



# The Ross Lyme Support Protocol

Lyme Disease Treatment Guidelines for The Self-Starter



**Marty Ross MD LLMD**

4/15/18

# Take Charge of Your Health

**The Ross Lyme Support Protocol** is one of nearly 100 helpful articles from Treat Lyme. Subscribe to [Treat Lyme](#) for information that could change your life.

Treat Lyme is a Do it Yourself Guide That Puts You In Charge.

Treat Lyme is for a **self starter**.

- Marty Ross MD LLMD offers you step-by-step plans using herbs, supplements and/or prescription medicines to fix any Lyme related medical problem.
- Our explanations are down to earth so you don't need a medical license.

Use Treat Lyme to **take charge**.

- Use it to understand Lyme disease and to build treatments.
- Use it on your own with or without a physician.
- You can even use it to give your physician fresh ideas.

# The Ross Lyme Support Protocol

## Lyme Disease Treatment Guidelines for The Self-Starter

Updated 4/15/18

"The Ross Lyme Support Protocol is a set of Lyme disease treatment guidelines for the self-starter. Use these successful approaches from my medical practice to speed your recovery so you can live life fully." Marty Ross MD LLMD

Questions? Ask Me in [Conversations with Marty Ross MD](#)

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## How To Use The Protocol

### Managing your care alone?

- *The Ross Lyme Support Protocol* provides the **must-do** steps to manage your care.

### Working with a prescription only medical provider?

- You will do better using my recommended **must-do** lifestyle steps and natural medicines. Add these natural medicines to your existing prescription treatments to boost your care and recovery.

### Already working with an integrative medicine physician?

- Use *The Ross Lyme Support Protocol* to provide your doctor additional ideas to assist you.
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## Diagnosis, Tests, and Relapse Prevention.

The Ross Lyme Support Protocol, a set of Lyme disease treatment guidelines, focuses on treatments. Read or watch the following articles found on Treat Lyme for information about diagnosis, tests, and relapse prevention.

### Diagnosis

- [How to Diagnose Chronic Lyme Disease.](#)
- [How to Diagnose Babesia.](#)
- [It Could Be Bartonella or Babesia: The Symptoms and Signs.](#)

## Tests

- [A Review of Lyme Infection Tests. Pass or Fail.](#)
- [The Western Blot Lyme Disease Test: A Lyme Byte.](#)
- [CD-57 Test? Rarely.](#)
- [Is There a Lyme Done Test? No.](#)

## Relapse Prevention

- [Finished? And How To Prevent Relapse](#)
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# The Ross Lyme Support Protocol

## Lyme Disease Treatment Guidelines for The Self-Starter

Here are Lyme disease treatment guidelines for anyone with chronic Lyme and associated diseases. *The Ross Lyme Support Protocol* includes essential treatment steps that you should address at the beginning and throughout a chronic Lyme disease treatment. It is designed to:

- **boost** the immune system,
- **improve** detoxification,
- **speed** recovery,
- **kill** the infections, and
- **protect** and **repair** from the harmful effects of the infections and the herbal or prescription antibiotics.

While the following Lyme disease treatment approach focuses on a limited number of areas, it corrects most of the problems like:

- low energy,
- pain,
- insomnia,
- brain, neurologic, and thinking problems, and
- immune compromise and suppression.

**Herxheimer Die-off Reactions.** When a person starts a Lyme disease treatment or changes herbal and prescription antibiotics it is common to have some worsening. See [Herxheimer Die-off Reaction: Inflammation Run Amok](#) for more information about this and the steps you can take to treat it.

**Treatment Length and persistence.** See [Getting Healthy: Will I? When? How Do I?](#) for more information about Lyme disease treatment length and persistence. Generally, I recommend staying on each of the natural medicines recommended below for a minimum of 6 months to see if they are helping. Natural medicines do help speed recovery, but treating Lyme still takes time. Once you have marked improvement then you can likely stop many of these natural medicines except for probiotics, curcumin, ashwagandha, and a good multivitamin.

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## Before You Start

### **Make Sure It Is Not Mold Toxin Illness.**

Mold toxin illness can look just like Lyme disease. The reason is both trigger a reaction in the immune system that produces too many inflammation chemicals called cytokines. And cytokines cause most of the problems seen in both of these illnesses.

If your illness began while you were living or working in a building with obvious mold, **I suggest treating for mold toxin illness first.** I find correcting this issue, may make it so you do not need to treat for Lyme disease. Once the mold toxins are removed, the immune system can keep Lyme under control. For more info on this read [Mold and Lyme Toxin Illness](#) and [Positive Lyme Test. No Symptoms. Don't Treat.](#)

### **Very Allergic? Treat Mast Cell Activation Syndrome.**

Chronic Infections can trigger excessive allergic reactions to food, prescription and natural medicines, and to the environment. If this is your problem, consider using supplements, diet and medicines for Mast Cell Activation Syndrome. For more information read [Mast Cell Activation Syndrome & Lyme.](#)

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## Part 1. Sleep

(Use either a natural medicine or prescription medicine. Do not mix natural medicines and prescription medicines together as a first treatment but you can do so later.)

### **What You Should Do**

#### **Natural medicines:**

(You can mix these two herbal medicines together or use in combination with the prescriptions medicines if needed.)

**L-Theanine 100 mg** 1 to 6 pills a night 1 hour before bed. Do not exceed 1200 mg a day if using for nerve pain or anxiety during the day too. Excessive amounts in the day are very sedating,

AND/OR

**Herbal Combinations.** 1 to 4 pills 1 hour before bed. (Common herbs in sleep combination pills include valerian root, hops, yams, wild lettuce, L-theanine, and others. For instance these herbs are found in a product by Integrative Therapeutics called The Revitalizing Sleep Formula.)

### **Prescription medicines:**

**Zolpidem (Ambien) 10 mg** 1 pill 30 min before bed (Use if your primary problem is getting to sleep. It is short acting.)

AND/OR

**Trazodone 50 mg** 1/2 to 2 pills 30 min before bed time. (Use this if your primary problem is staying asleep.)

### **For More Information About These Items or for Additional Options:**

See [Sleep in Lyme Disease: The Basic Steps](#) for more information about sleep hygiene. For information about sleep herbs and supplements see [Sleep: The Natural Medicines](#). And for more information and sleep prescriptions options see [Sleep: The Prescription Medicines](#).

### **Why You Should Do This**

Sleep is often disturbed in chronic Lyme disease. Lack of adequate sleep worsens pain, increases fatigue, and suppresses the immune system. It appears that in response to infection, the excess inflammatory cytokines produced by the immune system decrease the output of sleep inducing hormones to the sleep centers of the brain. And lack of sleep increases cytokines. A restorative amount of sleep is 7 to 9 hours of sleep a night. Sleep in the few hours before midnight is most restorative.

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## **Part 2. Diet**

### **What You Should Do**

Eat a **paleo-based diet** rich in organic foods, healthy fats, proteins, and vitamin rich vegetables. For more detailed information about the diet see [The Best Brain, Inflammation, Pain, Energy & Detox Diet Ever.](#)

Another starting diet to consider is an **elimination diet**. For detailed information see [Elimination Diet to Find Food Problems.](#)

## Why You Should Do This

A paleo diet is low in simple sugars which decreases the chances of developing intestinal yeast. It also promotes brain health and supports the energy factories found in every cell called mitochondria. Because it is low in sugar it also decreases inflammation.

An elimination diet helps a person find which foods they may have allergies or inflammation reactions against. If you are reacting to foods consider trying an elimination diet first. Removing allergic and inflammatory foods from your diet leads to decreased pain and improved energy.

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## Part 3. Cytokine Control

### What You Should Do

#### Natural medicines:

[Curcumin](#) **500 mg** 1 pill 3 times a day. (Choose a liposomal product. In such a product, the curcumin is microscopically wrapped in oil like sunflower oil to increase its absorption.)

OR

**AntiCytokine Combination** 1-2 pills 3 times a day. (Anticytokine combinations include **curcumin**, **resveratrol**, **black tea extract**, and **N-Acetyl Cysteine (NAC)**). One product that contains these items is *Cytoquel* by Researched Nutritionals.)

#### Prescription medicines:

(There are no effective and safe options.)

### Why You Should Do This

Cytokines are inflammatory chemicals made by the immune system in chronic Lyme disease. Lowering them with curcumin, resveratrol, black tea extract, NAC and antioxidants found in a good multivitamin (Part 6.) will

- correct many lyme symptoms,
- boost the immune system, and

- limit Herxheimer die-off reactions.

See [Control Cytokines: A Guide to Fix Lyme Symptoms & The Immune System](#) for more information and additional herbal medicine options to use in a Lyme disease treatment.

On the one hand cytokines are good because they turn on the immune system. They perform a number of functions that include:

- making antibodies work more effectively,
- increasing active white blood cells to fight infections,
- recruiting white blood cells to the location of an infection,
- turning on white blood cells to fight infections, and
- decreasing viral and bacterial replication.

On the other hand in chronic Lyme disease the immune system makes too many cytokines which is bad. Too many cytokines:

- suppress the immune system,
- cause pain,
- decrease hormone production from organs like the thyroid and the adrenal glands,
- disturb sleep,
- decrease brain function,
- increase fatigue and tiredness,
- waste muscles, cause depression, and
- decrease the function of various organs throughout the body resulting in many other symptoms and medical problems.

At the beginning of treatment or when antibiotics are changed the cytokines are made in even greater amounts causing a person to feel much worse. This is called a Herxheimer die-off reaction.

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## Part 4. Adaptogen

### What You Should Do

Natural medicine:

[Ashwagandha](#) 400 mg 1 to 2 pills in am and 1 to 2 pills between 1 to 2 pm. Taking late in the day may disturb sleep.

### Why You Should Do This

An adaptogen is a substance that helps the body deal with the harmful medical and emotional stress of being ill. Adaptogens have been used for centuries in Ayurvedic and Chinese medicine with great observed benefit. Based on animal experiments ashwagandha improves energy, immune function, and adrenal and thyroid function. It likely has additional beneficial effects that have not been researched.

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## Part 5. Hormones

“Read the “Why You Should Do This” section below to determine, based on symptoms alone, if you have low hormones. It is safe to treat these problems without testing if you use natural medicines.” Marty Ross MD LLMD

### What You Should Do

#### A. Adrenal Insufficiency

(Start with the natural medicine or prescription medicine. Do not use both together in the first treatment, but you can do so later if the symptoms of low adrenals persist.)

##### Natural medicine:

**Ashwagandha 400 mg** 1-2 pills in am and 1-2 pills between 1 to 2 pm. Taking late in the day may disturb sleep.

##### Prescription medicine:

(I rarely use this because there is a very small risk of immune suppression using prescription hydrocortisone. However, the doses I recommend are the normal amounts the adrenal glands should make. I prefer ashwagandha because it is a supportive herb that does not suppress the immune system.)

**Cortef 5 mg** 1 to 2 pills in am and 1 to 2 pills between 1 to 2 pm. Taking late in the day may disturb sleep.

#### B. Low Thyroid

##### Natural medicines:

**Ashwagandha 400 mg** 1-2 pills in am and 1-2 pills between 1 to 2 pm. Taking late in the day may disturb sleep.

USE WITH

**Zinc 20 mg, Selenium 100 to 200 mg, and Iodine 200 to 300 mcg** 1 time a day.  
(These are often found in multivitamins or you can supplement them individually.)

Use these natural medicines first for one to two months before adding or trying the prescription medicine option below. Often working with these supplements corrects the thyroid so you do not need to take thyroid prescription medicines.

**Prescription medicine:**

**Dessicated Thyroid 1/2 grain or Armour Thyroid 1/2 grain** 1 pill in the morning 30 min before anything else and on an empty stomach with water only. Increase every 3 to 4 weeks by 1/2 grain if low thyroid symptoms persist.

For more information about how to manage Thyroid, even if your tests are normal, read my comprehensive article: [Hypothyroidism. The Best Tests, Meds, & Vitamins.](#)

**Why You Should Do This**

Fixing low adrenals and/or low thyroid helps the immune system work better and can improve energy.

A person could have normal range testing for each of the hormones but still have clinically low hormones. **Because of the unreliability of testing, treatment for low hormones should occur if there are clinical symptoms of low hormones** as long as treatment does not increase hormone levels above the upper end of normal.

**Diagnose Based on Symptoms:**

If you have a number of these symptoms, consider using the natural medicine approaches for each respective problem.

**Adrenal Insufficiency:** fatigue, recurrent infections, poor recovery from infections, low blood sugar with shakiness and irritability relieved by eating, low blood pressure and dizziness on standing, afternoon crashing, and sugar cravings.

**Low thyroid:** fatigue, achiness, dry skin, cold intolerance, weight gain, constipation, and changes in menstrual periods.

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## **Part 6. Essential Micronutrients**

### **What You Should Do**

**Natural medicine:**

**Multivitamin.** Use a vitamin that has numerous amino acids, antioxidants, minerals, and various vitamin Bs including b12 and folate. In my practice I use powders by Thorne and Integrative Therapeutics and capsules by Researched Nutritionals.

## Why You Should Do This

To heal and feel better requires a multivitamin with an essential set of vitamins, minerals, amino acids, and antioxidants. A good multivitamin can improve functioning of the immune system, muscles, brain and nerves, hormones, organs including the kidney and liver, detoxification, and decreases inflammation. It also protects the body from the toxic effect of prescriptive antibiotics.

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## Part 7. Detoxification

### What You Should Do

Reduce the total load of negative environmental influences on your health:

- eat organic foods,
- avoid gluten, scents, alcohol and tobacco, and
- decrease emotional stress.

**Natural Medicine:** Support Liver detoxification.

**Liposomal Glutathione 400 to 500 mg** 1 time a day. Glutathione is the master detox chemical used by the liver to remove toxins. It also helps remove neurotoxins and repair brain tissue. It works better than other herbal options like pinella or burbur. Read more in [Glutathione: The Great Fixer](#).

**Diet:** Drink water regularly to support kidney detoxification. A general rule of thumb is to drink 1/2 of your ideal body weight (measured in pounds) as ounces of non-caffeinated liquids a day. For example a person with a 150 pound ideal body weight should drink 75 ounces a day of non-caffeinated liquid. Eat healthy vegetables and a limited number of fruits a day for vitamins and for fiber. Fiber binds toxins in the intestines and promotes their removal from the body through regular bowel movements.

See [Lyme Detoxification 101: The Basics](#) for more detailed information.

### Why You Should Do This

Lyme produces toxins that lead to inflammation from cytokines. This suppresses the immune system and gives many of the Lyme symptoms. In addition, many of the natural and prescription medicines can have toxic effects. These detoxification steps protect against and fix toxin issues.

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## Part 8. Exercise

### What You Should Do

**Exercise to tolerance.** Find a level you can do that does not make you worse the next day. This may mean you can only walk half a block at the beginning.

Over exercise, an amount that makes a person feel worse, may suppress the immune system and impair healing. Be careful. At the beginning of treatment, you may have to wait to begin exercise until you have some improvements.

### Why You Should Do This

Exercise improves blood flow to all tissues. This improves the penetration of antibiotics and helps with detox. Exercise also releases various chemicals like endorphins and enkephalins that produce healing effects and improve immune function.

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## Part 9. Immune System Boosters

The entire Ross Lyme Support Protocol is designed to boost your immune system.

Use my recommendations for sleeping, lowering cytokines, detoxing, using an adaptogen, fixing hormonal problems, killing Lyme, yeast, and coinfections, exercising as tolerated, and eating a paleo or elimination diet to fix immune system dysfunction.

In addition to these steps there are additional supplements you can take. To read more about these options see [How to Boost the Immune System in Lyme](#). I do not recommend these additional supplements at first. I consider adding them at 6 to 9 months in treatment or during antibiotic holiday periods.

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## Part 10. Yeast

“Read "Why You Should Do This" below to determine on your own if you have a current intestinal yeast overgrowth problem requiring treatment.” Marty Ross MD LLMD

## What You Should Do

### Prevention or Treatment

1. For yeast overgrowth prevention use probiotics and antifungals in A & B.
2. For current intestinal yeast overgrowth treatment use probiotics and antifungals in A & C.

### A. Probiotics: Required for Yeast Prevention or Treatment

#### Natural medicine:

**Probiotic.** Use a product shown to repopulate the intestines in scientific studies. Take at least 5 to 10 billion live cultures 1 hour away from antibiotics. During an active yeast infection consider increasing to 20 billion cultures one time a day or divided in to two doses.

#### B. Antifungals for Prevention:

(Use either the natural medicine or prescription medicine. You do not need to use both together.)

#### Natural medicine:

**Herbal Combinations.** 2 pills 2 times a day. Common herbs found individually or mixed together include: pau d'arco, caprylic acid, rosemary oil, thyme oil, garlic, and grapefruit seed extract. You can find these herbs in products like *Phytostan* by Integrative Therapeutics and *CapriPlus* by Karuna.

#### Prescription medicine:

**Nystatin 500,000 IU** 2 pills 2 times a day.

#### C. Antifungals for Treatment:

(Do this if you have a **yeast screening score of 140 or higher** (see below). When you complete treatment, then start yeast prevention antifungals as above. Use the natural medicine or prescription medicine option but not both together.)

#### Natural medicine:

**Herbal Combinations.** 2 pills 2 times a day. Common herbs found individually or mixed together include: pau d'arco, caprylic acid, rosemary oil, thyme oil, garlic, and grapefruit seed extract. You can find these herbs in products like *Phytostan* by Integrative

Therapeutics and *CapriPlus* by Karuna. This will take 3 to 4 months to get yeast overgrowth under control.

### **Prescription medicine:**

(Use both of the following together.)

**Nystatin 500,000 IU** 2 pills 2 times a day, and  
**Fluconazole (Diflucan) 200 mg** 1 time daily for 30 days. Use in combination with nystatin to prevent drug resistance. This combination will take 30 days to get yeast under control.

### **Additional Options:**

Some have great difficulty getting rid of intestinal yeast overgrowth. See *Kills Yeast: A Brief Guide* for more herbal and prescription medicine options.

## **Why You Should Do This**

Too many yeast in the intestines (yeast overgrowth) is a common problem that occurs in those with chronic Lyme disease either during or prior to beginning Lyme disease treatment. Antibiotics used to treat Lyme can lead to too many yeast. Immune suppression prior to starting antibiotics can also cause yeast overgrowth. Yeast overgrowth can result in an ongoing systemic allergic reaction to the yeast that can suppress the immune system. **Yeast overgrowth also leads to inflammatory cytokine excess** that cause many of the Lyme disease symptoms and pain. Food allergies and sensitivities can be the result of yeast overgrowth too.

There is not a useful diagnostic blood test or stool test for yeast overgrowth. While some may test for antibodies in the blood to intestinal yeast, antibodies are common even when yeast are in balance. In addition it is normal to have stool cultures grow yeast; so a culture does not indicate if yeast are in excess. For this reason, yeast are diagnosed using my [yeast screening questionnaire](#). This questionnaire evaluates for the possibility of yeast overgrowth based on yeast overgrowth risk factors and intensity of symptoms. In general I find people benefit from treatment if the score is **140 or higher**.

At the beginning of a Lyme disease treatment, often before antibiotics are started it is essential to treat yeast. Doing so can limit the severity of Herxheimer die-off reactions from treating Lyme because removing yeast removes one source of inflammatory cytokine excess.

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## **Part 11. Lyme Infection Treatment**

“Based on my experience, these natural medicine and prescription medicine options have **equal** chances of helping a person. The chance they will help is 85 to 90% over a 6 month period of time.” Marty Ross MD LLMD

## What You Should Do

### Natural medicines:

**Otoba Bark Extract and Cat's Claw.** 5 drops 2 times a day of each herb and increase the dosing every 2 days by 1 drop per dose till taking 30 drops 2 times a day. Take on an empty stomach. Do not take 30 minutes before through 2 hours after having food, medicines, or supplements. If you get a Herxheimer die-off reaction do not advance the dose till it decreases.

OR

### Prescription medicines (and Grapefruit Seed Extract Herbal Medicine):

(I generally start with oral antibiotics. For considerations about IV antibiotics see [A Lyme Disease Antibiotic Guide.](#))

**Doxycycline 100 mg** 2 pills 2 times a day or 4 pills 1 time a day. Take with food to prevent nausea. Do not take with calcium supplements or calcium fortified dairy products like milk or cheese or milk substitutes like rice milk. OR **Clarithromycin (Biaxin) 500 mg** 1 pill 2 times a day.

TAKE WITH

**Rifampin 300 mg** 2 pills 1 time a day OR **Tinidazole 500 mg** 2 or 3 times a day OR **Grapefruit Seed Extract 250mg** 1 pill 2 times a day.

For many more Lyme herbal and prescription antibiotic options see: [A Lyme Disease Antibiotic Guide.](#)

## Why You Should Do This

Lyme exist in three different forms. These are the spirochete, the I-form (lives in cells), and the microscopic cyst form. A Lyme disease treatment should treat all three forms at the same time.

Otoba bark extract and cat's claw treat all three forms of the germ. Because these herbs are dosed using drops, they can be more easily regulated to manage a die-off reaction by not increasing the dose until the reaction lessens if present. In my experience any oral antibiotic combination works as well as the otoba bark extract and cat's claw combination which is 85% to 90% of the time.

Doxycycline or Clarithromycin treat the spirochete and the I-form. While Rifampin, Tinidazole and Grapefruit Seed Extract treat the cyst form.

## Part 12. Coinfection Treatments

### What You Should Do

Do not start treatments for the bartonella or babesia coinfections at the initial visit. Wait one month or longer to adjust to the Herxheimer die-off reaction from treating the Lyme infection and to stabilize on the supportive supplements.

If you have both of these coinfections you should treat one first before adding a treatment for the other. When both are present my preference is to treat for bartonella first for 2-3 months and then add treatment for babesia. Treat these coinfections at the same time you treat the Lyme infection.

### Natural Medicines:

#### Bartonella

(In my experience, these natural medicine options work 70 to 75% of the time and take 4-6 months. If you do not have improvement in bartonella symptoms by 2 months then change to prescription medicines. Any of my recommended prescription medicine options work about 80 to 85% of the time.)

**Houttuynia** 5 drops 2 times a day of each herb and increase the dosing every 2 days by 1 drop per dose till taking 30 drops 2 times a day. Take on an empty stomach. Do not take 30 minutes before through 2 hours after having food, medicines, or supplements.

USE WITH

**Sida Acuta** 1/4 tsp 3 times a day for 1 week, then increase to 1/2 tsp 3 times a day. It is best to take this without food. It can be taken at the same time as the Houttuynia.

#### Babesia

(In my experience, these natural medicine options work 75 to 80% of the time and take 4-5 months. If you do not have improvement in babesia symptoms by 2 months then change to prescription medicines. Any of my recommended prescription options works about 80 to 85% of the time.)

**Cryptolepis** 5ml 3 times a day.

AND/OR

**Artemisinin 100 mg** 2 or 3 pills 2 times a day for 3 days on the medication then take 11 days off. Continue this 14 day cycle. The goal is to reach 5 pills 3 times a day on the 3

days the medication is taken. I use artemisinin this way because the intestines develop an enzyme that destroys this herbal medicine if it is used longer than 3 days. Be aware the dose on the 3 days is quite strong. Often it causes a worsening of the babesia symptoms beginning on the 2nd day and sometimes lasting until 6 days later. If a person is very medicine sensitive I start at 1 or 2 pills 3 times a day. Artemisinin often does not work well for babesia from tick bites on the east coast US.

### **Prescription Medicines:**

See [Kills Bartonella: A Brief Guide](#) and/or [Kills Babesia: A Brief Guide](#) for prescription approaches you can take to treat these infections.

### **Why You Should Do This**

Based on my experience, a person will not recover from Lyme if these two Lyme coinfections are not treated when they are present. It is as though they protect Lyme. And Lyme seems to protect them, which is why it takes months in Lyme to get rid of these infections.

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## **Part 13. Additional Natural Medicines**

Many other natural medicines to manage symptoms and problems exist. Wait one month after beginning a Lyme disease treatment to start these. For additional treatment ideas based on your specific medical problems see articles in the following medical problem chapters. For instance if you have severe brain fog or numbness find helpful articles in the Brain & Nerves chapter.

- [Biofilms](#),
  - [Bladder](#),
  - [Brain & Nerves](#),
  - [Detoxification](#),
  - [Energy & Fatigue](#),
  - [Heart & Blood](#),
  - [Herxheimer & Cytokines](#),
  - [Hormones](#),
  - [Immune System](#),
  - [Mental Health](#),
  - [Nutrition](#),
  - [Pain](#),
  - [Sleep](#),
  - [Stomach & Intestines](#), and
  - [Yeast](#).
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## Part 14. Special Considerations

### Persister Lyme Infection Regimen

New research shows that Lyme can develop persisters. These are germ forms that go into hibernation and can ignore antibiotics. This condition can occur after someone is on antibiotics for some time. If you have tried antibiotics before and not gotten better, or if you are a year or more into treatment and not seeing good improvements, consider a persister Lyme regimen. For more information read [How to Treat Persister Lyme. What Works?](#)

### If You Are Becoming More Allergic With Treatment

Chronic Infections can trigger excessive allergic reactions to food, prescription and natural medicines, and to the environment. If this is your problem, consider using supplements, diet and medicines for Mast Cell Activation Syndrome. For more information read [Mast Cell Activation Syndrome & Lyme.](#)

### Three Months

My experience in chronic Lyme disease treatment shows that by 3 months of treatment 30% of people have improvement. Generally these people have an easier chance recovering from Lyme disease with traditional herbal and prescription antibiotic combinations. For those that are not having significant changes by 3 months then I am adding Biocidin. Based on unpublished lab experiments Biocidin breaks down biofilms and decreases antibiotic resistance by blocking efflux pumps that remove antibiotics from germs. Read more [Biocidin: A Potent Antimicrobial & Biofilm Breaker.](#)

**Biocidin LSF.** Start at 1 pump under the tongue 1 time a day. Every 2 days increase by 1 pump first as 1 pump 2 times a day, then 1 pump 3 times a day, and eventually to 2 pumps 3 times a day. If you develop a [herxheimer die-off reaction](#) do not increase until it passes. For sensitive people place 1 pump in 5 ounces of water. Start with 1 ounce 1 time a day. Increase by 1 ounce a day increasing gradually at first to 1 ounce 3 times a day. Eventually as tolerated work up to 10 ounces (2 pumps) 3 times a day.

### Six Months and Beyond

There are additional steps you should consider by 6 to 9 months of Lyme disease treatment if you are not having adequate improvement. Read or watch these articles from Treat Lyme for more information and my recommended treatments.

### Detoxification

- [Mold and Lyme Toxin Illness.](#)
- [MTHFR and Detoxification. A Lyme Byte.](#)
- [Heavy Metals: The Problem & The Best Test.](#)
- [Far Infrared Sauna Detox: More Than Sweat.](#)

### **Biofilms**

- [Biofilms: Lyme Disease Gated Communities.](#)

### **Chronic viral infections**

- [When & How To Treat Chronic Viruses: A Brief Guide.](#)

### **Boost energy, fix mitochondria cell energy factories**

- [Power Up! Energy and Mitochondria.](#)

### **Co-infections**

Continually review your symptoms to see if you have a coinfection that was missed. Treating Lyme is like peeling the layers of an onion. As you treat, it sometimes becomes more apparent which coinfections are present. In addition, it is possible to have coinfection relapses.

- [Kills Bartonella: A Brief Guide.](#)
- [Kills Babesia: A Brief Guide.](#)

### **Autoimmune illness and chronic Inflammation**

- [Low Dose Naltrexone \(LDN\) & Lyme.](#)
- [LDI: Bring on The Regulators.](#)

### **Yeast**

If you have a number of these symptoms: increased sugar cravings, intestinal gassiness or bloating, recent vaginal yeast infection, oral yeast, and/or vaginal or rectal itching consider treating for yeast overgrowth in the intestines.

- [Kills Yeast: A Brief Guide.](#)

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## **Part 15. Health Decline after Doing Better**

It is common to have ups and downs during the course of a Lyme disease treatment. In some cases there can be a significant decline after a person is doing better. In these cases consider yeast overgrowth of the intestines or relapse of a bartonella or babesia coinfection. **In my experience the majority of major health declines are do to yeast overgrowth in the intestines.** This is true even if significant symptoms of yeast do not exist.

Excessive yeast in the intestines lead to increased levels of cytokines. Because excess cytokines cause many of the chronic Lyme disease symptoms, it could seem like your Lyme disease is getting worse.

Yeast could be the cause of your decline if you have a number of these symptoms: increased sugar cravings, intestinal gassiness or bloating, recent vaginal yeast infection, oral yeast, and/or vaginal or rectal itching. For Information on diagnosing yeast see [A Silent Problem: Do You Have Yeast?](#) For yeast treatment information see [Kills Yeast: A Brief Guide.](#)

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## Your Source for Quality Supplements



You can find high quality supplements mentioned in this article at Marty Ross MD Supplements. Go to [The Ross Lyme Support Protocol](#) page to see products Dr. Ross recommends and uses with his own patients.