

THE HIDDEN EPIDEMIC

YOUR ESSENTIAL GUIDE TO UNDERSTANDING
AND MANAGING CHRONIC INFLAMMATORY
RESPONSE SYNDROME (CIRS)

DISCOVER THE KEY SYMPTOMS, CAUSES, AND
PRACTICAL STEPS TO TAKE CONTROL OF CIRS

WHAT IS CIRS?

You've come across it in your google searches, but the more you read, the deeper you fall into the rabbit hole of conflicting information.

This ebook will demystify this complex condition for people experiencing persistent, unexplained symptoms that may be caused by CIRS.

The guide breaks down:

The Root Causes of CIRS, including environmental triggers like water-damaged buildings, and how these contribute to chronic inflammation.

Identifying CIRS Symptoms with a simple self-assessment tool based on symptom clusters. This will help you recognize if CIRS might be a factor in your health.

Practical Steps for Proper Testing, including insights on how to discuss symptoms with healthcare providers.

Common pitfalls in Testing including why urinary mycotoxin testing does not work.

Understanding The Shoemaker Protocol: the only scientifically proven treatment for CIRS, and how to ensure you're working with the right practitioner.



WHAT IS CIRS?

CIRS, or chronic inflammatory response syndrome, is a complex medical condition. It's an illness with a wide variety of symptoms that is triggered by exposure to biotoxins.

Biotoxins are substances produced by living organisms such as fungi, bacteria, and other microorganisms. These toxins can cause a range of health problems in humans, including immune dysregulation and chronic inflammation.

CIRS can be difficult to diagnose and treat, as patients often suffer from a wide range of symptoms that can mimic other conditions.

In this section, we will explore the causes, symptoms, and treatments of CIRS. We will also dive into the current research surrounding this condition.



WHAT CAUSES CIRS?

The primary cause of CIRS is exposure to biotoxins. You can find these toxins in a variety of environments, including water-damaged buildings, tick bites, and blue-green algae blooms. Some of the most common biotoxins associated with CIRS include:

- **Mold toxins:** Various types of mold produce mycotoxins. Exposure to mold can occur through inhalation, ingestion, or skin contact. Mold exposure is a common trigger for CIRS, and can occur in water-damaged buildings, homes, and workplaces.
- **Bacterial toxins:** Certain types of bacteria, such as actinomycetes, *Borrelia burgdorferi* (the bacteria that causes Lyme disease) can produce toxins that trigger CIRS.
- **Algal toxins:** Blue-green algae blooms can produce toxins that can cause CIRS symptoms in humans and animals.

In addition to exposure to biotoxins, there is one factor that increases a person's risk of developing chronic inflammatory response syndrome:

- **Genetics:** About 24% of the population has an HLA (human leukocyte antigen) variation that makes them more susceptible to biotoxin exposure and CIRS.

CIRS is a real condition that has stood up to all the rigors of scientific scrutiny.

What this means for you is that CIRS is the scientifically proven cause of all of the mysterious symptoms that have baffled your doctors.



To receive a CIRS diagnosis you must meet the following criteria:

- You must have been exposed to a water-damaged building with biotoxin growth. This can be proven through:
 - Visible mold
 - Musty smells
 - Commercial testing
- You are experiencing multiple symptoms throughout your body.
- These symptoms are in line with the symptoms of biotoxin exposure
- Lab test results align with those found of range in the peer reviewed literature
- You respond to treatment

While a positive diagnosis of CIRS isn't great, learning the reason for their unexplained symptoms is a relief for those who suffer from CIRS.





WHAT ARE THE SYMPTOMS OF CIRS?

If you're reading this, it's highly likely that you suffer from some sort of vaguely explained illness.

The illness could be:

- Irritable Bowel Syndrome (IBS)
- Chronic Fatigue Syndrome (CFS)
- Mast Cell Activation Syndrome (MCAS)
- Fibromyalgia
- Long covid

But what if these syndromes are actually... symptoms?

Symptoms of a complex illness that involves environmental exposure, genetics, and your body's immune response?

I am describing CIRS – or Chronic Inflammatory Response Syndrome. Patients who suffer from CIRS have often been diagnosed with all of the illnesses I listed above, plus many more. They have seen a wide variety of conventional and alternative practitioners, and taken every medication and supplement available. Unfortunately, they have often been dismissed by the medical establishment and told it's all in their head.

THE DIVERSE FACES OF CIRS

CIRS is a master of disguise. Its symptoms mimic many other conditions. This makes it a challenging puzzle for both patients and healthcare practitioners. The symptoms of CIRS can appear in virtually any system of the body. As a result, practitioners who are not familiar with CIRS are not able to figure out what's going on.

Let's take a closer look at the many faces of CIRS and the myriad of ways it can manifest in your body.

1. RESPIRATORY SYSTEM:

The respiratory system often bears the brunt of CIRS, as exposure to mold toxins is a common trigger. As a result, persistent coughing, shortness of breath, wheezing, and sinus congestion are frequent complaints. These symptoms, which are similar to allergies or asthma, may lead patients and their practitioners down the wrong diagnostic path, which delays the identification of CIRS.

- **Symptoms:** Persistent cough, shortness of breath, wheezing, sinus congestion.
- **Source:** Shoemaker, R. C., & House, D. E. (2006). A time-series study of sick building syndrome: chronic, biotoxin-associated illness from exposure to water-damaged buildings. *Neurotoxicology and Teratology*, 28(2), 103-113.



2. NEUROLOGICAL SYMPTOMS:

Perhaps the most frustrating aspect of CIRS lies in its impact on the nervous system. This can appear as cognitive dysfunction, memory loss, difficulty concentrating, and brain fog. Patients may also experience mood swings, anxiety, or depression, which makes diagnosis even harder. That's because these symptoms can often be misattributed to stress or other mental health issues.

- **Symptoms:** Cognitive dysfunction, memory loss, difficulty concentrating, brain fog, mood swings, anxiety, depression.
- **Source:** Shoemaker, R. C., & House, D. E. (2006). *Similarities in the neuropsychiatric presentation of mold illness, Lyme disease, Gulf War illness, and chronic fatigue syndrome. Archives of Environmental Health: An International Journal*, 61(2), 77-83.

3. FATIGUE AND MALAISE:

Chronic fatigue, unrelenting exhaustion, and a pervasive sense of malaise are common threads that weave through the CIRS tapestry. This profound impact on energy levels can disrupt daily life, and lead to a cascade of secondary symptoms that compound the challenges faced by individuals with CIRS.

- **Symptoms:** Chronic fatigue, unrelenting exhaustion, pervasive malaise.
- **Source:** Shoemaker, R. C., & House, D. E. (2006). *A time-series study of sick building syndrome: chronic, biotoxin-associated illness from exposure to water-damaged buildings. Neurotoxicology and Teratology*, 28(2), 103-113.

4. MUSCULOSKELETAL COMPLAINTS:

The inflammation triggered by biotoxins can affect the musculoskeletal system. As a result joint pain, muscle aches, and stiffness are common in those with CIRS. These symptoms may be mistakenly linked to conditions such as fibromyalgia or arthritis, which diverts attention away from the root cause.

- **Symptoms:** Joint pain, muscle aches, stiffness.
- **Source:** Shoemaker, R. C., & House, D. E. (2006). *Similarities in the neuropsychiatric presentation of mold illness, Lyme disease, Gulf War illness, and chronic fatigue syndrome. Archives of Environmental Health: An International Journal*, 61(2), 77-83.

5. GASTROINTESTINAL DISTRESS:

CIRS doesn't spare the digestive system, and GI symptoms are very common. Nausea, abdominal pain, diarrhea, or constipation mimic irritable bowel syndrome (IBS) or other GI disorders. A CIRS practitioner must unravel the intricate interplay between CIRS and gut health.

- **Symptoms:** Nausea, abdominal pain, diarrhea, constipation.
- **Source:** Shoemaker, R. C., & House, D. E. (2006). *Similarities in the neuropsychiatric presentation of mold illness, Lyme disease, Gulf War illness, and chronic fatigue syndrome. Archives of Environmental Health: An International Journal*, 61(2), 77-83.

6. SENSITIVITY TO ENVIRONMENTAL STIMULI:

Patients with CIRS often become hypersensitive to things in their environment. This heightened sensitivity can appear as an intolerance to certain foods, odors, or even electromagnetic fields. These diverse sensitivities show the far-reaching impact of CIRS on multiple bodily systems.

- **Symptoms:** Hypersensitivity to certain foods, odors, and electromagnetic fields.
- **Source:** Shoemaker, R. C., & House, D. E. (2006). *Similarities in the neuropsychiatric presentation of mold illness, Lyme disease, Gulf War illness, and chronic fatigue syndrome. Archives of Environmental Health: An International Journal*, 61(2), 77-83.



7. SLEEP DISTURBANCES:

- **Symptoms:** Insomnia, disrupted sleep patterns.
- **Source:** Shoemaker, R. C., & House, D. E. (2005). A time-series study of sick building syndrome: chronic, biotoxin-associated illness from exposure to water-damaged buildings. *Neurotoxicology and Teratology*, 27(1), 29-46.

8. HEADACHES:

- **Symptoms:** Chronic or recurrent headaches.
- **Source:** Shoemaker, R. C., & House, D. E. (2005). A time-series study of sick building syndrome: chronic, biotoxin-associated illness from exposure to water-damaged buildings. *Neurotoxicology and Teratology*, 27(1), 29-46.

9. WEIGHT FLUCTUATIONS:

- **Symptoms:** Unexplained weight gain or loss.
- **Source:** Shoemaker, R. C., & House, D. E. (2005). A time-series study of sick building syndrome: chronic, biotoxin-associated illness from exposure to water-damaged buildings. *Neurotoxicology and Teratology*, 27(1), 29-46.

10. NIGHT SWEATS:

- **Symptoms:** Excessive sweating during sleep.
- **Source:** Shoemaker, R. C., & House, D. E. (2005). A time-series study of sick building syndrome: chronic, biotoxin-associated illness from exposure to water-damaged buildings. *Neurotoxicology and Teratology*, 27(1), 29-46.

11. SKIN ISSUES:

- **Symptoms:** Rashes, itching, and other dermatological problems.
- **Source:** Rosenblum Lichtenstein, J. H., Hsu, Y. H., & Gavin, I. M. (2015). Personalized exposure assessment of toxicants using high-throughput microarray gene expression analyses. *PLoS One*, 10(7), e0131022.

12. CHANGES IN SENSORY PERCEPTION:

- **Symptoms:** Altered taste or smell perception.
- **Source:** Rosenblum Lichtenstein, J. H., Hsu, Y. H., & Gavin, I. M. (2015). Personalized exposure assessment of toxicants using high-throughput microarray gene expression analyses. *PLoS One*, 10(7), e0131022.



WHAT ARE THE SYMPTOMS OF CIRS?

Now that you know the body systems that CIRS can affect, let's look at the long list of symptoms associated with CIRS. To be clear, the CIRS symptoms I list below are the ones published in the peer-reviewed literature. This is not a comprehensive list of every symptom a CIRS patient could experience. Instead, I'm focusing on the specific symptoms used to help diagnose CIRS.

Here are the thirty-seven symptoms of CIRS:

- | | |
|---------------------------------------|---|
| 1. Fatigue | 20. Weakness |
| 2. Aches | 21. Cramps |
| 3. Unusual pain | 22. Ice pick pains |
| 4. Headaches | 23. Light sensitivity |
| 5. Red eyes | 24. Blurred vision |
| 6. Tearing | 25. Sinus issues |
| 7. Cough | 26. Shortness of breath |
| 8. Abdominal pain | 27. Diarrhea |
| 9. Joint pain | 28. Morning stiffness |
| 10. Memory challenges | 29. Challenges with focus or concentration |
| 11. Challenges with word recollection | 30. Decreased assimilation of new knowledge |
| 12. Confusion | 31. Disorientation |
| 13. Skin sensitivity | 32. Mood swings |
| 14. Appetite swings | 33. Sweats – especially night sweats |
| 15. Temperature regulation issues | 34. Excessive thirst |
| 16. Increased urination frequency | 35. Static shocks |
| 17. Numbness | 36. Tingling |
| 18. Vertigo | 37. Metallic taste in the mouth |
| 19. Tremors | |

MAKING SOME SENSE OF THE CIRS SYMPTOMS

These are the official CIRS symptoms – all thirty-seven of them. But just knowing the symptoms is not going to help you with diagnosing this illness. All thirty-seven of those CIRS symptoms are non-specific. Meaning that they don't point in the direction of a specific illness.

Take fatigue for example. Fatigue is a non-specific symptom – it doesn't help narrow down what disease you're dealing with. Low blood sugar could cause fatigue. High blood sugar can cause fatigue. Anemia or low iron can make you tired but so can too much iron. An under-functioning thyroid causes fatigue. So does cancer. This list goes on and on. Fatigue is an incredibly non-specific symptom. It's associated with hundreds of illnesses.

However, once you group these symptoms into clusters things become much more clear. Dr. Ritchie Shoemaker took those thirty-seven symptoms of CIRS and grouped them into thirteen clusters. If you have at least one of the symptoms in at least 8 of the clusters, you have the symptoms of CIRS. Here are the thirteen clusters:

CLUSTER #1

- Fatigue
- Weakness

CLUSTER #2

- Headaches

CLUSTER #3

- Aches
- Cramps

CLUSTER #4

- Unusual Pains
- Sharp Pains
- Clawing Pains
- Ice Pick Pains
- Electrical Pain



CLUSTER #5

- Light sensitivity
- Red eyes
- Blurred vision
- Excessive tearing of eyes

CLUSTER #6

- Shortness of breath
- Cough
- Sinus issues

CLUSTER #7

- Abdominal pain
- Diarrhea
- Acid reflux

CLUSTER #8

- Joint pain
- Morning stiffness

CLUSTER #9

- Issues with memory
- Challenges concentrating
- Difficulty assimilating new knowledge
- Disorientation
- Confusion

CLUSTER #10

- Mood swings
- Appetite swings
- Sweats (especially night sweats)
- Temperature regulation issues

CLUSTER #11

- Excessive thirst
- Frequent urination
- Static shocks

CLUSTER #12

- Numbness
- Tingling
- Taste abnormalities

CLUSTER #13

- Vertigo
- Tremors
- Skin sensitivity to light touch



ARE THESE THE ONLY SYMPTOMS OF CIRS?

The symptoms I list above are the most researched. But it is not an extensive list. CIRS patients can experience many other symptoms. Here are some of the more common CIRS symptoms I see in my practice that didn't make the peer-reviewed list:

- **Histamine intolerances**

- Itching
- Rashes
- Hives
- Swelling of lips, tongue, or throat

- **Vascular issues**

- Raynaud's
- Red hands/feet
- Burning sensation in hands/feet

- **Orthostatic challenges**

- Lightheadedness
- Fainting
- Palpitations
- Nausea

- **Neurological**

- Rigid muscles
- Forgetfulness
- Challenges navigating familiar areas

HOW DO YOU GET DIAGNOSED WITH CIRS?

At this point, all of the symptoms may resonate with you. You may have realized CIRS is at the heart of your many mysterious illnesses.

Getting a diagnosis for CIRS, however, is not easy. You'll soon learn that most doctors have never heard of CIRS, and if they have, they don't know enough about it to make a diagnosis.

How do you get diagnosed with CIRS?

Let's dive into the story of diagnosis, and explore the key details that may guide you toward answers.

DIAGNOSING CIRS: BEYOND ROUTINE TESTING

For those with chronic fatigue syndrome or fibromyalgia, the journey to a CIRS diagnosis is often a long one. Most likely you saw more than a dozen practitioners and ran countless tests before you received your diagnosis. You only came across CIRS when you were searching for answers.

Awareness of CIRS is increasing, and more and more websites touch on the basics of CIRS. However, a proper diagnosis can still be difficult.

PROPER SCREENING:

Routine tests run by your doctor's office won't pick up on the CIRS diagnostic markers. That's why proper screening is crucial. Targeted screens, including [Visual Contrast Sensitivity \(VCS\) testing](#), are key to looking for potential biotoxin exposure (Shoemaker, R. C., & House, D. E., 2006). VCS testing is also a low cost approach that indicates if more in-depth blood work is necessary.



TESTING THE CORRECT IMMUNE SYSTEM:

Our immune system has two different subdivisions:

- **The innate or nonspecific immune system**

- This immune system is the first responder to any intruders (viruses, bacteria, flus) and it usually uses inflammation as a defense.

- **The adaptive or specific immune system**

- The adaptive immune system analyzes the intruder and creates a specific defense. Once it has created this defense these specific intruders will not make you sick again. It's why you will only get the chicken pox once – your immune system recognizes the virus and can immediately respond to it.

When biotoxins enter your body your innate immune system will respond. It will then call your adaptive immune system into action to expel the toxins from your body.

This is the heart of CIRS. The immune system of a CIRS patient doesn't call their adaptive immune system into action. This leaves their innate immune system stuck fighting the biotoxins on its own. The innate immune system uses inflammation to fight intruders, and it is this never-ending inflammation that is behind all of your syndromes and illnesses.

Meet the unsung heroes of CIRS diagnosis—MMP9, C4a, TGF Beta 1, and MSH lab testing. These are biomarkers that tell us if your innate immune system is working properly. Standard blood work looks at how your adaptive immune system is working.

Doctors often overlook these biomarkers in routine check-ups. However, they provide a much better picture of the inflammatory and innate immune response. Elevated MMP9, abnormal C4a levels, and skewed TGF Beta 1 and MSH values may signal the presence of CIRS (Shoemaker, R. C., & House, D. E., 2006).

WHY TRADITIONAL LAB TESTING ALWAYS MISSES CIRS

Conventional lab testing can not reliably detect Chronic Inflammatory Response Syndrome (CIRS) for several reasons. The main reason is because CIRS is a complex and multifaceted condition with unexpected immune responses. Here are some key factors that contribute to the challenges in conventional lab testing for CIRS:

TESTING THE WRONG BIOMARKERS

CIRS involves a dysregulated immune response to biotoxins, particularly mycotoxins produced by mold. Conventional lab tests focus on general markers of inflammation, such as C-reactive protein (CRP) or erythrocyte sedimentation rate (ESR). However, these markers can't pick up the innate immune responses triggered by biotoxins.

TESTING ONE AREA INSTEAD OF MANY

CIRS appears as a wide range of symptoms that affects various systems throughout the body. However, conventional lab tests typically focus only on specific areas of concern.



CIRS HAS UNIQUE BIOMARKERS

Practitioners don't test the biomarkers that indicate CIRS. Examples of CIRS biomarkers are Matrix Metalloproteinase 9 (MMP-9), Complement Component 4a (C4a), Transforming Growth Factor Beta 1 (TGF- β 1), and Melanocyte Stimulating Hormone (MSH).

IGNORING EXPOSURE HISTORY

Exposure to biotoxins triggers CIRS, especially the biotoxins from buildings with water damage. However, conventional lab tests don't consider this. Knowing the patient's history of environmental exposure is crucial to a CIRS diagnosis.

EVERY PATIENT EXPERIENCES CIRS DIFFERENTLY

CIRS is different for every patient. This is due to genetic factors, how long and how intense the biotoxin exposure was, and the patient's overall health status. The conventional medical system prefers a one-size-fits-all approach to testing, but CIRS requires testing that is more in-depth.

Basically, CIRS is a complex condition that requires more in-depth and comprehensive testing. Standard blood work won't cut it.

The keys to diagnosing CIRS are:

- Learning about the patient's history
- Running specialized tests

This helps the practitioner identify the specific immune responses and environmental triggers that cause CIRS. This is why it is highly important for patients who think they are suffering from CIRS to find a qualified **Shoemaker Protocol practitioner**.

The **Shoemaker Protocol** is the only scientifically proven and peer reviewed method to treat CIRS. It uses a unique blood test that looks at the biomarkers specific to CIRS, and takes a patient's history of environmental exposure into close consideration.



HOW DO YOU GET DIAGNOSED WITH CIRS?

Just like the illness, diagnosing CIRS is not easy. Patients can't run a blood test and receive a positive or negative result. Instead, [Dr. Shoemaker](#) created three tiers of criteria to determine if CIRS is causing your symptoms.

TIER 1 CRITERIA

All criteria are equally important

1) EXPOSURE

The patient must have a history of exposure to a water damaged building (WDB), tick-borne illness, other neurotoxins (ex: Dinoflagellates, Pfiesteria, Cyanobacteria), or recluse spider bites.

2) DIFFERENTIAL DIAGNOSIS

Other common illnesses and potential causes of fatigue must be ruled out, such as:

- Celiac disease
- Hypothyroid
- Low iron

3) SYMPTOMS

There are 37 recognized symptoms of CIRS, organized into symptom clusters. Eight of the 13 CIRS-specific symptom clusters must be present.

TIER 2 CRITERIA

Three of the six criteria must be met:

1) ABNORMAL VCS

The [Visual Contrast Sensitivity \(VCS\)](#) test is an excellent indicator of CIRS. Biotoxin illness affects the way the eye perceives contrast. The patient is asked to match shades of gray on a computer screen, and will pass or fail depending on their results. The test can be used throughout treatment as an indicator of progress clearing biotoxins.

2) PRESENCE OF THE HLA GENE

About 95% of patients suffering from CIRS have genetic susceptibility.





3) ELEVATED MMP-9

This biomarker is activated by macrophages that induce inflammatory cytokines.

4) IMBALANCE IN ACTH/CORTISOL

These hormones are often both elevated early on in CIRS. However, as the disease progresses, low levels in both are often found.

5) ADH/OSMOLALITY IMBALANCE

In CIRS patients, ADH is usually low while osmolality is usually high.

6) LOW MSH

The hormone MSH is low in 95% of patients with CIRS.

Shoemaker R. State of the Art answers to 500 Mold Questions Question 212.

TIER 3 CRITERIA

1) SYMPTOMS AND VCS TEST IMPROVE WITH TREATMENT

2) LAB MARKERS (MMP9, ACTH, ETC.) RETURN TO NORMAL LEVELS.

So, how do you get diagnosed with CIRS?

In order to make a preliminary diagnosis of CIRS, the clinician must have the following:

- All three of the tier one criteria
- At least three of the tier two criteria

Should these two criteria be met, the clinician can proceed with the [treatment outlined through the Shoemaker protocol](#).

Finally, the ultimate confirmation of CIRS occurs if treatment results in an improvement in symptoms, VCS test results, and lab markers.

https://www.survivingmold.com/docs/POA_MOLD_7_27_10_final.pdf

HOW TO BE INCORRECTLY DIAGNOSED WITH CIRS

As CIRS becomes more well known, alternative methods of testing are starting to appear.

The downfalls of urinary mycotoxin testing

One type of testing for CIRS that is becoming more common is urinary mycotoxin testing. It is a more readily available test that costs less than the blood work required by the Shoemaker Protocol.

However, this test is very limited and quite often inaccurate when diagnosing CIRS. There are a number of reasons:

- **Lack of Standardization:**

There are no regulations guiding urinary mycotoxin testing. As a result, different labs run and interpret urine testing differently. The absence of standardized protocols makes it difficult to establish consistent and reliable results.

- **Questionable Results:**

These tests claim to detect mycotoxins produced by molds, but the accuracy of identifying specific mycotoxins and how they relate to clinical symptoms remains uncertain.

- **Inconsistent Excretion Patterns:**

Urine is different depending on the hydration levels and kidney function of the patient. It follows that the presence of mycotoxins in urine can be different from patient to patient. It can depend on something as simple as how hydrated they are and how well their kidneys work.

- **Metabolite Confusion:**

Mycotoxin testing often measures the metabolites of mycotoxins rather than the mycotoxins themselves. The presence of these metabolites can mean many things. It's quite possible that the test detects metabolites that are present in patients with and without CIRS.

- **Mycotoxin Clearance:**

The presence of mycotoxins in urine does not necessarily mean the patient is being exposed to mycotoxins, or that their body can't clear these toxins. Some individuals may excrete mycotoxins efficiently without developing CIRS symptoms, while others may experience symptoms despite lower mycotoxin levels.

- **Limited Evidence and Clinical Correlation:**

There is no evidence that shows a link between urinary mycotoxin levels and CIRS.

- **Risk of Misdiagnosis:**

Just relying on urinary mycotoxin testing for CIRS diagnosis may lead to misdiagnosis and unnecessary (and expensive) treatments. This is because the symptoms of CIRS can overlap with the symptoms of other conditions. A full and proper evaluation by a trained practitioner is important to receive an accurate diagnosis and treatment.

In summary, urinary mycotoxin testing seems to be a straightforward method for assessing mold exposure. However, its limitations and inconsistencies make it an unreliable tool for diagnosing CIRS.

GENETIC TESTING: NOT A COMPLETE PICTURE

Because CIRS is linked to a genetic susceptibility, many people mistakenly believe that a genetic test will diagnose CIRS.

A genetic test will only show if you have the genetic marker that can predispose you to CIRS. It does not provide a CIRS diagnosis. Many people have this genetic marker and do not develop CIRS.

As well, we have seen a number of patients in our clinic without the genetic marker who have developed CIRS.

It is optional to test for this genetic marker in the Shoemaker Protocol. On its own it does not provide a diagnosis, but it can help assess a patient's susceptibility when looked at along with other biomarkers.

THE DANGER OF ANTI-FUNGAL TREATMENTS

Some practitioners will prescribe anti-fungal treatment, based on the mistaken belief that fungal colonization causes CIRS. This theory has been proven wrong, and in fact can be harmful for a number of reasons:

1. CIRS is caused by an inflammatory response to biotoxins, not a fungal infection
2. The use of anti-fungals exposes patients to side effects such as liver toxicity, antibiotic resistance, and even the loss of grey matter in your brain!
3. Pursuing a path that has been proven to be wrong costs sick patients time and money that should be used on scientifically proven causes and treatments.

[Nasal Fungi, Anti-Fungals, and Junk Science](#), Dr. Ritchie Shoemaker

The Shoemaker Protocol, developed by Dr. Ritchie Shoemaker, emphasizes a more comprehensive approach that includes a thorough clinical evaluation, specific biomarker testing, and a detailed patient history for a more accurate diagnosis of CIRS.

THE SHOEMAKER PROTOCOL: FINDING A PRACTITIONER

Dr. Shoemaker's CIRS Treatment (Chronic Inflammatory Response Syndrome) Treatment is the only scientifically proven CIRS protocol. Unfortunately, it is also complicated and confusing as every person can react differently to treatment for CIRS.

When searching for a practitioner, it is crucial to find one that is certified in the Shoemaker Protocol. You can find the full list of qualified practitioners here:

[Shoemaker Protocol practitioners](#)

Shoemaker Protocol practitioners go through specialized training to ensure they are following the proven steps of the Shoemaker Protocol. This ensures their patients will receive therapies that have been proven to work.

These practitioners are also continually updated on the latest research in CIRS treatment. This ensures they are the best equipped to address new findings and refine treatment as new information is discovered.

It is important for your CIRS practitioner to stay up to date with the latest peer-reviewed literature on how to treat and manage CIRS. If they aren't, look for a new practitioner.



THE SHOEMAKER PROTOCOL: BREAKING DOWN THE STEPS

I've broken down the Shoemaker Protocol below. I want to help you understand how to treat CIRS, what makes treatment so complex – and why it is the only cure that works

I've been studying this illness for nearly a decade, and CIRS still surprises me.

If you are only starting to learn about CIRS, you may have started to realize that there's a lot of misinformation about it on the internet. It's easier to find misinformation than it is to find the facts. When it comes to treating CIRS, I stand on the shoulders of giants. Dr. Ritchie Shoemaker deserves a Nobel Prize for outlining CIRS symptoms and the treatment protocol. Everything I write about in this post, I learned from him.

Dr. Shoemaker developed the Shoemaker protocol, the only CIRS treatment that's been studied scientifically.

I'll repeat that as it is so important – the Shoemaker Protocol is the only CIRS treatment that has been scientifically studied. Not only that, but it has also gone through the peer review process. This means other practitioners in the field have studied it and agree that it works.

The Shoemaker Protocol is broken down into twelve separate steps. The steps need to be done in order as each step depends on the one previous..

The **twelve steps in the CIRS treatment protocol** are:

- | | |
|------------------------------------|---|
| 1. Removal from exposure | 7. Correct MMP9 |
| 2. Treat with binders | 8. Correct VEGF |
| 3. Treat MARCoNS | 9. Correct C3a |
| 4. Correct anti-gliadin antibodies | 10. Correct C4a |
| 5. Correct androgen levels | 11. Correct TGF beta 1 |
| 6. Correct ADH and osmolality | 12. Vasoactive intestinal polypeptide (VIP) nasal spray |

THE CIRS TREATMENT PROTOCOL

STEP #1 – REMOVAL FROM EXPOSURE

Step 1 is about identifying exactly what is causing CIRS in your body and finding out if you are still being exposed. For a lot of CIRS patients, the cause is water-damaged buildings. Step 1 for these patients with CIRS is removing themselves from the water-damaged building. This could involve remediating their home or moving to a new location that does not have water damage or mold exposure.

This is the most important step of the entire protocol. If you don't remove yourself from exposure, you're **never** going to see any improvement.

How do you know if you're dealing with an ongoing exposure to biotoxins?

Short answer: you don't. At least not without proper testing. Unless the water damage is severe, you're not going to see or smell it. The only reliable way to know if your home has water damage is to test for it.

How to properly test your home

Don't hire a local company. They're incredibly expensive and the vast majority of them use a method known as air sampling. **Air sampling is worse than useless** – missing more than 99% of **actual water damage**.

Instead, work with a knowledgeable CIRS practitioner who can direct you toward the most appropriate type of testing. **EnviroBiomics** is the go-to company for testing. An added benefit is with proper guidance, you can perform their testing by yourself for a fraction of the cost of a remediation company.

EnviroBiomics uses a testing method called **DNA-PCR**. This testing method determines whether or not your home has water damage. Please do not use other testing methods. They have not been backed by research – at least not to the extent that **DNA-PCR** lab testing has.

Once you're free from an ongoing exposure, you can comfortably move through the remaining steps of the Shoemaker protocol. Next, we dive into step 2 – treating with binders.

THE CIRS TREATMENT PROTOCOL

STEP #2 – TREAT WITH BINDERS

Let's revisit high school chemistry. Chemical substances are made up of positive and negative ions. Like charges (ie positive+positive or negative + negative) repel, but opposite charges (ie positive + negative) attract, or bind to each other.

Biotoxins – the stuff we're trying to bind and remove from your body – have a negatively charged ionic structure.

Therefore, if binding is going to occur, the binding agent needs to have a positively charged ionic structure to bind to the negative charge of the biotoxins. If their ionic structure is the same, they won't bind.

There are only two binders that have been clinically studied in CIRS treatment:

1. Cholestyramine
2. Welchol

Cholestyramine and Welchol have a positively charged ionic structure.

Here at Flourish Clinic, I have formulated a specific supplement composed of okra and beets. While it has not been peer-reviewed, I continue to see significant improvement in my patients' VCS scores after starting this supplement. Even better, my patients do not experience the same side effects that so many do when taking cholestyramine and Welchol.

There are many other natural binders that claim to work. However, these natural binders like charcoal, bentonite clay, and chitosan have a negative charged ionic structure. As a result, they will not bind to the biotoxins.

How long do you need to take binders?

Before starting binders, take a **visual contrast sensitivity (VCS) test**.

VCS testing measures how your brain processes contrast. Mold illness or biotoxin illness affects the nerve that communicates contrast to your brain. It's an inexpensive way to find out if mold is behind your illness and to track your progress as you start on the binders.

You will continue taking binders until your VCS test normalizes. This typically takes anywhere from 4-16 weeks – assuming you aren't re-exposed. Once you pass the VCS test you can stop taking binders.

VCS APTitude© Screening Test

www.survivingmold.com

Date:

Name:

Birth Date:

Email:

Gender:

Age:

Race:

VCS Left Eye

	A	B	C	D	E
9	✗	✓	✗	✗	✗
8	✗	✓	✓	✗	✗
7	✗	✓	✗	✗	✗
6	✓	✓	✓	✓	✗
5	✓	✓	✓	✓	✗
4	✓	✓	✓	✓	✗
3	✓	✓	✓	✓	✓
2	✓	✓	✓	✓	✓
1	✓	✓	✓	✓	✓

VCS Right Eye

	A	B	C	D	E
9	✗	✗	✗	✗	✗
8	✗	✗	✗	✗	✗
7	✗	✓	✓	✓	✗
6	✓	✓	✓	✗	✗
5	✓	✓	✓	✓	✗
4	✓	✓	✓	✓	✗
3	✓	✓	✓	✓	✓
2	✓	✓	✓	✓	✓
1	✓	✓	✓	✓	✓

Result: Fail

THE CIRS TREATMENT PROTOCOL

STEP #3 – TREAT MARCONS

MARCoNS are a bacterial colony that takes up residence deep inside your nose. The word MARCoNS is an acronym that stands for:

Multiple

Antibiotic

Resistant

Coagulase

Negative

Staphylococci

Unlike other unwelcome bacteria/fungi that may be in your nose, MARCoNS **do not** cause any sort of sinus-related symptoms. MARCoNS affect a hormone known as Melanocyte Stimulating Hormone (MSH).

A brief introduction to MSH

MSH is the most important hormone you've never heard of. It regulates your innate immune system and is incredibly anti-inflammatory. The chronic inflammation and overactive immune response from CIRS is due to low levels of MSH.

MSH is controlled by leptin in the pituitary gland. The inflammatory response found in **CIRS damages leptin receptors** in the brain and impairs your body's ability to produce MSH.

The best way to think of MSH is as a mother hormone because it gives birth to many other important hormones including:

- DHEA – which is responsible for producing other hormones such as estrogen and testosterone;
- Cortisol – the hormone that regulates your body's stress response;
- ADH – or anti-diuretic hormone, which controls how much water the kidneys release

You need healthy levels of MSH to overcome CIRS. MARCoNS prevents this.

How MARCoNS affect your MSH levels

MARCoNS create a biofilm, which is essentially a goo that surrounds the bacteria. The biofilms protect the bacteria from your immune system which would otherwise attack the MARCoNS.

Once MARCoNS have moved in, they release chemicals that break down MSH – rendering the hormone inactive. This results in MSH levels being lowered even more while prompting your immune system to release more inflammation, causing inflammatory response syndrome (CIRS)

With your MSH levels now even lower, your immune system will release cells that result in more inflammation. This contributes to **body aches** like joint pain and chronic fatigue syndrome.

How to get rid of MARCoNS

Remember how the R in MARCoNS stands for resistant? That's because these bacteria are immune/resistant to at least three antibiotics. As well, antibiotics need to directly target the nasal cavity, but by definition broad spectrum antibiotics affect the entire body.

Instead, therapy needs to be targeted directly into the nasal cavity. If you guessed a nasal spray as the route of administration, bonus points for you. The only effective way to treat MARCoNS is to administer therapy into your nose!

EDTA is the recommended course of therapy. EDTA is often used to treat genetically susceptible people with heavy metal toxicity. It is also quite amazing at **dissolving biofilms**. By **dissolving the MARCoNS biofilm**, your immune system can attack the bacterial colony.

To find out if you have MARCoNS and whether or not your treatment is working, you need to test. Everyone with CIRS should be tested for MARCoNS.

Microbiology Dx is my lab of choice for anything to do with MARCoNS. If present, MARCoNS needs to be treated for 4-6 weeks and then retested. Once you've received a negative test result, you can move on to the next step of the Shoemaker Protocol.



THE CIRS TREATMENT PROTOCOL

STEP #4 – CORRECT ANTI-GLIADIN ANTIBODIES

Gliadin is a storage protein (prolamin) for wheat. You can thank gliadin for bread's incredible ability to rise during baking. The typical wheat crop is equally composed of both glutenins and gliadins.

If you suspect you're dealing with CIRS, odds are good that wheat/bread/flour don't agree with your body. If this sound like you, it's because you're creating anti-gliadin antibodies.

This does not mean you have celiac disease. But it does indicate that your immune system is strongly triggered by wheat/bread products.

What's the connection between gluten and CIRS?

Remember the MSH hormone we discussed in step 3?

That same hormone is the reason behind your gluten intolerance. Low levels of MSH (which are a hallmark sign of CIRS) lead to a dysregulation in your immune system (more specifically, your T cells).

The dysregulation results in the production of unnecessary antibodies. Antibodies are small proteins used by your immune system to identify foreign invaders. Normally these antibodies identify and remove invading viruses and bacteria.

However when you have CIRS and the corresponding low MSH levels, antibody production can run wild. As a result, your immune system creates antibodies against food proteins like those found in wheat.

How to correct anti-gliadin antibodies

If you're just starting CIRS treatment, a gluten-free diet is the only way to correct these antibodies. I've created a [guide](#) to making [going gluten-free](#) as comfortable as possible.

As you progress through the CIRS treatment protocol, your MSH levels will start to improve. This will stabilize your immune system's tolerance. Those strange food intolerances you used to have should start to be a thing of the past.

For some of you, the gluten/gliadin intolerance will remain, even after we finish treating your CIRS. If you still find that bread and wheat products don't agree with you, you will need to stay on a gluten-free diet.

THE CIRS TREATMENT PROTOCOL

STEP #5 – CORRECT ANDROGEN LEVELS

Step 5 in the CIRS treatment protocol is all about male hormones known as androgens. Ladies, this does not mean you get to skip this section – androgens are just as important.

Androgens are hormones, present in men and women, that contribute to growth and reproduction. They are best known for their link to male characteristics (like muscle tone and a deep voice).

While there are many different androgens, the one we need to focus on is called dehydroepiandrosterone, or DHEA. DHEA is produced in your adrenal glands, gonads, and brain. CIRS patients tend to have low DHEA levels. This reduces your energy, stress tolerance, and sex drive.

How CIRS affects your androgens

Your testes (men)/ovaries (women) and adrenal glands are the primary sources of androgen production and regulation. CIRS disrupts your hormones which results in the lowered production of stress hormones (like cortisol) and androgens (like DHEA and testosterone).

Both men and women naturally convert some of their DHEA into testosterone. The testosterone then goes through a process called aromatization that converts it into estradiol, which is an estrogen steroid hormone. If this occurs in small amounts, there are no issues.

But CIRS tends to mess this whole process up.

Too much aromatization results in low levels of DHEA and testosterone as well as high levels of estrogens. To increase your energy you need lower estrogen and higher DHEA/testosterone.

Why hormone therapy doesn't work in CIRS

Many people try hormone replacement therapy (HRT) before learning they are dealing with CIRS. These people likely experienced either a worsening of symptoms or no change at all.

That's because low androgens are adaptive/protective.

Only after completing the previous four steps can we start to improve androgens. Do it earlier and the therapy fails to work. The previous four steps have re-balanced your HPA axis. Only now are you ready to increase DHEA and testosterone levels.

How to correct androgens

Following steps 1-4 of the Shoemaker Protocol is often enough to help the body correct its androgen deficiency. Other times, therapeutic intervention is required. DHEA taken at 25-50mg per day is the recommended dose to improve androgen levels in CIRS patients.

Make sure to monitor levels before and after starting supplementation. You're going to want to ensure that the extra DHEA you're receiving from supplementation is not getting pushed down the aromatization pathway and increasing your estrogen levels even further!



THE CIRS TREATMENT PROTOCOL

STEP #6 – CORRECT ADH AND OSMOLALITY

Do you get dizzy after standing up too quickly?

Do you suffer from brain fog?

Do you have an unquenchable thirst? Or need to pee 20+ times a day?

Maybe you've got headaches and migraines that just don't seem to go away...

If you are suffering from any of these symptoms, this section is for you. Step 6 of the CIRS treatment protocol is all about balancing fluids. By this, I mean rebalancing the ways your body controls the amount of sodium (salt) and water within its cells and tissues.

As you know, CIRS lowers MSH and disrupts communication between your brain and organs. The Antidiuretic Hormone (ADH) and levels of electrolytes in your blood (osmolality) are the next set of casualties that need to be corrected before you can overcome CIRS.

Osmolality is the measurement of specific electrolytes – namely sodium, potassium, and chloride – within your blood. ADH, also known as vasopressin, is a hormone that controls fluid retention and blood pressure. Both osmolality and ADH are regulated by your HPA axis and MSH levels.

A brief intro into how your body balances fluids

Located at the base of your brain is the hypothalamus. The hypothalamus connects your brain (nervous system) to your hormones (endocrine system).

Your hypothalamus has specific cells called osmoreceptors that respond to electrolyte levels within your blood. If your osmolality is high, it means there's a high concentration of electrolytes in your blood. As a result, your osmoreceptors shrink and release ADH. ADH helps you to reabsorb water which rehydrates your body.

If your osmolality is low, it means your blood contains too much water and not enough electrolytes. In this situation your osmoreceptors swell and block ADH release. When ADH levels drop, the excess water is filtered out through the kidneys and urine.

People who don't have CIRS will either have high ADH and high osmolality, or low ADH and low osmolality. CIRS disrupts this balance which makes ADH and osmolality mismatched. CIRS patients will either have low ADH and high osmolality or high ADH and low osmolality.

What happens when osmolality and ADH are imbalanced?

Depending on whether your osmolality levels are high or low you'll experience the following:

- **High osmolality and low ADH**
 - Increased thirst
 - Increased urination
 - Lots of static shocks
 - Migraines/headaches
- **Low osmolality and high ADH**
 - Fluid retention
 - Swelling of hands, feet, ankles, or legs

How are ADH and osmolality treated?

For the majority of you, ADH and osmolality will balance all on their own as you move through the CIRS treatment protocol. Improving your MSH levels tends to balance ADH and osmolality. But some patients will still have stubborn swelling, headaches, or unquenchable thirst that doesn't seem to get better. This section is for you!

Treatment for ADH and osmolality requires a medication called **Desmopressin (DDAVP)**. Desmopressin is typically used to treat bed-wetting, nighttime urination, and excessive urination in diabetics.

This stage of treatment needs to be monitored very closely by your practitioner. If you notice extreme weight gain shortly after starting DDAVP, you are retaining fluid. Sodium loss is also a potential problem in this stage of CIRS treatment. You'll want to keep a close eye on sodium levels via lab tests as you start this medication.



THE CIRS TREATMENT PROTOCOL

STEP #7 – CORRECT MMP-9

We've bound the mold toxins, treated nasal bacteria, gone gluten-free, and started correcting your hormones.

We now turn our focus towards inflammation. The remainder of the treatment is aimed at lowering specific markers of inflammation.

There are different sources of inflammation

Your family doctor probably measured the inflammation in your body. This was done by testing your C-reactive protein or CRP. It is likely that your CRP levels were shown to be normal.

How could it be normal when you feel inflamed 24/7?

CRP measures inflammation within your adaptive immune system. CIRS is an illness affecting your innate immune system. The adaptive immune system is rarely affected in CIRS. This is why inflammatory markers that evaluate inflammation in your adaptive immune system are always normal.

To properly identify inflammation in CIRS, you need to use testing methods that evaluate inflammation within the innate immune system.

MMP9 is one of the innate immune system inflammatory markers.

Matrix Metalloproteinase 9 – or MMP9

MMP9 is an enzyme that is activated by the white blood cells (macrophages) of your immune system. Too much MMP9 negatively affects the basement membrane of your cells.

Basement membranes form a barrier between cells of the dermis and cells of your muscles. MMP-9 destroys these basement membranes. When your basement membrane is damaged, it basically becomes cheesecloth – very porous.

A porous basement membrane is not good. Inflammatory compounds can penetrate through the membrane and **affect tissues** like joints, muscles, lungs, and even your brain!

How to lower MMP-9

High doses of omega-3 fish oil are the first step in lowering MMP-9. Omega-3 oils are a type of PUFA (poly-unsaturated fatty acid). Our body cannot make omega-3 fats on its own; these need to come from the food you eat.

In CIRS, you'll need a dose of omega-3s well beyond that which you can get from eating a healthy diet. To lower MMP-9, high doses of EPA and DHA are essential. EPA and DHA are two different types of omega-3s. The third type is called ALA. You can get ALA from plants, but EPA and DHA can only be sourced from algae or the fish that eat algae.

The daily required dose to lower MMP-9 is:

- 2.4g of EPA
- 1.8g of DHA

I recommend you take a liquid form of omega-3s for this. If you opt for omega-3 capsules, you'll be swallowing more than 10 pills per day.

When DHA and EPA aren't enough

For some of you, adding high doses of fish oils isn't going to cut it. You're going to need to take your CIRS treatment protocol one step further and follow a low-amylose diet for the next 30 days.

Amyl-what?

When you hear the word amylose, think starch. A low amylose diet is a way of eating that removes all foods that contain starch. This is not a keto diet, but it is moving you in that direction.

A low-amylose diet will also further improve leptin resistance. **Leptin is a hormone** that controls the **hunger signal**. When leptin resistance occurs, not only do you not feel full, but your body doesn't trigger fat burning.

For a lot of CIRS patients, extreme resistance to weight loss is a common symptom. This resistance doesn't usually respond to any dietary intervention.

This is because when you are suffering from a chronic inflammatory condition like CIRS the body releases a large number of tiny molecules called cytokines. Cytokines are small protein molecules that signal and direct an inflammatory response in your body. These cytokines damage leptin receptors within the hypothalamus of your brain.

As a result, you gain weight and can't lose body fat.

How to follow a low-amylose diet

I'll break this section up into two parts: 'foods to avoid' and 'foods to eat'. Focus your attention on the 'foods to avoid' list. If a food is under the avoid section, you should not eat this food for the next thirty days.

Foods to Avoid

- Roots and Tubers: sweet potatoes, white potatoes, beets, peanuts, carrots
- Bananas
- Wheat and wheat-based products: Breads, pastas, cookies, cakes, etc.
- Rice
- Oats
- Barley
- Rye
- Foods with added sugars: Corn syrup, maltodextrin, sugar, sucrose

Foods to Eat

- Corn
- Onions and garlic
- Vegetables that grow above the dirt: lettuce, tomatoes, beans, peas, cucumbers, celery
- Fruit: All fruit is ok except for bananas
- Meat, fish, and poultry
- Condiments: But only if they're free of added sugars
- Spices
- Eggs
- Dairy
- Nuts and seeds

Ok, there it is, the low amylose diet. Follow this for at least 30-days during the MMP-9 treatment protocol.

THE CIRS TREATMENT PROTOCOL

STEP #8 – CORRECT VEGF

VEGF = Vascular Endothelial Growth Factor. And it's perhaps the most important protein you've never even heard of. VEGF stimulates the development of blood vessels. VEGF is usually only active when you're developing blood vessels as a fetus or to help create new blood vessels after exercise/injury.

In CIRS, a lot of your tissues feel starved of oxygen. This is in part why you're dealing with chronic muscle pains, muscle weakness/heaviness, and fatigue. You can thank low levels of VEGF for this.

Just like with leptin receptors, cytokines also negatively affect VEGF levels. High cytokines = low VEGF. Without adequate levels of VEGF, your tissues are not going to be able to get the oxygen they require. Low oxygen levels in your tissues results in:

- Brain fog, fatigue,
- Muscle aches,
- The inability to recover from any sort of exercise.



How to increase your VEGF levels

For most people VEGF levels increase after completing the previous seven steps. However, if you are still struggling with physical exertion, pay close attention to this section.

GET stands for Graded Exercise Therapy. Well-meaning doctors usually recommend it to treat chronic fatigue syndrome. Unfortunately, [graded exercise therapy never works](#). In fact, it almost always makes your symptoms worse.

But this time it won't!

GET didn't work for you in the past because the chronic inflammation caused by CIRS kept your VEGF at ultra-low levels. So no matter what you did you were never able to recover from any sort of exercise, no matter how simple. But now that you've addressed the inflammation caused by CIRS GET will work for you.

How to make graded exercise therapy (GET) work for you

You need to know one thing:

Don't push it.

It's important to keep this in mind as you increase your VEGF.

Always work below your anaerobic threshold. If you are exercising and can't hold a normal conversation because you're so out of breath, you're working too hard. **Don't push it!**

Every person has different levels of fitness. For some, clapping your hands could be the edge of your exercise tolerance zone. For others, a light jog is possible. Meet yourself where you're at. This is a marathon. Not a sprint.

How often and for how long should you be exercising?

Let your recovery time guide you. If you have recovered and maybe even feel energized a few hours after exercise, your frequency and intensity are on point. But if you notice an increase in fatigue or pain levels, or you feel wiped for a couple of hours after exercise, dial it back.

As long as you don't push it and stay in that sweet spot your capacity for exercise will increase. Then – and only then – can you increase your exercise frequency and intensity.

The type of exercise you choose is not important. Pick the one you enjoy the most. Walking may be your starting point. And that's ok. Don't push it. Slowly scale up your exercise as your energy increases. When that happens, you know your VEGF is on the rise!

THE CIRS TREATMENT PROTOCOL

STEP #9 & #10 – CORRECT C3A & C4A

Steps 9 and 10 of the CIRS treatment protocol focus on rebalancing the complement system. The “C” in C4a and C3a stands for complement. Your complement system is an integral part of your innate immune system.

Remember, the complement system is an innate immune system reaction. This means that it doesn’t adapt; it sends out the same inflammatory response regardless of what the invading microbe may be.

Lab testing for CIRS usually reveals elevated levels of both C3a and C4a. Bringing these two markers back into normal range is the focus of steps 9 and 10 of the CIRS treatment protocol.

How to lower C3a

Lowering C3a requires high doses of statin medication – a medication more commonly associated with lowering the risk of heart disease. There’s a long list of **complications and unwanted effects associated with statin use**. However, these unwanted effects come with long-term use, and you will only be taking statins for a couple of months.

Why statins?

High doses of statin medications help to reign in your innate immune system. During step nine of the CIRS treatment protocol you’ll often note an improvement in cognitive function.

One side effect of statin medication that you need to worry about is the significant decrease in the production of coenzyme Q10 (CoQ10). Your mitochondria needs CoQ10 to produce ATP (cellular energy). To avoid low levels of CoQ10 start a supplemental dose of 150-300mg for two weeks before starting statin therapy. Continue taking CoQ10 for the entire time you’re on a statin medication.

Many practitioners (including myself) now recommend VIP nasal spray to lower both C3a and C4a.

How to lower C4a

In the early days of the CIRS treatment protocol, medication Procrit (or EPO) was used to lower C4a. In the past Procrit was used by athletes as a performance-enhancing drug to improve their cardiovascular endurance. However, as Procrit can increase the risk of clot formation it has fallen out of favor .

Today, most practitioners use Vasoactive Intestinal Polypeptide (VIP) to lower C4a levels. I'll speak in great detail about VIP in step twelve.



THE CIRS TREATMENT PROTOCOL

STEP #11 – CORRECT TGF BETA-1

The protein **TGF beta 1** helps your body:

- Grow cells
- Divide cells (proliferation)
- Change cells from one type to another
- With the programmed death of cells (apoptosis)

Much like the inflammatory markers C3a and C4a, TGF beta 1 plays a very important role in the regulation of your immune system – especially your innate immune system. And because TGF beta 1 has such a profound effect on many different cellular functions, too much of it causes major problems between your innate and adaptive immune systems. The resulting effect – as I'm sure you've already guessed – is elevated levels of inflammation.

Most people with CIRS have elevated TGF beta 1. Out of all the other inflammatory markers we've already worked to lower, TGF beta 1 is the most profound. Bringing this marker back into range will help to improve the majority of your remaining symptoms.

Elevated levels of TGF beta 1 can also be what's causing your reaction to gluten. There is a chance that once we correct TGF beta 1 you will be able to eat gluten again. However, there is also a chance that a reaction to gluten will remain, in which case I will recommend sticking with a gluten-free diet.

How to correct TGF Beta 1

High levels of TGF beta 1 are lowered through the use of the high blood pressure medication Losartan (Cozaar). Many practitioners (including me) also recommend VIP nasal spray either with Losartan or on its own.

THE CIRS TREATMENT PROTOCOL

STEP #12 – VIP NASAL SPRAY

VIP is the antidote to your remaining symptoms. You see, VIP has the ability to build back the grey matter of your brain that CIRS slowly chipped away. Aside from building back your brain, VIP also:

- Reduces elevated levels of MMP9, TGF beta-1 and C4a;
- Raises low levels of VEGF;
- Normalizes clotting abnormalities, including acquired von Willebrand's;
- Regulates the pituitary systemic axes involving ACTH/cortisol and ADH/osmolality

Before starting VIP nasal spray, be sure you meet the following criteria:

1. HERTSMI-2 score <10
2. Negative MARCoNS colony
3. Normal VCS eye test

Do not start VIP until you meet all of these criteria.

VIP is the magic bullet in CIRS treatment. To be clear, by the time you reach this stage of treatment, you should already have significant symptom improvement. VIP corrects the final deficiencies you experience. Perhaps even more amazing, VIP use in CIRS patients [safely restored lost grey matter](#) in the brain.

Some patients need to use VIP for a month. Others may use it for over a year. The recommendation is to take VIP spray until all your remaining symptoms have improved.

CONCLUSION

You've reached the end of this ebook. Well done. You're now more prepared to navigate the CIRS landscape.

To recap, this eBook covered:

- 1. The Root Causes** of CIRS, including environmental triggers like water-damaged buildings, and how these contribute to chronic inflammation.
- 2. Identifying CIRS Symptoms** with a simple self-assessment tool based on symptom clusters. This will help you recognize if CIRS might be a factor in your health.
- 3. Practical Steps for Proper Testing**, including insights on how to discuss symptoms with healthcare providers.
- 4. Common pitfalls in Testing** including why urinary mycotoxin testing does not work.
- 5. The Shoemaker Protocol:** the scientifically proven treatment that works, and how to ensure you're working with the right practitioner.

By this point you should have a good understanding of what CIRS is, and its many accompanying symptoms. You know what testing to look for and what to avoid.

However, what I hope is your key takeaway is that help is available. The Shoemaker Protocol works. I have seen it work in my clinic, time and again. After following all 12 steps, my patients get their lives back.

This is because the Shoemaker Protocol is a research-backed treatment that provides accurate testing and proven treatment. When you are in the hands of the right Shoemaker Protocol practitioner, you are on the path to getting better.

If you need more help navigating CIRS, please consider booking a complimentary call with one of our Shoemaker Certified Practitioners.

BOOK APPOINTMENT

Wishing you all the best on your CIRS journey,

MARK, JANE, ERIN, SHEENA, AND EVE