syrup...a little sip'll do ya! [August](#)

More select nutrients are covered at the end of the following item.

## 2. Choose the Best Foods and Supplements for a Stronger Immune System

Introduction...*for the times they are a'changin'*

Points to ponder:

As the pandemic heads into its third year (!), the link between diet and immune health becomes more evident and increasingly important.

Thankfully, proactive people now have better scientific data to work with during these challenging times as **food shortages and higher cost** have become common and are likely to continue in response to several factors, including climate change.

Lymphoma is a hematological cancer. Patients with a hematological cancer frequently have a compromised immunity which can limit their response to vaccines as noted in the [March 2021 Newsletter](#).

In our changing world, lymphoma survivors need to be increasingly savvy regarding their health.

We may think of the term “net worth” as referring to money. But there is also a “net worth” regarding one’s health status. Which one should take priority?

### Background

It has been known for decades that there are **specific** nutrients in foods and supplements that can enhance immune response.

it is now essential to examine our Nutrition Pillar in the 4PEP program to identify which specific foods and supplements are standouts for building and sustaining a robust immune system.

In addition, it is important to note **how much** and **on what schedule** foods should be eaten.

These two factors are turning out to be as important as the food choices themselves.

### How Diet Influences Immunity

During the past five years, the role of the gut microbiome in governing human health has emerged as a leading topic in prominent research.

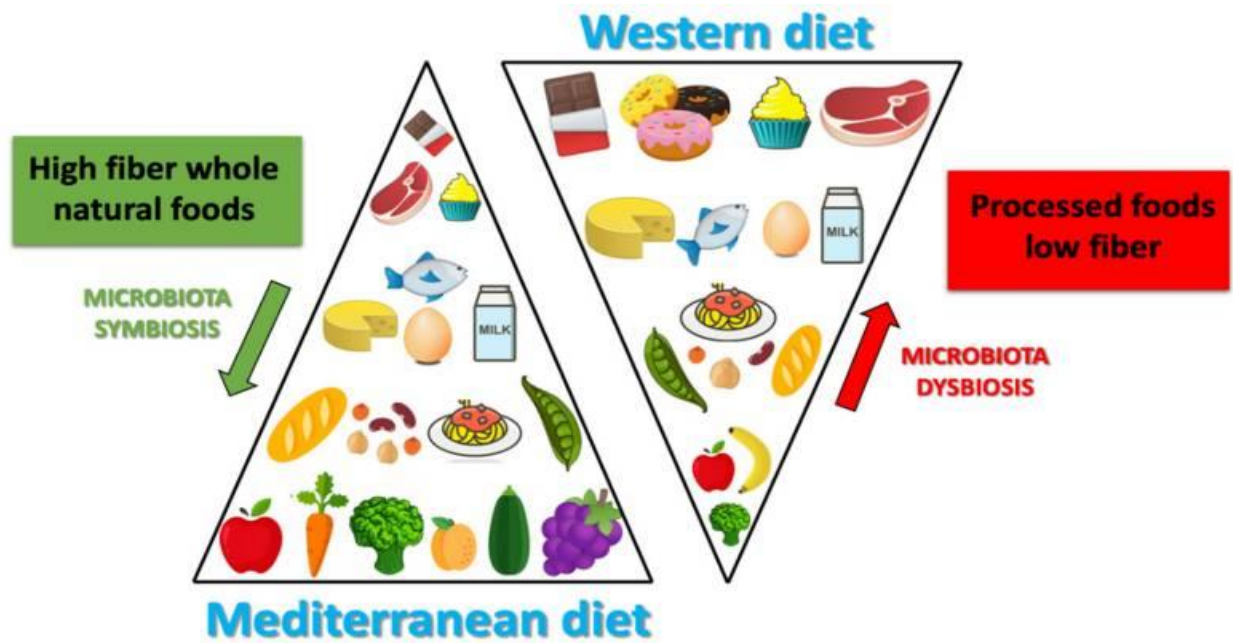
Over 70% of the human immune system is harbored in the gut. Lymphoma is a cancer of the immune system. Thus, lymphoma survivors are directly affected.

Diet is now widely recognized as the core factor influencing both the general health of the gut microbiome **and** the immune system.

“Inflammatory diseases” like lymphoma and cardiovascular disease are directly affected by diet. This research from 2021 states, quote: [LINK](#)

*“...diet is the greatest modulator of immune system–microbiota crosstalk”.*

In addition, both micro and macronutrients derived from food and/or supplements play a key role in immune health. In many cases, a deficiency in even one important vitamin or micronutrient (like vitamin D) is enough to impair immune function.



Source : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7822000/>

The illustration above shows the marked contrast between the Mediterranean diet and the disease-promoting Western diet.

For the population at large, the superiority of a Mediterranean diet has been verified in numerous studies. Its merits arise mainly from a high fiber content with a nutrient-dense abundance of bioactive and antioxidant components. [LINK](#)

In contrast, recently published research conducted both with mice and people demonstrated how destructive a typical high fat, sugar-laden Western style diet can be in damaging immune function. [LINK](#)

While our site acknowledges the global, general merits of the Mediterranean diet, we believe that there is **no one best diet for everyone**.

People are VERY different in terms of their gender, age, size, weight and lifestyle physical activity. This variability from one person to another is magnified when lymphoma is taken into account.

Taking this variation into account, we believe that **each person's own specific dietary plan needs to be created from the bottom up, not the top down.**

Therefore, we strongly recommend a **BALANCED DIET** as described on page 60 in [Article #3](#) .

In general, the Mediterranean diet comes closest to our recommendation that food choices from a balanced diet be selected for “precision” application to each person at the current point of analysis in their life.

These choices are summarized below.

### Can Eating Less Result in a Stronger Immunity?

The core importance of T cells was summarized in item 1 above on page 7.

The T cell/calorie restriction connection has been known for some time. A study done with humans in 2010 examining the effect of weight loss and/or calorie restriction on T cells showed that T cell responsiveness improved over the 6-month period of the study as the subjects continued to lose weight.

In this study, men and women, aged 20 to 40 years, consumed either a 30-percent or 10-percent calorie-restricted diet for six months. The results showed T cell proliferation was significantly increased in both calorie-restricted groups. [LINK](#)

### When to Eat is Important

By restricting calorie intake to a condensed “window” of time (such as eating only between 11 AM and 6 PM) we can also strengthen our immune system.

This type of calorie restriction is commonly referred to as **time-restricted eating (TRE)**.

TRE's cousin, which is often referred to as *Intermittent Fasting*, is a broader term that covers a variety of restrictive eating styles. It has also been found to help strengthen immunity.

Any restrictive eating program creates a gap, or rest period, that the body can put to good use. Much of the energy the body's system uses to digest and process food can be redirected for other purposes.

Dr. Jason Fung identifies one of the biggest benefits of a time restricted eating or intermittent fasting program as an increase in immune surveillance.

According to Dr. Fung, part of the improved immune function can be directed to fighting viruses by triggering a process called **autophagy**:

*"Autophagy plays a key role in helping the body fight viruses. It's like a cleaning crew that comes in and scrubs the entire place, while you're sleeping. When the immune system sees signs of invading viruses or infection it sends the alarm bells of the immune system ringing and begins to create antibodies that will recognize this invader and be able to fight it off."* [LINK](#)

### Specific Foods for a Stronger Immune System

In a time of shortages, it's important to have an abundance of immune-supportive foods and supplements to choose from.

It's also important to know WHY they work, which is why we've included links after each item listed below if you desire to learn more.

Please note that we've chosen many of the superstars in foods and supplements here (when it comes to supporting the immune system) but this list is by no means all-inclusive.

As a reminder, please note that it is best to choose organic, fresh and **non-GMO** whenever possible.

## Fruits and Vegetables

- Fermented Vegetables [LINK](#) [LINK](#)
- Green Vegetables [LINK](#) [LINK](#)
- High Polyphenol foods [LINK](#) [LINK](#)
- Oranges and other citrus [LINK](#)
- Garlic [LINK](#)
- Fruits and Veggies high in soluble fiber [LINK](#)
- High Fiber Diet in general [LINK](#)
- Mushrooms [LINK](#)
- Elderberries [LINK](#)
- Blueberries [LINK](#)

## Dairy

- Yogurt and Kefir [LINK](#)
- Goat Milk Kefirs, Yogurts and Cheeses [LINK](#)

## Healthy Fats

- Olive Oil [LINK](#)
- Omega 3s [LINK](#)

## Animal Protein

- Branched-Chain Amino Acids [LINK](#) [LINK](#)
- Lean Grass-Fed Meats [LINK](#)
- Bone Broth [LINK](#)

## Key Supplements

- Zinc/Copper [LINK](#) [LINK](#)
- Zinc/Quercetin [LINK](#)
- Selenium [LINK](#)
- Vitamin C [LINK](#)
- Vitamin D3 [LINK](#)
- B Complex [LINK](#) [LINK](#)
- Fish Oil [LINK](#)

- Retinoids (vitamin A) [LINK](#)
- Magnesium [LINK](#)



## *Elements of Fertility*

Photo by Judith

~ Robert

December, 2021

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**Strive → Survive → Thrive**

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