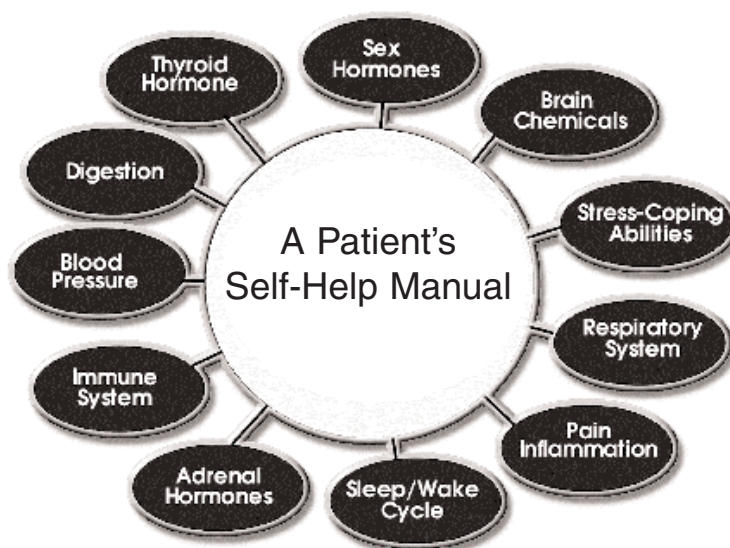

Treating and Beating Fibromyalgia & Chronic Fatigue Syndrome

A Patient's Self-Help Manual

Dr. Rodger H. Murphree D.C., C.N.S.

Treating and Beating Fibromyalgia & Chronic Fatigue Syndrome



By Dr. Rodger H. Murphree D.C., C.N.S.

Many manufacturers and sellers claim trademarks on their unique products. When these trademarks appear in this book and we are aware of them, we have used initial capital letters (e.g., Prozac) for designation.

Endnotes designated in the text of this book can be found at the end of each corresponding chapter. Patient testimonials are based on actual experiences as observed by the author. Patient names have been changed to protect privacy.

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This book and the advice given are not intended to take the place of your physician's. I recommend all patients consult with a medical doctor before discontinuing any prescription medication.

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Introduction

This manual is designed to be a companion to my book, *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome*. My purpose in writing this manual is to provide you with a step-by-step approach for beating your illness. To get the most out of this manual, I strongly recommend that you read my book, *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome*.

A New Kind of Medicine

When I first began practicing fourteen years ago, I'd never heard of Fibromyalgia or Chronic Fatigue Syndrome. Fibromyalgia was never mentioned in any of the medical textbooks we used in our studies. Then, eight years ago, a patient was referred to me who changed my life forever. She was suffering from a strange collection of symptoms: diffuse pain throughout her body, headaches, menstrual irregularities, allergies, chronic infections, insomnia, depression, digestive problems, and unrelenting fatigue. After several years of being passed from one doctor to the next, she had recently been diagnosed with Fibromyalgia by a local rheumatologist.

Though medications had been recommended to her, they were mostly for covering up the various symptoms she was

2 A Step-by-step How-to Guide ---

experiencing. A friend told her about me and how I had helped her overcome chronic headaches. Mrs. Jones* had turned to me in desperation. Her Fibromyalgia symptoms were getting worse and no one seemed to be able to help her.

I read everything I could find on Fibromyalgia Syndrome (FMS) and Chronic Fatigue Syndrome (CFS). Fortunately, I was not aware that there was “no cure” for Fibromyalgia. I just did what I had been doing with all of my patients. I treated the whole person from the inside out.

Three months later, Sheila was totally well. She no longer had pain, insomnia, fatigue, allergies, or any of the other symptoms that had plagued her. She was ecstatic, and so was I. I quickly began to get dozens of Fibromyalgia and Chronic Fatigue Syndrome patients. I continued to learn, refine, and update my Fibromyalgia and Chronic Fatigue Syndrome treatment protocol.

Some patients got well. Some did not. Although I was happy with my successes, I was more disturbed about the failures. Why did some patients get well while others did not? I continued to search for answers. I found other chiropractors, nutritionists, massage therapists, and medical doctors who were also searching for answers. It became clear to me that I had to think “outside the box” to effectively treat Fibromyalgia and CFS. These illnesses do not come with a neatly packaged set of symptoms that fit into an insurance code book. They demand a new way of thinking.

I decided I would open my own medical practice. This practice was based on integrating prescription and natural therapies

*This individual's name has been changed for the purpose of confidentiality.

(integrative medicine) for the prevention and treatment of disease. I learned a great deal about integrating traditional and alternative methods. I learned firsthand how prescription medications could provide relief for many common illnesses. Some prescription medications were tremendously helpful, including natural Bio-identical hormones (tri-estrogen and progesterone cream), Armour thyroid, T3 therapy, low-dose Cortef, proper sleep medications (only after 5HTP, melatonin, or other naturals didn't work), antibiotics for acute bacterial infections, and cortisone for acute back pain and respiratory infections.

Unfortunately, I also learned that medications have side effects and don't always work. A majority of our patients were medical misfits who had already been to dozens of doctors and were therefore on a variety of prescription medications. Many of these medications were more harmful than helpful. I eventually realized that prescription medication didn't offer much hope for these medical misfits. I knew that correcting the person's biochemistry was the key to restoring a person's inborn healing mechanisms. Prescription medications could, in some cases, be helpful, but they could never be better than our own self-regulating, God-given healing mechanisms. The medical practice continued to grow, and we moved onto the campus of a major hospital in Birmingham, Alabama. Red tape, insurance demands, and an ever-increasing financial overhead started to affect how we practiced. Eventually, we became so overwhelmed with patients that we fell back into the conventional medical paradigm of 10–15 minute office visits ending with more prescriptions (either nutritional or medical). Patients were now on dozens of supplements and prescription medications for a variety of symptoms. We had lost some of the original ideas that prompted me to start the medical practice.

I sold my interest in the medical practice and, with great trepidation, opened my own one-man practice once again. How was I going to continue to see patients with complicated illnesses (something I feel called to do) without the aid of prescription medications? I would soon find that nutritional medicine can and does hold its own when paired against chronic illnesses.

I found, through trial and error, that the less I referred to my old medical clinic, the better many of my fibromyalgia patients did. The reasons were many, but mainly because the fewer medications the patient was on, the easier it was to restore her own self-healing mechanisms. This doesn't mean I don't refer to medical doctors. I often do. But now that I've been on both sides of the fence (conventional medicine and nutritional medicine), I know that the type of nutritional medicine I practice works! Even if conventional medicine continues to say it doesn't.

I had come full circle. I now know that the way to feel better (and get well), was to get healthy from the inside out. So I wrote a book all about why nutritional medicine works, *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome*.

Patients now call, email, or travel from all over the world to consult with me. Why? Because my program works! These "medical misfits" have usually been to dozens of medical doctors, including those at Mayo and John Hopkins. Yet, conventional medicine has failed them. But some little chiropractic nutritionist in Birmingham, Alabama, is able to help them!

There is no doubt that conventional medicine saves thousands of lives each year. Conventional medicine excels at life-saving

treatments. It is often effective in alleviating many of the symptoms associated with certain illnesses. However, no one is born with a Prozac deficiency, and treating symptoms doesn't translate into better health. Conventional medical therapies often attempt to mop the wet kitchen floor (symptom) while ignoring the leaky roof (cause).

The way to beat FMS and CFS is to get healthy. This manual is designed to help you uncover the nutritional or biochemical disorders that are making you sick. Once you start repairing these disorders (correcting the cause[s]), miracles can happen. You can get your life back. You can feel good again!

I hope you find that this manual and its approach will help you get well, just as it has helped thousands of patients around the world.

Chapter 1

Fibromyalgia Syndrome

I don't treat illnesses. I treat people! No matter the illness, most individuals will get well by concentrating on getting healthy from the inside out, correcting causes, and not merely covering up symptoms.

– Dr. Rodger H. Murphree, D.C., C.N.S.

Fibromyalgia (FMS) is characterized by diffuse muscle pain, poor sleep, and unrelenting fatigue. Other symptoms include poor memory, depression, irritable bowel, chemical sensitivities, allergies, chronic infections, and headaches. Leading FMS researchers estimate that 2–4% of the general population suffer from this syndrome. Ninety percent of those diagnosed with FMS are women. The stiffness and pain associated with FMS usually appear gradually and become worse, with additional physical, emotional, and/or mental fatigue. The soft tissue and muscles of the neck, shoulders, chest and rib cage, lower back, and thighs are especially vulnerable. This pain can be mild and annoying, or severe and disabling.

FMS shares some of the symptoms of chronic fatigue syndrome (CFS). In fact, 70% of patients diagnosed with FMS also meet all of the diagnostic criteria for CFS.

DIAGNOSTIC CRITERIA FOR FIBROMYALGIA

(These criteria were first proposed in 1990 by the American College of Rheumatology.)

1. *History of Widespread Pain*

Pain is considered widespread when all of the following are present: pain in the left side of the body, pain in the right side of the body, pain above the waist, and pain below the waist. In addition, axial skeletal pain (cervical spine, anterior chest, thoracic spine, or low back) must be present. In this definition, shoulder and buttock pain is considered as pain for each involved side. Low back pain is considered lower segment pain.

2. *Pain in 11 of 18 Tender Point Sites on Digital Palpation*¹

Diagnoses have been missed because many individuals with FMS meet some of the criteria but not all of them. Most of these individuals have other symptoms associated with FMS not explicitly outlined in the ACR criteria. They might have insomnia, irritable bowel, fatigue, mental confusion, and only four of the 18 tender points. Or they might have insomnia, fatigue, and five reproducible tender points. Although the minor criteria represent the most frequent and usual symptoms associated with FMS, they don't account for all of the various conditions seen in FMS patients.

The symptoms of FMS and CFS don't fit neatly into a medical how-to book. This frustrates many doctors, but it doesn't matter to me whether or not patients have 18 reproducible trigger points. If they have trouble sleeping (falling asleep within 30 minutes and sleeping through the night) and have chronic pain, then they either have FMS or they're at high risk for developing the illness.

POTENTIAL SYMPTOMS OF FMS

- **Sleep disturbances:** Sufferers might not feel refreshed despite getting adequate amounts of sleep. They might also have difficulty falling or staying asleep.
- **Stiffness:** Body stiffness is present in most patients. Weather changes and remaining in one position for a long period of time contribute to the problem. Stiffness might also be present upon awakening.
- **Headaches and facial pain:** Headaches may be caused by associated tenderness in the neck and shoulder area or in the soft tissue around the temporomandibular joint (TMJ).
- **Abdominal discomfort:** Irritable bowel syndrome, with such symptoms as digestive disturbances, abdominal pain and bloating, constipation, and diarrhea, might be present.
- **Irritable bladder:** Patients might have an increase in urinary frequency and a greater urgency to urinate.
- **Numbness (parathesia):** Symptoms include a prickling, tingling, or burning sensation in the extremities.
- **Chest pain:** Muscular pain at the point where the ribs meet the chest bone might occur.
- **Cognitive disorders:** The symptoms of cognitive disorders may vary from day to day. They can include “spaciness,” memory lapses, difficulty concentrating, word mix-ups when speaking or writing, and clumsiness.
- **Chemical (environmental) sensitivity:** Sensitivities to light, noise, odor, and weather are often present, as are allergic reactions to a variety of substances.
- **Disequilibrium:** Difficulties in orientation may occur when standing, driving, or reading. Dizziness and balance problems might also be present.

A SAMPLE OF 1,000 FMS PATIENTS

Carol Jessop, MD, reports that a sample of close to 1,000 of her FMS patients shows that they suffer or suffered from the following: ²

- muscular pain (100%)
- poor sleep and fatigue (nearly 100%)
- depression (nearly 100%)
- cold hands and feet with poor circulation, known as Raynaud's syndrome (40%)
- anxiety (24%)
- elevated temperature (10%)
- low temperature, suggesting low thyroid and metabolism (65%)
- low blood pressure, suggesting dysautonomia and poor adrenal function (86%)
- white spots on their nails, suggesting low zinc and poor digestion or malabsorption (85%)
- tender thyroid (40%)
- swollen lymph nodes, suggesting an immune dysfunction (18%).
- irritable bowel syndrome (73%)
- severe headaches, usually associated with low magnesium and low thyroid and adrenal hormones (50%)
- dry eyes, suggestive of allergies (18%)
- osteoarthritis (12%)
- rheumatoid arthritis (7%)
- yeast in the stool (82%)
- parasites in the stool (30%)

- irregular periods, suggestive of poor nutrition (60%)
- TMJ syndrome (25%)
- endometriosis, suggestive of estrogen dominance and/or liver dysfunction (15%)
- restless leg syndrome, suggestive of low magnesium (30%)
- multiple chemical sensitivities, suggestive of liver dysfunction (40%)
- interstitial cystitis (25%)
- irritable bladder (15%)
- mitral valve prolapse (75%)

Just as interesting are the symptoms her patients had before developing FMS:

- constipation (58%)
- bloating, gas, and/or indigestion (80%)
- heartburn (40%)
- irritable bowel syndrome (89%)

Recommended Reading

- *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome* by RH Murphree, DC, CNS; 2003.

Resources

- You are invited to visit my website, www.DrRodger.com .
- American College of Rheumatology's website, www.Rheumatology.org .

NOTES

1. American College of Rheumatology website, June 2004.
2. From author's notes: Fibromyalgia Workshop. Speaker: Leon Chaitow, 2000.

Chapter 2

Chronic Fatigue Syndrome

Chronic Fatigue Syndrome (CFS) shares many similarities with FMS. Several studies have suggested that they are the same illness. One study comparing 50 CFS patients with 50 FMS patients showed the following symptoms to be the same for both groups: low-grade fever (28%), swollen lymph nodes (33%), rash (47%), cough (40%), and recurrent sore throat (54%). Another study comparing CFS patients with FMS patients showed that brain wave patterns, tender points, pain, and fatigue were virtually identical in both groups.¹

A 1997 study by Allen N. Tyler, MD, ND, DC, muddies the water even further. Ten patients, all of whom met the ACR criteria for FMS, were selected at random for blood testing. They were tested for influenza type-B antibodies, and three of the ten tested positive. Another randomly selected group of ten FMS patients (meeting all the ACR criteria) were tested for antibodies to influenza type-A. Nine of them tested positive.²

DIAGNOSTIC CRITERIA FOR CHRONIC FATIGUE SYNDROME³

Major Criteria

1. new onset of fatigue causing 50% reduction in activity for at least six months
2. exclusion of other illnesses that can cause fatigue

Minor Criteria

1. presence of eight of 11 symptoms, or
2. presence of six of 11 symptoms and two of three signs:

SYMPTOMS

1. mild fever
2. recurrent sore throat
3. painful lymph nodes
4. muscle weakness
5. muscle pain
6. migratory joint pain
7. prolonged fatigue after exercise
8. recurrent headaches
9. neurological or psychological complaints, such as:
 - depression
 - excessive irritability
 - forgetfulness
 - sensitivity to bright light
 - confusion
 - inability to concentrate
10. sleep disturbances
11. sudden onset of symptom complex

SIGNS

1. low-grade fever
 2. non-exudative pharyngitis (sore throat)
 3. tender lymph nodes
-

Due to weakened immunity, individuals with chronic fatigue have terrible problems with energy as well as recurring bouts with the flu, colds, sinusitis, and other immune problems. As with so many complex chronic illnesses, CFS may be aggravated by a wide variety of environmental and physiological challenges. Food allergies, environmental sensitivities (odors), heavy metal toxicity (mercury, aluminum, etc.), yeast overgrowth, parasites, and vitamin/mineral deficiencies can all contribute to CFS.

All of us have been exposed to mono or the Epstein-Barr virus (or other viruses) at one time or another (usually as teenagers), but our bodies are usually strong enough to overcome the exposure. We develop immunity to the virus. We carry the virus around inside of us until we die. Normally, this dormant virus never causes any more problems. It is kept in check by a healthy immune system.

Individuals with CFS aren't able to squelch the normally dormant virus (or other bug), and it begins to raise its ugly head once again. Individuals with CFS may feel like they are walking around with the "flu from hell." They have all the symptoms of a very bad case of the flu. But unlike most cases of the flu, CFS doesn't disappear after one or two weeks.

HOW TO QUICKLY DISTINGUISH BETWEEN FMS AND CFS

A positive EBV panel is a clear indicator that someone has CFS. However, you don't need a blood test to diagnose CFS. If you have chronic fatigue (hard to get out of bed each day), achy diffuse pain, and a lowered immune function (chronic infections), then you either have CFS or you're at high risk of developing it.

The CFS patient usually has chronic infections (sinusitis, upper respiratory, urinary tract infections, colds, flu, etc.) and is sick several times a year. She gets at least two bad infections a year. They will usually have chronic or intermittent sore throats, swollen lymph nodes, and periodic fevers. They usually ache all over. FMS patients may ache all over as well, but they usually have specific areas (neck, low back, etc.) that are the most troublesome.

Many CFS patients will also have a sluggish liver (more likely than in those with FMS). Clues that would lead you to suspect a sluggish liver include funny or negative reactions to medications (they take something to put them to sleep, and it wakes them up, or "a little goes a long way"); intolerance to caffeine, alcohol, or odors (the longer they've had the illness, the more sensitive they become to odors, perfumes, gasoline, smoke, cleaners, etc.); and a history of elevated liver enzymes on past blood work. Of course, anyone with hepatitis or fatty liver has a sluggish liver. Long-term prescription-medication therapies can also create a sluggish liver.

CFS AND LIVER DYSFUNCTION

CFS patients are more likely than FMS patients to have a sluggish liver. Clues that would lead you to suspect you may have a sluggish liver include:

- **chemical sensitivities** (see below)
- **funny or negative reactions to medications** (you take something to put you to sleep but it wakes you up, or a little goes a long way)
- **intolerance of caffeine**
- **intolerance of alcohol**
- **intolerance of odors** (the longer patients have had the illness, the more sensitive they become to odors, perfumes, gasoline, smoke, cleaners, etc.)
- **a history of elevated liver enzymes** on past blood work.

CFS patients may have severe chemical sensitivities and may not be able to tolerate nutritional supplements. They may have allergic reactions to even the purest multivitamins. This complicates things. It is best to start slow, especially with individuals who have severe chemical sensitivities.

Further Information

Please see Chapter 14, *Liver Dysfunction*.

Please see Chapter 8, *Immune System Dysfunction*, for the Immune Function Protocol.

Recommended Reading

- *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome* by RH Murphree, DC, CNS; 2003.
- *From Fatigued to Fantastic* by Jacob Teitelbaum, MD.

NOTES

1. J Rheum 1992 and CIBA Foundation Symposium, 173.
2. Altern Med Rev, 1997.
3. Centers for Disease Control.

Chapter 3

Looking for Clues

Okay. It's time to put your detective caps on. As you read through this chapter, look for clues that are intended to help you solve your health problems. The following questionnaire is the same one I use in my practice. You don't have to physically fill it out. However, I strongly recommend you read all the way through the questionnaire and take notes as you go. Then, at the end of the questionnaire, use your notes to help direct you to the chapters you should focus on. Happy hunting.

FIBROMYALGIA AND CHRONIC FATIGUE NEW PATIENT INTAKE FORM

(WITH COMMENTS IN ITALICS)

NOTE: THIS FORM APPEARS WITHOUT COMMENTS IN THE APPENDIX

What medications are you taking? Please list them here:

Most CFS/FMS patients are on at least six prescription medications. These medications may cause all sorts of side-effects: anti-depressants can cause anxiety; benzodiazepines (anxiety medications like Xanax or Klonopin) can cause amnesia and depression; NSAIDs (Celebrex, Alleve, Mobic, etc.) can cause intestinal permeability;

cholesterol medications (Lipitor, Zocor, and others) can cause diffuse muscle pain; etc. There are dozens of prescription medications that will make your CFS/FMS worse.

Specific medications and their side effects are discussed in detail in Chapter 4, Conventional Medical Therapies.

Do you have trouble falling asleep? ___Yes ___No

Do you have trouble staying asleep? ___Yes ___No

When did you first start having trouble sleeping (months, years ago)?

These are perhaps the three most important questions on this intake form. If a person is having problems with sleep (can't fall asleep and stay asleep without medication) and has diffuse pain, it is a good bet that she has FMS.

If she does consistently sleep through the night without medications (or naturals) but complains that she just doesn't have any energy, gets sick a lot, and has achy pain, she most likely has CFS (a person can have both illnesses).

These are important clues. Both illnesses are treated with high doses of nutritional supplements. However, I'm always relieved to see that patients have checked that they are having trouble with their sleep. I know if I can get them going into deep sleep (and I usually can) and build up their serotonin levels (with 5HTP), these individuals will feel better in only a couple of weeks. I find that the classic symptoms associated with FMS—insomnia, depression, pain, fatigue, anxiety, and irritable bowel syndrome (IBS)—respond quickly to restored serotonin levels.

It takes longer and is harder to get these same results in true CFS patient. I define a true CFS patient as having a severely compromised immune system and having normal serotonin levels. These individuals usually have a sluggish liver (indicated by funny reactions to medications, odor aversions, and chemical sensitivities), catch every cold or flu that comes around, suffer from chronic infections, and have zero tolerance to stress. But they don't have any trouble sleeping.

An in-depth discussion on sleep concerns is covered in chapter 5, Sleep Disorders.

What over-the-counter or prescription medications have you taken for sleep?

<input type="checkbox"/> Ambien	<input type="checkbox"/> Zanaflex	<input type="checkbox"/> Trazadone	<input type="checkbox"/> Sonata
<input type="checkbox"/> Tylenol PM	<input type="checkbox"/> Elavil	<input type="checkbox"/> Neurontin	<input type="checkbox"/> Xanax
<input type="checkbox"/> Flexeril	<input type="checkbox"/> Doxepin	<input type="checkbox"/> Klonopin	<input type="checkbox"/> Ativan
<input type="checkbox"/> Benadryl			

Other: _____

If you're on sleep medications, I suspect you have a serotonin deficiency. Some of these drugs promote deep, restorative sleep (the key to getting well) and some don't. Those in bold promote deep, restorative sleep. Those in regular type, don't. All of these medications have potential unwanted side effects. These side effects could be making your condition worse.

If you're taking any of the above medications, then please read about them in chapter 4, Conventional Medical Therapies, and chapter 5, Sleep Disorders.

**NEUROTRANSMITTERS/MOOD DISORDERS
(BRAIN CHEMICALS)**

Are you taking one or more antidepressants? Yes No

If so, please list them here:

Have you taken other antidepressants in the past?

Yes No

If so, which ones? Prozac Paxil Celexa

Lexapr Wellbutrin Effexor Zoloft

Were they helpful? Please describe in detail (didn't help, had side-effects, stopped working, etc.):

Do you crave carbohydrates, starches, and/or sugar?

Yes No

A positive answer suggests a serotonin deficiency. This may also point to a yeast overgrowth problem. The amino acid tryptophan (5HTP) is best absorbed when combined with carbohydrates (sugar). Sugar or starches act as sedatives. This may be why people under stress attempt to self medicate through over eating (especially starches). Sugar feeds yeast, and those with a yeast overgrowth will often have sugar cravings.

Do you get white spots on your fingernails? ___Yes ___No ___Not sure

White spots on the nails are a sign of a zinc deficiency. A zinc deficiency leads to elevated copper levels. Excess copper can create anxiety, nervousness, insomnia, and fatigue. Long-term elevated copper levels lead to depression.

*For a thorough discussion on vitamins, minerals, amino acids, and essential fatty acids, please see my book, *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome*.*

For further information on medical therapies and mood disorders, see chapters 4 and 12.

BOWEL FUNCTION

Do you have normal, daily bowel movements (at least one bowel movement a day)? ___Yes ___No

Do you have loose bowels (diarrhea), constipation, or perhaps both?
Please describe:

If a patient is constipated, it usually means he is deficient in magnesium. Once he starts taking 600–700 mg of magnesium, normal bowel function will return. The CFS/Fibromyalgia Formula has 700 mg of magnesium.

Have you been diagnosed with Irritable Bowel Syndrome (IBS)?
___Yes ___No

IBS usually goes away after one to two weeks on my program. There are more serotonin receptors in the intestinal tract than in the brain! Serotonin helps control the speed at which food is broken down and moved through the intestinal tract. A serotonin deficiency causes IBS. Restoring normal serotonin levels with 5HTP usually cures IBS once and for all.

Do you ever have floating stools (floats on top of toilet water)?
___Yes ___No

Floating stools are a sign that a person is not breaking down the fats in her diet. She might have problems with her gallbladder (or no gallbladder). This person should take pancreatic digestive enzymes or bile salts with each meal.

Specific information regarding bowel function is discussed in chapter 7, Digestion and GI Disorders.

IMMUNE FUNCTION

Check all that apply to you:

- ___ Chronic Sinus Congestion
- ___ Chronic Sinus Infections (2 or more a year)
- ___ Chronic Sore Throat
- ___ Chronic Colds or Flu infections each year
- ___ Chronic Upper Respiratory Infections (Bronchitis, Pneumonia)

Chronic means a minimum of 3–4 times a year.

These items will be checked by true CFS patients. Those with FMS may also have chronic infections. Chronic sinusitis is a common

complaint seen in those with CFS and FMS. I always suspect a low thyroid if someone suffers from chronic sinus infections.

For further information, please see chapter 8, Immune System Disorders.

LIVER FUNCTION

Have you ever had elevated (high) liver enzymes on laboratory blood work? Yes No Not Sure

A “yes” could possibly mean a sluggish liver, usually from taking prescription medications. It could also be due to a fatty liver or hepatitis.

Do you have any funny reactions when you drink alcohol (a little goes a long way, can't drink red wine, etc.)? If so, please describe:

A positive answer suggests you may have a sluggish liver.

Do you have any problems eating raw onions? Yes No

Raw onion can cause problems in individuals with a sluggish liver. The sulphur in raw onions is the culprit.

The day after eating asparagus, do you get a very strong odor when urinating?
 Yes No

This is a sign of a molybdenum deficiency. It is also a sign that a person may be allergic to sulphites.

Do you have hepatitis? ___Yes ___ No

Do you have a fatty liver? ___ Yes ___ No

Do you have funny/strange reactions to medications? ___Yes ___No

Do strong odors (such as gasoline, smoke, cleaning supplies, perfume, etc.) bother you? ___Yes ___No

Answering yes to any of these questions suggests you may have a sluggish liver. Remember that smells are nothing more than invisible chemicals floating in the air. These foreign chemicals must be processed by the liver. The longer you've had the illness, the less your tolerance to certain odors.

If any of these questions apply to you, then I recommend you read chapter 14, Liver Detoxification. If you have severe chemical sensitivities (have funny reactions to drugs or nutritional supplements), then I recommend you read Chapter 14 first, then work through the rest of the manual.

ADRENAL FUNCTION

If you skip a meal, do you feel bad (have headaches, become irritable, get jittery, tired, etc.)? ___ Yes ___No

This is a sign of hypoglycemia (low blood sugar) and adrenal dysfunction. Many of the patients I see aren't hungry in the morning, and instead of eating breakfast, they rely on caffeine to get them going. However, if they don't eat lunch or skip dinner, they become very irritable.

Do you have low blood pressure? ___Yes ___ No ___Don't Know

This is a sign of low adrenal function. It can also occur when taking certain prescription medications (beta-blockers, Topamax, etc.). Low blood pressure causes fatigue and lethargy. Blood helps deliver vital nutrients and oxygen to all the cells in the body, including those in the brain. A normal blood pressure is between 100–120 systolic (top number) over 60–80 diastolic (bottom number). Individuals with low blood pressure need to be drinking 70 ounces (at least) of water a day and using plenty of salt. This will improve their energy.

Do you crave salty foods? ___Yes ___No

A “yes” is a sure sign of adrenal stress. Salt increases the production of certain adrenal hormones. Individuals with low adrenal function will be drawn towards salty snack foods.

Does an increase in stress or stressful situations make your symptoms worse?

___Yes ___No

A “yes” is a sign that a patient’s stress coping account and adrenal glands are severely challenged.

How's your energy level? Choose 1 to 5, with 5 being the best. _____

Low energy (3 or lower) suggests low adrenal function and perhaps low thyroid.

How's your concentration and memory, on the same scale? _____

Individuals who are low in norepinephrine (adrenal hormone) will have poor mental clarity.

How do you feel in the morning?

Refreshed Hung over Exhausted
 Nauseated Achy All Over

Are you hungry in the morning? Yes No

Low adrenaline levels (norepinephrine) will cause decreased mental clarity.

Nausea and a lack of appetite first thing in the morning is a sign of poor adrenal function. People with adrenal deficiency will prefer to skip breakfast. This artificially raises their normally low adrenal cortisol levels and gives them a false boost of energy. They will often use caffeine in ever increasing doses to jumpstart their adrenal glands. The digestion of food requires energy and puts the breaks on fasting cortisol levels, so they skip breakfast.

Nausea in the morning is an indication of low blood sugar levels. It is also a sign (along with not dreaming at night) of a vitamin B6 deficiency.

Please eat breakfast—even something as light as a handful of cashews and an apple. Avoid simple sugars (as we all should) in the morning. You should avoid milk, cereals, fruit juices, muffins, doughnuts, pastries, and other high glycemic foods (simple carbohydrates or starches and sugar laden foods).

For more information, I recommend everyone read chapter 6, Adrenal Fatigue.

DIGESTION

Do you experience any of these?

Bloating: ___ Yes ___ No

Gas: ___ Yes ___ No

Indigestion: ___ Yes ___ No

A “yes” is a sign that you need to be taking digestive enzymes (one with each meal).

Are there certain foods that give you problems (sugar, spicy foods, fruits, meats, fats, dairy, etc.)? If so, please list:

If you answer yes to the question above, please read chapter 10, Food Allergies.

For more information on digestion, please see chapter 7, Digestion and GI Disorders.

DIET

What do you eat for breakfast? Please (honestly) describe here:

What do you eat for lunch? _____

What do you eat for dinner? _____

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What are your usual snack foods (popcorn, ice cream, cookies, potato chips, candies)? Please be honest and specific: _____

Do you drink coffee? If so, how many cups a day and when? _____

Do you drink sodas? If so, how many? _____

Do you drink tea? If so, how many glasses and when? _____

I recommend you review your answers above. The most potent drug we put into our body is the food we eat. Our food turns into the chemicals, hormones (thyroid, serotonin, estrogen, testosterone, etc.), enzymes, and nutrients the body needs on a moment to moment basis. Poor food choices increase the rate of degeneration and poor health. We all know that eating doughnuts and drinking diet coke can't be healthy. I strongly encourage you to clean up your diet. Reduce or eliminate all white foods: sugar, milk, white potatoes, and white bread. Reduce or eliminate caffeine (avoid all sodas like the plague), fried foods, sweets, and processed foods. Try to eat at least 2 fruits and 2 vegetables each day (fresh salads with raw vegetables: broccoli, peppers, tomatoes, etc.). To lose weight, reduce or avoid the high glycemic foods (see appendix). Try to eat fewer processed foods and more natural foods. Shop the outside aisles in grocery stores where you find unprocessed cheeses, meats, vegetables, and fruits. Skip the middle aisles that are stocked with processed foods: potato and corn chips, cereals, sweets, and snacks.

PAIN

Where do you have pain?

- | | | | |
|-----------------------------------|---------------------------------------|--|--------------------------------|
| <input type="checkbox"/> Joints | <input type="checkbox"/> Muscles | <input type="checkbox"/> Neck | <input type="checkbox"/> Hands |
| <input type="checkbox"/> Mid Back | <input type="checkbox"/> Low Back | <input type="checkbox"/> Chest | <input type="checkbox"/> Hips |
| <input type="checkbox"/> Arms | <input type="checkbox"/> Back of Legs | <input type="checkbox"/> Front of Legs | |
| <input type="checkbox"/> Knees | <input type="checkbox"/> Feet | <input type="checkbox"/> Ankles | |
| <input type="checkbox"/> Fingers | <input type="checkbox"/> Head | <input type="checkbox"/> Shoulder | |

Most of the pain associated with FMS goes away once you boost your serotonin levels and begin to consistently go into deep, restorative sleep each night.

The high doses of magnesium (which naturally relaxes muscles), malic acid (which blocks pain), and essential fatty acids (which decrease inflammation) contained in the CFS/Fibro formula (ordering information given at the end of this chapter) also help to quickly reduce the pains associated with FMS and CFS.

I also recommend you get chiropractic adjustments (by a doctor familiar with gentle therapies), physiotherapy (electrical muscle stim, moist heat, and myofascial percussion), and massage therapy.

If you suffer from chronic pain, pay special attention to the Chronic Pain Protocol in chapter 9, Chronic Pain and Inflammation.

INTESTINAL DYSBIOSIS

This is basically a yeast overgrowth questionnaire. I go into more detail about yeast overgrowth in the chapter 13.

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Have you ever been on long-term (more than 2 weeks) antibiotic therapy? Yes No

Have you ever had vaginal yeast infections? Yes No

If yes, when was your most recent infection? _____

Do you have chronic vaginal yeast infections (more than two a year)?
 Yes No

A "yes" strongly suggests a problem with yeast overgrowth.

Are you bothered by memory or concentration problems? Do you sometimes feel "spaced out?" Yes No

Do you feel "sick all over," yet in spite of visits to different physicians, the causes haven't been found? _____

Have you been pregnant two or more times? _____

Have you taken birth control pills? For more than 2 years?
 for more than 1 year? For 6 months to 1 year?

Are your pain symptoms worse on damp, muggy days or in moldy places? Yes No

Do you ever have itchy ears? Yes No

Itchy nose? Yes No

Rectal Itching? Yes No

Do you crave sugar? Yes No

Does eating sugar make your symptoms worse? ___Yes ___No

Do you have rectal itching after eating sugar, fruit, or a lot of starches?
___Yes ___No

Positive answers strongly suggest a problem with yeast overgrowth. Yeast which live in the intestinal tract, including the colon (rectum), feed off of sugar.

Have you ever been on long-term (weeks) steroid therapy (prednisone, cortisone)? ___Yes ___No

These promote yeast overgrowth.

Have you ever been on long-term (month or more) nonsteroidal anti-inflammatory medications (Such as Vioxx, Celebrex, Naprosyn, Advil, Bextra, Mobic, etc.)? ___Yes ___No

If “yes,” suspect intestinal permeability. Intestinal permeability leads to yeast overgrowth. Please see chapter 7, Intestinal Permeability.

For more information on yeast overgrowth, please see chapter 13.

YEAST QUESTIONNAIRE

Please mark your symptoms as follows: MI: mild M: moderate S: severe

_____ feeling of being “drained”

_____ abdominal pain

_____ constipation and/or diarrhea

- _____ **bloating, belching, or intestinal gas**
- _____ indigestion or heartburn
- _____ prostatitis
- _____ endometriosis or infertility
- _____ cramps and/or menstrual irregularities
- _____ premenstrual tension (PMS)
- _____ sore throat
- _____ **recurrent sinus infections**
- _____ chronic hives
- _____ recurrent cough or bronchitis
- _____ nasal congestion or postnasal drip
- _____ **nasal itching**
- _____ **eczema**
- _____ **psoriasis**
- _____ **cystitis or interstitial cystitis**
- _____ pressure in the ears
- _____ **troublesome vaginal burning, itching, or discharge**
- _____ **rectal itching**
- _____ dry mouth or throat
- _____ **mouth rashes, including “white tongue”**
- _____ bad breath
- _____ **foot, hair, or body odor not relieved by washing**
- _____ wheezing or shortness of breath
- _____ urinary frequency or urgency
- _____ burning on urination
- _____ burning or tearing eyes

*I pay particular attention to the highlighted statements.
See Yeast Overgrowth Protocol in chapter 13, Yeast Overgrowth.*

THYROID

Symptoms Checklist

- | | |
|--|--|
| <input type="checkbox"/> fatigue | <input type="checkbox"/> high cholesterol |
| <input type="checkbox"/> headaches | <input type="checkbox"/> cold hands/feet |
| <input type="checkbox"/> migraines | <input type="checkbox"/> changes in skin pigmentation |
| <input type="checkbox"/> PMS | <input type="checkbox"/> irritability |
| <input type="checkbox"/> irregular periods | <input type="checkbox"/> hypoglycemia |
| <input type="checkbox"/> fluid retention | <input type="checkbox"/> severe menstrual cramps |
| <input type="checkbox"/> dry hair | <input type="checkbox"/> low blood pressure |
| <input type="checkbox"/> dry skin | <input type="checkbox"/> frequent colds/sore throats |
| <input type="checkbox"/> hair loss | <input type="checkbox"/> heat and/or cold intolerance |
| <input type="checkbox"/> depression | <input type="checkbox"/> lightheadedness |
| <input type="checkbox"/> decreased memory | <input type="checkbox"/> ringing in the ears |
| <input type="checkbox"/> decreased concentration | <input type="checkbox"/> infertility |
| <input type="checkbox"/> decreased sex drive | <input type="checkbox"/> Irritable Bowel Syndrome |
| <input type="checkbox"/> unhealthy nails | <input type="checkbox"/> low motivation |
| <input type="checkbox"/> constipation | <input type="checkbox"/> frequent infections |
| <input type="checkbox"/> asthma | <input type="checkbox"/> inappropriate weight gain |
| <input type="checkbox"/> allergies | <input type="checkbox"/> difficulty falling asleep |

This questionnaire is helpful but not essential. I pay more attention to blood work (TSH above 3) and low body temperature (below 98 degrees). All of the above can suggest low thyroid.

I pay particular attention to the statements in bold above.

If you suspect you have hypothyroid (low thyroid function), then please see chapter 11, Thyroid Dysfunction.

BRAIN FUNCTION QUESTIONNAIRE

The Brain Function Questionnaire will help show which brain chemicals (neurotransmitters) you've depleted.

The "O" Group

Do any of these apply to your present feelings?

- Your life seems incomplete.
- You feel shy with all but your close friends.
- You have feelings of insecurity.
- You often feel unequal to others.
- When things go right, you sometimes feel undeserving.
- You feel something is missing in your life.
- You occasionally feel low self-worth or self-esteem.
- You feel inadequate as a person.
- You frequently feel fearful when there is nothing to fear.

If three or more of the above apply, then see chapter 12, Mood Disorders.

The "G" Group

Do any of these apply to your present feelings?

- You often feel anxious for no reason.
- You sometimes feel "free floating" anxiety.
- You frequently feel "edgy" and it's difficult to relax.
- You often feel a "knot" in your stomach.
- Falling asleep is sometimes difficult.
- It's hard to turn your mind off when you want to relax.
- You occasionally experience feelings of panic for no reason.
- You often use alcohol or other sedatives to calm down.

If three or more of the above apply, then see chapter 12.

The "D" Group

Do any of these apply to your present feelings?

- You lack pleasure in life.
- You feel there are no real rewards in life.
- You have unexplained lack of concern for others, even loved ones.
- You experience decreased parental feelings.
- Life seems less "colorful" or "flavorful".
- Things that used to be fun aren't any longer enjoyable.
- You have become a less spiritual or socially concerned person.

If three or more of the above apply, then see chapter 12.

The "N" Group

Do any of these apply to your present feelings?

- You suffer from a lack of energy.
- You often find it difficult to "get going."
- You suffer from decreased drive.
- You often start projects and then don't finish them.
- You frequently feel a need to sleep or "hibernate."
- You feel depressed a good deal of the time.
- You occasionally feel paranoid.
- Your survival seems threatened.
- You are bored a great deal of the time.

If three or more of the above apply, then see chapter 12, Mood Disorders.

The "S" Group

Do any of these apply to your present feelings?

- It's hard for you to go to sleep.
- You can't stay asleep.

- You often find yourself irritable.
- Your emotions often lack rationality.
- You occasionally experience unexplained tears.
- Noise bothers you more than it used to; seems louder than normal.
- You "flare up" at others more easily than you used to.
- You experience unprovoked anger.
- You feel depressed much of the time.
- You find you are more susceptible to pain.
- You prefer to be left alone.

If three or more of the above apply, then see chapter 12, Mood Disorders.

IMPORTANT: PLEASE FOLLOW INSTRUCTIONS BELOW

Now that you've finished taking some notes, you're ready to start working through the manual.

As you'll read in the chapters that follow, I place a lot of attention on restoring deep, restorative sleep, adrenal function, and optimal digestion. I recommend that all of my patients begin taking my "Jump Start Package." This is a specialized multivitamin/mineral pack that contains all the needed vitamins, minerals, amino acids, essential fatty acids, malic acid, and extra magnesium needed to help those with CFS and FMS get well. You can order these supplements online at www.DrRodger.com or by calling 1-888-884-9577. Please see appendix for additional information about these supplements.

After you've started these supplements, the next thing to look at is your thyroid. If your pain continues after 3 to 4 weeks, then start to explore leaky gut and the other protocols in chapter 9, Chronic Pain. Those with a compromised immune system will need to implement the protocols in chapter 8, Immune System Dysfunction.

PRIORITIZING WHERE TO START

1. I recommend anyone with severe chemical sensitivities and liver dysfunction read chapter 14, Liver Detoxification, first.
2. I recommend everyone read chapter 4, Conventional Medical Therapies.
3. If you're having trouble falling asleep and staying asleep, or if you're taking sleep medications, then you should read chapter 5, Sleep Disorders, next.
4. I recommend everyone read chapter 6, Adrenal Fatigue, on stress and the adrenals.
5. After reading the chapters above, move on to chapter 7, Digestion and GI Disorders.
6. Now you're ready to implement the protocols in chapter 8, Immune System Dysfunction, if needed (more important for those with CFS symptoms).

7. After 3 to 4 weeks, if you're still having a good deal of pain, it's time to start to implement the protocols in chapter 9, Chronic Pain and Inflammation.
8. Chapter 11, Thyroid Dysfunction, is for those who suspect they have low thyroid.
9. Individuals who continue to have problems and suspect they have food allergies should read chapter 10, Food Allergies.
10. After reading and applying the above protocols, it is now time to tweak your brain chemistry, if needed. Please see chapter 12, Mood Disorders.
11. Some individuals will find that they checked a lot of the questions on yeast overgrowth. These individuals will need to do the above protocols first before attempting to treat their yeast overgrowth (wait at least 4 weeks before beginning yeast overgrowth protocols).
12. Chapter 15, First Days Instruction Sheet, is for wrapping things up. This chapter uses the treatment prescription hand out and recommendations I use in my practice.

Of course I suggest you read the entire manual. Since FMS and CFS involve such a diverse list of symptoms and conditions, many of you will need to do all the protocols in this manual. For instance, some individuals will have osteoarthritis, high blood pressure, and food allergies along with all the symptoms associated with fibromyalgia: pain, poor sleep, depression, IBS, etc. I've

found that the only way to beat chronic illnesses, including FMS and CFS, is to get the person healthy from the inside out. You have to get healthy in order to get well. Yes, I know it sounds too simple to be true. But after working with these illnesses for over eight years, I can tell you as an expert, it really is the only thing that works.

Keep working through the manual until you correct all of your underlying problems. It will be work, but in the end it will be worth it! Good luck and God bless you in your mission to get healthy.

Chapter 4

Conventional Medical Therapies

“Today’s standard, AMA-approved medicine is rooted in treating symptoms, rather than causes. Its dependence on drugs and surgery is ruinously expensive to patients, insurance companies, and society as a whole.”

— Derrick Lonsdale, MD
“Why I Left Orthodox Medicine”

Conventional medical treatments for FMS and CFS is a controversial topic. Consider the following statements from The American College of Rheumatology:¹

“Conventional medical therapies are ineffective and no better than a sugar pill for the treatment of Fibromyalgia.”

“On tricyclic medications Amitriptyline (Elavil): Four controlled trials have evaluated the efficacy of Amitriptyline in Fibromyalgia...the longest trial showed no benefit when compared to placebo. Furthermore, the overall degree of benefit was found to be relatively small in relevant outcomes such as improvement in pain, fatigue, and sleep.”

Of note, 95% of Amitriptyline (Elavil)-treated patients experienced side-effects.

“Furthermore, use of anti-anxiety medications Benzodiazepines (Klonopin, Xanax etc.), corticosteroids (medrol dose packs, prednisone, etc.), and nonsteroidal anti-inflammatory agents (Mobic, Celebrex, Vioxx, Bextra, etc.), and pain medications have been shown to be ineffective and should be generally avoided.”

Most doctors continue to rely on prescription medications to treat fibromyalgia, even though their own studies show they are ineffective and can cause unwanted side-effects.

“And our best therapies Amitriptyline (Elavil) and Cyclobenzaprine (Flexeril) could not be distinguished from placebo after three months of therapy. Long-term, follow-up observations indicated that clinical findings for patients with FMS did not change appreciably after 15 years.”

The ACR has, like many physicians, thrown up their hands and admitted they have little if anything to offer for those suffering fibromyalgia. Yet, many are quick to ridicule nutritional therapies that consistently have been shown to be effective in treating fibromyalgia. The usual reply is that “there are no controlled studies.” Or how about this one: “Nutritional supplements aren’t regulated.”

Traditional medical treatments of FMS and CFS focus on controlling the various symptoms. Physicians generally rely on several different prescription medications, including pain medications of various sorts, muscle relaxers and tranquilizers, antidepressants, and nonsteroidal anti-inflammatory medicines.

NONSTEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs)

Vioxx, Celebrex, Bextra, Etc

NSAIDs can be helpful especially when used for inflammation that comes from traumatic injuries (sprains, strains, accidents, etc.). They can be effective in relieving pain and inflammation associated with chronic pain syndromes, including all forms of arthritis and some symptoms of FMS. However, long term use of these medications can cause a host of unwanted side effects. None of these medications actually correct the cause of pain. In fact they can accelerate joint destruction and cause intestinal permeability (which leads to more inflammation).

Nonsteroidal anti-inflammatories (NSAIDs) such as Bextra, Mobic, Ibuprofen, Daypro, Naprosyn, Celebrex, and Vioxx can cause intestinal permeability. They cover up the symptoms but do not address the cause, and they can actually cause further joint destruction.^{2,3}

Vioxx is Removed from Market

Merck has pulled the drug Vioxx off the market because a long-term clinical trial showed that some patients, after taking the drug for 18 months, developed serious heart problems. The data that ultimately persuaded the company to withdraw the drug indicated

15 cases of heart attack, stroke, or blood clots per thousand people each year over three years compared with 7.5 such events per thousand patients taking a placebo.

Internal memos show disagreement within the FDA over a study by one of its own scientists, Dr. David Graham, who estimated Vioxx had been associated with more than 27,000 heart attacks or deaths linked to cardiac problems.

Studies show that Vioxx users have twice the number of heart attacks as those taking Naproxen. These new drugs which block COX-2 enzymes may promote excessive blood clot formation. It appears that COX-2 enzymes counteract some of the effects of COX-1 enzyme which narrows the blood vessels. This narrowing then causes blood to be more likely to clot.⁴

Controversy has shrouded Vioxx almost since its introduction in 1999. The drug was among the first of the COX-2 inhibitors, which were developed to reduce pain and inflammation without the risk of ulcers and other gastrointestinal side effects posed by aspirin and other over-the-counter medications. Thousands of Americans die every year from internal bleeding caused by the older drugs.

NSAIDs causes 10,000 to 20,000 Deaths a Year

A person taking NSAIDS is seven times more likely to be hospitalized for gastrointestinal adverse effects. The FDA estimates that 200,000 cases of gastric bleeding occur annually which leads to 10,000 to 20,000 deaths each year.⁵

Pfizer's Celebrex and Bextra Don't Protect the Stomach

Studies show that only Vioxx is less damaging to the stomach. Celebrex and Bextra are not. This is one of the dirty little secrets that never got out about Pfizer's two block-buster drugs; they're no safer than older nonsteroidal anti-inflammatory drugs.

New COX-2 NSAIDs Are No Better Than Older Medications

Studies also show that neither drug (Celebrex or Bextra) alleviated pain any better than the older medicines. And the drugs cost close to \$3 a pill. Over-the-counter pain relievers, in contrast, cost pennies a dose.

Other COX-2 drugs including Celebrex and Bextra are being linked to an increased risk of heart attack and stroke. It may be a matter of time before all COX-2 drugs are pulled from the market.

For a more detailed description of COX-2 hormones, please see chapter 9, Chronic Pain and Inflammation.

High Blood Pressure

NSAIDs can cause high blood pressure. In one study, 41% of those who had recently started on medication to lower their blood pressure were also taking NSAIDs. NSAIDs more than double a person's risk of developing high blood pressure.⁶

PAIN MEDICATIONS

Ultram, Hydrocone, Loritab, Darvacet, Duragesic Patches, Etc

Pain medications can be very helpful in relieving acute and chronic pain. Unfortunately, pain medications eventually lose their effectiveness. This is especially true in the case of FMS. If pain medications worked (long term), I'd be out on the streets buying them for my patients. However, people taking pain medications find they have to take an ever increasing dose to get any relief. Before they know it, they're addicted to a potentially life threatening drug. Eventually, the drug stops providing any pain relief. Another drug or an additional drug is tried, and the process continues until the person becomes zapped of their vitality, living hour to hour in accordance with their medication schedule.

SLEEP MEDICATIONS

Ambien, Elavil, Flexeril, Trazadone, Restoril, Klonopin, Xanax, Ativan, and Sonata

- **Ambien** (zolpidem) is a short-acting drug that usually lasts for four–six hours. If a patient takes a half dose before bed, then he can take an additional half dose if needed four–six hours later. Even though the literature on Ambien suggests patients don't build up a tolerance, many do. Some patient's do well on Ambien; some build up a tolerance over a period of time needing higher and higher doses until the medicine no longer works. This medication does promote deep, restorative sleep.

Some side effects are short term memory loss, fuzzy thinking, sedation or next day hang over, mood disorders (anxiety and depression), flu-like symptoms, muscle aches, and in-coordination.

This drug, like most drugs, is processed by the liver, so those with sluggish liver function should use this medication with caution. Most common side effects include dizziness and diarrhea. Some patients complain of loss of coordination or concentration. Ambien has caused amnesia (short-term memory loss), but this happens mostly at doses exceeding 10 mg. Patients are cautioned against abruptly stopping the medicine, since withdrawal symptoms commonly occur. Ambien may cause fatigue, headache, anxiety, difficulty sleeping, and memory loss. Long-term use can result in back pain, flu-like symptoms, depression, constipation, upset stomach, joint pain, URI, sore throat, urinary infection, and heart palpitations.

- **Trazadone** (desyrel) is an antidepressant that increases a person's ability to hang on to serotonin. It reduces anxiety, and promotes deep sleep. I've found this drug to be quite helpful when 5HTP or melatonin doesn't work. It can cause early morning hangover. This medication does promote deep restorative sleep.

Common side effects include upset stomach, constipation, bad taste in the mouth, heartburn, diarrhea, rash, rapid heartbeat, mental confusion, hostility, swelling in the arms or legs, dizziness, nightmares, drowsiness, and fatigue.

- **Soma** (carisprodol) is a tranquilizer that acts on the central nervous system to relax muscles. It's used as a sleep aid and muscle relaxer. The most common complaint is its sedating nature. It can be helpful, especially if there is a great deal of muscle guarding or chronic unrelenting tightness. This medication does not promote deep, restorative sleep.

Soma and other muscle relaxants have an assortment of unwanted side effects including fatigue, rapid heartbeat, dizziness, depression, breathing difficulties, chest tightness, and trembling.

- **Elavil** (amitriptyline) is an antidepressant that has become synonymous with treating FMS. It was one of the first drugs to be studied in the treatment of FMS. It can be very helpful in reducing the pain associated with FMS, but it has several potential side effects. It is also prone to lose its effectiveness over time. This medication does promote deep, restorative sleep.

Elavil may cause weight gain, early morning hangover, neurally mediated hypotension (low blood pressure), depression, poor sleep, anxiety, and irregular heartbeat.

- **Flexeril** (cyclobenzaprine) is a muscle relaxant chemically similar to the antidepressant Elavil. It is sometimes used as a sleep aid. Unlike many of the prescription medications for sleep, Flexeril does allow the patient to go into deep stage four (restorative) sleep. It is quite sedating. This medication does promote deep, restorative sleep.

Side effects, including gastritis and a feeling of being hung-over or “out of touch,” prevent most patients from remaining on this drug for very long.

- **Baclofen** (lioresal) is a muscle relaxant similar to the natural neurotransmitter GABA. This medication does not promote deep, restorative sleep.

Side effects include fatigue, drowsiness, low blood pressure, weakness, dizziness, nausea, headache, depression, weight gain, and insomnia.

- **Sonata** (zaleplon) is designed to last for only four hours. This helps prevent morning hangover. I’ve not found it to be very effective, though, since most of my patients have trouble sleeping through the night, not just with getting to sleep.

Side effects include drowsiness, amnesia, tingling in hands and/feet, abnormal vision, mood disorders, and perversion of sense of smell.

- **Zanaflex** (tizanidine) is a muscle relaxant that has gained some popularity among physicians treating FMS. It is sedating and, like other muscle relaxers, can help with insomnia. This medication does not produce deep, restorative (delta-wave) sleep. It does not help increase serotonin levels; it only tranquilizes the nervous system. For this reason alone it should be avoided.

Zanaflex is associated with numerous side effects including liver failure (at least three individuals have died from taking

this medication), asthenia (weakness), somnolence (prolonged drowsiness or a trance-like condition that may continue for a number of days), dizziness, UTI (urinary tract infection), constipation, liver injury, elevated liver enzymes, vomiting, speech disorder, blurred vision, nervousness, hypotension, psychosis/hallucinations, bradycardia (slow heart action), pharyngitis (sore throat), and dyskinesia (defect in voluntary movements). The stuff is poison!

- **Anti-anxiety medication or Benzodiazepines:**
Xanax, Klonopin, Ativan, Restoril, Busbar, Tranxene, Serax, Librium, Tegretol, Valium, Trileptal, Seraquel, Risperdal, Symbax

These medications are usually used as anti-anxiety medication. They're addictive, and patients build up a tolerance so that the drug eventually loses its effectiveness as a sleep aid. These medications have many side effects that contribute to poor health and should be (slowly over a 4 week period) weaned off as soon as possible.

No one has an anti-anxiety drug deficiency. Increasing low serotonin levels with 5HTP and, if needed, using gamma-aminobutyric-acid (GABA) helps prevent anxiety rather quickly.

Remember: you should work with a medical doctor and slowly wean (over a 4 week period) off these medications. There are numerous withdrawal symptoms associated with these drugs, so the slower the better.

The big problem with these medications is that they are loaded with side effects that cause further health problems (depression, fatigue, memory loss, “fibro fog” etc.) yet don’t promote deep, restorative sleep.

Side effects associated with these medications include sleep disturbances (poor sleep), seizures, neuropsychiatric disturbances (mania, depression, suicide, etc.) tinnitus (ringing in the ears), transient memory loss (amnesia), dizziness, agitation (anxiety), disorientation, hypotension (low blood pressure), nausea, edema (fluid retention), ataxia (muscular incoordination), tremors, sexual dysfunction (decreased desire and performance), asthenia (weakness), somnolence (prolonged drowsiness or a trance-like condition that may continue for a number of days), and headaches.

- **Neurontin and Gabitril**

GABA inhibitors such as Gabitril (tiagabine) and Neurontin (gabapentin) are anticonvulsant medications originally used to control seizures. They are now being used to block nerve-related pain (neuralgia) including pain caused by herpes zoster. These medications are also being prescribed for chronic headaches (with some success). I’ve not found them to be helpful for the diffuse extremity pains associated with FMS. They don’t promote deep, restorative sleep and can cause many of the same symptoms associated with CFS and FMS. Most patients can wean off these medications with no problems.

There are several side effects associated with their use, including somnolence (prolonged drowsiness or a trance-like

condition that may continue for a number of days), dizziness, weakness, fatigue, double vision, edema (fluid retention), ataxia (muscular in-coordination), thought disorder, possible long-term ophthalmic problems (abnormal eyeball movements and disorders), tremors, weight gain, back pain, constipation, muscle aches, memory loss, asthenia (weakness), depression, abnormal thinking, itching, involuntary muscle twitching, serious rash, and runny nose.

Don't these side effects sound like some of the symptoms associated with FMS and CFS?

Interestingly, the pharmaceutical giant Pfizer recently plead guilty to marketing Neurontin for uses unapproved by the federal government. They were fined \$430 million, including a \$240 million criminal fine, the second-largest in a health-care fraud prosecution. Of course, Pfizer's 2003 revenue was \$45.1 billion. The company admitted to marketing Neurontin to treat bipolar disorder, attention deficit disorder, Lou Gehrig's disease, drug and alcohol withdrawal seizures, migraine headaches, and restless leg syndrome, even through a scientific study showed a placebo worked as well as or better than Neurontin for bipolar disorder. Marketing tactics included paying doctors to attend presentations in lavish vacation surroundings.

- **Topamax** (topiramate) is used primarily for adjunctive therapy for tonic-clonic seizures. It is also used for anxiety disorders.

The side effects associated with this drug, especially the fatigue and low blood pressure, prevent patients from having any extra energy.

Note this excerpt from a letter from the manufacturers of Topamax (Ortho-McNeil Pharmaceutical, Inc.) to doctors: “Topamax: drug used to control epilepsy, off-label drug for anxiety or insomnia—may cause serious eye damage and/or blindness. As of August 17, 2001, there have been 23 reported cases: 22 in adults and one in pediatric patients. It is generally recognized that post-marketing data are subject to substantial under-reporting.”

- **Beta Blockers:**

- **Inderal, Lorpresser, Tenormin, Torprol, Etc**

- Beta blockers, such as Inderal (propranol), Lorpresser (metoprolol), Tenormin (atenolol), and Torprol (metoprolol), are used for long-term management of angina (chest pain), mitral valve prolapse (MVP), heart arrhythmias (irregular heart beats), and hypertension (high blood pressure). These medications have some very serious side effects and should be avoided at all costs. I’m always amazed at how many of my patients are taking these drugs for MVP. The best way to stop the symptoms associated with heart irregularities, including MVP, is to correct magnesium deficiency. Magnesium is certainly a lot safer than these drugs (should be taking 500 to 700 mg of magnesium a day).

Beta-blockers slow the heart rate, which reduces cardiac output. This leads to low blood pressure and fatigue. The brain and muscles aren’t getting enough blood and oxygen. This

can lead to fuzzy thinking, poor memory, depression, anxiety, and physical fatigue.

According to Mark Houston, MD, associate clinical professor of medicine at Vanderbilt School of Medicine, side effects associated with beta-blockers include congestive heart failure (CHF), reduced cardiac output, fatigue, heart block, dizziness, depression, bradycardia (decreased heart beat and function), cold extremities, parathesia (a feeling of “pins and needles”), dyspnea (shortness of breath), drowsiness, lethargy, insomnia, headaches, poor memory, nausea, diarrhea, constipation, colitis, wheezing, bronchospasm, Raynaud’s Syndrome (burning, tingling, pain, numbness, or poor circulation in the hands and feet), claudication, hyperkalemia (muscle cramps), muscle fatigue, lowered libido, impotence, postural hypotension, raised triglycerides, lowered HDL, raised LDL, and hyperglycemia. Dr. Houston recommends Hawthorne berry as a natural beta-blocker alternative. Hawthorne berry is an ACE inhibitor; it works by inhibiting (blocking) the angiotensin-converting enzyme. This enzyme is what causes the constriction of arteries (raises blood pressure and heart contraction/rate). Recommended dose of Hawthorne berry is 160–900 mg of standardized extract daily.

I have found that most people can wean off beta-blockers and other high blood-pressure medications by increasing their Omega-3 (fish oil) and magnesium (700 mg a day or up to bowel tolerance). Some individuals will also need niacin (B3) at rather high doses.

For more information about lowering cholesterol, blood pressure, or blood fats (triglycerides), please visit my website, www.DrRodger.com, or call 1-888-884-9577 to order a special report booklet on Beating Heart Disease, MVP, High Cholesterol, and High Blood Pressure.

- **Stimulants:**

- **Adderall, Concerta, Cylert, Etc**

- Stimulants such as Adderall (amphetamine), Concerta (methylphenidate), Cylert (pemoline), Dexedrine (dextroamphetamine sulfate), Focalin (dexmethylphenidate HCL), Metadate (methylphenidate), and Ritalin (methylphenidate) are use to increase adrenaline.

They can be very helpful in increasing a person's energy. But you may remember the saying "speed kills." With the exception of Provigil, these medications are nothing more than various forms of amphetamines ("speed"). These drugs are incredibly hard on the adrenal glands. Long-term use can cause adrenal burnout at least and full blown Addison's Disease (adrenal failure) at worst.

- **Provigil**, the narcolepsy drug, is being recommend for fatigue associated with FMS and CFS. This medication is designed to keep a person from going to sleep. Yes, it can help wake you up in the morning and make you more alert. However, the reason you're tired is because you're not going into deep, restorative sleep each night. However, this medication will interfere with your normal circadian rhythm (sleep wake cycle). The worse thing you can do is take a medication that

interferes with your circadian rhythm. Anything that may disrupt your ability to go into deep sleep each night, should be avoided.

Side effects include: insomnia (big problem), Tourette's syndrome (movement disorder consisting of grimaces, ticks, and involuntary outbursts), nervousness, unstable mood (anxiety, mania, depression, irritability, aggression, etc) tachycardia (rapid heartbeat), hypertension (high blood pressure), tics (abnormal muscle movements), psychosis (abnormal behavior), headaches, seizures, visual disturbances, anorexia (unwanted weight loss), aplastic anemia (arrested development of bone marrow), liver dysfunction, and blood dyscrasias (disease).

Note: If you're consistently sleeping through the night, then it is probably best to wait on weaning off these medications. If natural sleep recommendations (5HTP, melatonin, etc.) aren't working, then you need to wean off the amphetamines sooner.

When people do wean off these stimulants, they will feel very lethargic and even depressed for awhile (wean off these medications slowly; over 4 week period). You can counter this by using the amino acid L-phenylalanine at 4,000–10,000 mg twice daily on an empty stomach (but not later than 4 p.m.). You should increase your adrenal cortex glandular dose to 1,000 mg twice daily. Or you can use S-adenosyl-methionine (SAME), 600 mg–1,000 mg daily, taken on an empty stomach. SAME is a serotonin and norepinephrine reuptakeinhibitor. It quickly increases adrenaline levels and results in more mental and

physical energy (without all the side effects associated with prescription medications).

- **Cholesterol Lowering Medications:**

- **Lipitor, Zocor, Crestor, Etc**

- Cholesterol-lowering HMG-CoA reductase inhibitors (statin drugs) such as Lipitor (atorvastatin), Lescol (fluvastatin), Altacor (lovastatin), Mevacor (lovastatin), Pravachol (pravastatin), Zocor (simvastatin), and Crestor (rosuvastatin) can cause diffuse muscle pain similar to that seen in FMS and CFS. Also, consider this quote from JAMA: “Drugs that lower fats (lipids) and cholesterol have been shown to increase the risk of certain cancers.”⁷

Potential side effects of these drugs are myalgia (muscle pain), rhabdomyolysis (a destructive muscle disorder that usually causes temporary paralysis or weakness of the affected muscle), myopathy (muscle inflammation), renal dysfunction (kidney failure), dizziness, headaches, GI upset, arthralgia (joint pain), flu-like symptoms, elevated liver enzymes, and sinusitis.

Again, these sound like a lot of the symptoms associated with FMS and CFS.

Cholesterol is an Essential and Important Fat

Contrary to popular medical fiction, cholesterol is an important part of overall health and doesn't cause (in and of itself) arteriosclerosis. Cholesterol is essential in maintaining proper hormone production. Testosterone, dehydroepiandrosterone (DHEA), progesterone, estradiol, and cortisol are all made from cholesterol.

Cholesterol plays a major role in brain cell function. Furthermore, low cholesterol (130 and below) has been linked to certain mood disorders including depression and anxiety, as well as increased risk for heart attack.

Cholesterol and fats are the very building blocks that make up each and every cell. Cholesterol is an important fat that helps keep cell membranes permeable. This permeability allows the good nutrients to get into the cell and toxic waste products to get out of the cell.

Over 8% of the brain's solid matter is made up of cholesterol. Lipids (fat) make up 70% of the brain. This fat insulates brain cells and allows neurotransmitters to communicate with one another.

Cholesterol is essential for proper brain function and normalized neurotransmitters (remember serotonin)! A deficiency in cholesterol can result in mood disorders including depression, anxiety, irritability, and "fibro fog."

Cholesterol is also involved in the production of such essential hormones as DHEA, testosterone, estradiol, progesterone, and cortisol. Because it is essential to our very survival, the body manufactures cholesterol on a daily basis. Eliminating cholesterol from our diet only triggers the body to make more! Cholesterol is not the villain it has been made out to be.

Rather, a deficiency in essential fatty acids and a diet high in trans-fatty acids provides the ammunition for cardiovascular disease and poor health.

There are receptor sites on the membranes at which point the happy hormones (serotonin and others) attach themselves. Trans-fatty acids block the cellular membrane receptor sites. A blocked or hardened cellular membrane prevents nutrients from entering and exiting the cell. The neurotransmitters are then unable to attach themselves to the cell's membrane. This can lead to depression, insomnia, anxiety, fatigue, ADD, or any disorder that involves the brain hormones (serotonin, epinephrine, dopamine, etc.).

NATURAL CHOLESTEROL LOWERING PROTOCOL

I don't recommend patients stay on cholesterol-lowering medications unless they have total cholesterol levels above 300. Even so, they should be using nutritional therapies to help reduce their total cholesterol levels.

Start with 400–500 mg of timed release niacin (vitamin B3). Make sure it is timed or sustained release form of niacin. This will prevent the flushing that occurs with high doses of regular niacin. Some very sensitive individuals (especially if have a sluggish liver, hepatitis, fatty liver, etc.) will need to take a special form of niacin called “No Flush” niacin (inositolhexaniacinate).

Regardless, you'll need to begin with 400–500 mg a day for 3 days. Then increase to 400–500 mg twice a day for three days. Then double the dose 800–1,000 mg twice a day.

You should also add policosanol (a derivative of sugar cane wax) and increase your fish oil intake (there is 2,000 mg in the CFS/Fibro Formula) to a total of 3,000–6,000 mg a day.

Policosanol has been shown in more than 15 double-blind controlled clinical trials to correct levels of total, HDL, and LDL cholesterol.

For more information about lowering cholesterol, blood pressure, or blood fats (tryglycerides), please visit my website, www.DrRodger.com or call 1-888-884-9577 for information about ordering a special report booklet on Beating Heart Disease, High Cholesterol, and High Blood Pressure.

- **Antidepressants:**

- **Prozac, Zoloft, Celexa, Paxil, Etc**

- Selective Serotonin Reuptake Inhibitors (SSRIs)

- SSRIs work by increasing the brain's use of the neurotransmitter serotonin. Serotonin deficiency is linked to depression, lowered pain tolerance, poor sleep, and mental fatigue.

- All SSRIs are partially or wholly broken down in the liver.

- This can create liver dysfunction in some patients, so patients with a sluggish liver should be cautious in taking these medications.

- Common side effects include headache, muscle pain, chest pain, anxiety, nervousness, sleeplessness, drowsiness, weakness, changes in sex drive, tremors, dry mouth, irritated stomach, loss of appetite, dizziness, nausea, rash, itching, weight gain, diarrhea, impotence, hair loss, dry skin, chest pain, bronchitis, abnormal heart beat, twitching, anemia, low blood sugar, and low thyroid. Examples of SSRIs include Zoloft (sertraline), Paxil (paroxetine HCL), Celexa (citalopram), Prozac (fluoxetine), Luvox (fluvoxamine), etc.

Other Side Effects Noted for Antidepressants

Harvard Medical School's Dr. Joseph Glenmullen recently reported on the many dreadful side effects associated with conventional anti-depressant medications. These include neurological disorders, sexual dysfunction (in up to 60% of users), debilitating withdrawal symptoms (including hallucinations, electric shock-like sensations, dizziness, nausea, and anxiety), and decreased effectiveness in about 35% of long-term users.⁸

Increased Link to Suicide

Another frightening “side effect” is a suspected link between SSRI use and suicide in teenagers and children. Drug regulators have recommended that Paxil not be newly prescribed to anyone under age 18. Some regulators believe the risk extends to adult patients, as well.⁹

No Better than a Sugar Pill?

An article that appeared in the American Psychology Association's journal reveals that SSRIs are not much better than placebo. Although antidepressant medication is widely regarded as effective, a recent meta-analysis of published clinical trials indicates that 75 percent of the response to antidepressants is duplicated by placebo. In other words these antidepressants were only 25 percent more effective than a sugar pill.¹⁰

Other Antidepressants

- **Wellbutrin** (bupropion HCL) is usually reserved for major depression. It increases the neurotransmitters serotonin, epinephrine, and dopamine.

Side effects include seizures, dry mouth, rapid heartbeat, headache (including migraines), sleeplessness, loss of concentration, and fatigue.

- **Effexor** (venlafaxine) is chemically different from other antidepressants. It helps the brain hold onto serotonin, epinephrine, and dopamine.

Effexor (venlafaxine) and Cymbalta (duloxetine) are known as serotonin and norepinephrine reuptake inhibitors (SNRIS). Side effects include blurred vision, fatigue, dry mouth, sleeplessness, nervousness, tremors, weakness, nausea, constipation, loss of appetite, and vomiting, pain, insomnia, (always take this medication in the morning), chest pain, fever, neck pain, migraine, increased appetite, weight gain, swelling or fluid retention, amnesia, confusion, vertigo, cough, itching, abnormal periods, increased risk of prostatitis (inflammation of prostate), problems with urination, vaginal inflammation, and dozens of less common side effects including the ones mentioned above for SSRIS.

- **Cymbalta** has received a great deal of fanfare from its supplier, Lilly. However, it is not really any different than Effexor, a drug that has been around for quite some time. The January 2005 issue of Best Pills Worst Pills News reports that this serotonin and norepinephrine reuptake inhibitor (SNRI) has been shown to cause liver toxicity. This medication can also cause high blood pressure. Cymbalta has been marketed as an antidepressant that also helps block pain. The Medical

Letter on Drugs and Therapeutics found that Cymbalta was “nothing special” and concluded their October 11, 2004 report by saying: Whether duloxetine offers any advantage over venlafaxine (Effexor) or an SSRI (selective serotonin reuptake inhibitor) like fluoxetine (Prozac and others) remains to be established. The manufacturer’s claim that duloxetine is the antidepressant for painful symptoms associated with depression is unsupported; no comparative trials are available.

Tricyclic Antidepressants: Elavil, Pamelor, Doxepin, Etc

Tricyclic antidepressants block the hormones serotonin and norepinephrine. This produces a sedative effect. They also reduce the effects of the hormone acetylcholine. Like other antidepressant medications, these drugs are processed by the liver and can cause liver toxicity.

Common side effects include sedation, confusion, blurred vision, muscle spasms or tremors, dry mouth, convulsions, constipation, difficulty in urinating, and sensitivity to light. Examples of tricyclic antidepressants include Pamelor (nortriptyline) and Elavil (amitriptyline).

- **Elavil** (amitriptyline) is an antidepressant now synonymous with treating FMS. It was one of the first drugs to be studied in the treatment of FMS. It can be very helpful in reducing pain, but it has several potential unwanted side effects: weight gain, early morning hangover, neurally mediated hypotension (low blood pressure), and irregular heartbeat.

WARNING

Consult your doctor before discontinuing any medications.

I don't recommend you stop taking your prescription medications until after you start feeling better on my program. Stopping medications can trigger a host of withdrawal symptoms. Start taking the supplements I recommend, build your stress coping system up, and allow your body to start healing itself. After you start feeling stronger (it may be a few months) then with the help of your doctor, slowly start weaning off the medications. Most of the medications can be weaned off and never missed. Some medications will have to be re-started until you become stronger or find other less toxic options.

The medications listed below have potential side effects that will prevent you from beating FMS and CFS, and you should focus on weaning off of these medications (with the help of your medical doctor) first. These medications should be weaned off, one at a time, with the help of your doctor as soon as possible after starting the supplements listed in this manual.

- Zanaflex. This medication doesn't promote deep sleep and can cause all sorts of symptoms including muscle aches, depression, mental fatigue and all the other usual things associated with FMS.
- All the **Anti-anxiety medication** or **Benzodiazepines: Xanax, Klonopin, Ativan, Restoril, Busbar, Etc**
These medications can cause depression, fatigue, and mental disorientation. They drain you.

- **Cholesterol Lowering Medications:**

- **Lipitor, Zocor, Crestor, Etc**

- All cholesterol lowering medications, especially the statins, should be suspected as a cause of muscle aches, depression, and lethargy. You should attempt to wean off these drugs and see if it has been a source of muscle pain. If it makes no difference, then no problem. Statins reduce CoQ10, and this is the cause of muscle pain. If you must stay on these medications (especially if total cholesterol is above 300), then I recommend you start taking 100–200mg of CoQ10 a day.

- **Stimulants:**

- **Adderall, Concerta, Cylert, Etc**

- These medications bankrupt your stress coping account. They rob Peter to pay Paul. They interfere with your sleep/wake cycle and make sleep disorders even worse.

- **Beta Blockers:**

- **Inderal, Lorpresser, Tenormin, Torprol, Etc**

- These medications prevent you from ever having any get up and go. They drain you.

- **Topamax** – same as above.

- **Neurontin and Gabitril** don't seem to help with the pain associated with FMS or CFS and are loaded with potential side effects that are a mirror images of those associated with FMS and CFS.

The Emperor Has No Clothes

Drugs can be helpful, but longterm use by those with chronic illnesses can lead to dependence and further complications. Short-term use to mask unwanted symptoms is certainly justified and appreciated by both the patient and the doctor. But FMS and CFS don't develop from a deficiency of pain medicine. They are caused by a body's inability to maintain homeostasis (a healthy balance).

Prescriptions can be invaluable, but most drugs have unwanted side effects. So sometimes the cure can be worse than the disease. Studies now show that complications from prescription medications kill over 100,000 people a year. These complications are the fourth leading cause of death in the United States! Only heart disease, cancer, and accidents claim more lives each year.

In addition, many of the side effects of these drugs are similar or identical to the symptoms of FMS and CFS. These similarities can cause confusion when trying to determine the effectiveness of treatment.

I believe prescription medications serve a valuable role in today's health care. Not everyone can be drug free, and most of my patients are on at least one prescription medication. However, I also feel it's best to use drugs judiciously. Drug therapy in and of itself will not correct all the symptoms of FMS and CFS. If it did, everyone would get well, and there would be no reason to be reading this manual.

Prescription Medications Offer Little Hope

A study conducted by the Mayo Foundation for Medical Education and Research demonstrates the need for FMS and CFS treatment beyond drug therapy. Thirty-nine patients with FMS were inter-

viewed about their symptoms. Twenty-nine were interviewed again 10 years later. Of these 29 (mean age 55 at second interview), all had persistence of the same FMS symptoms. Moderate to severe pain or stiffness was reported in 55% of patients, moderate to a great deal of sleep difficulty was noted in 48%, and moderate to extreme fatigue was noted in 59%. These symptoms showed little change from earlier surveys. The surprising finding was that 79% of the patients were still taking medications to control symptoms. We can conclude that the medications weren't making a significant impact.¹¹

Medications Can Cause Nutritional Deficiencies

- **Aspirin** depletes folic acid, iron, potassium, sodium and vitamin C.
- **Beta-blockers** deplete coenzyme Q10 (co-Q10), an important nutrient for liver function and for cardiovascular and overall health. This can lead to heart disease, fatigue and muscle pain.
- **Amitriptyline** (Elavil) depletes co-Q10 and vitamin B2. This can cause headaches, anxiety, depression, heart disease, fatigue, and muscle pain.
- **Carbamazepine** (Tegratol) depletes biotin, folic acid, and vitamin D. This can cause pain, fatigue, and depression.
- **Celecoxib** (Celebrex) depletes folic acid.
- **Corticosteroids** (cortisone, dexamethasone, hydrocortisone, prednisone) depletes calcium, folic acid, magnesium, potassium, selenium, vitamin C, vitamin D, and zinc. This can cause depression, fatigue, pain, heart disease, and other illnesses.
- **Digoxin** (Lanoxin) depletes calcium, magnesium, phosphorus, and vitamin B1.
- **Estrogens** (Estrace, Estratab, Estrostep, Menest, Premarin)

deplete magnesium, omega-3 fatty acids, vitamin B6, zinc, and Omega-3 fatty acids. This can cause pain, depression, poor immune function, and other illnesses.

- **Famotidine** (Pepcid and Pepcid AC) depletes calcium, folic acid, iron, vitamin B12, vitamin D, and zinc. May lead poor immune function, fatigue, depression, and pain.
- **Hydrochlorothiazide** (Esidrix, Ezide, Dyazide, DydroDIURIL, Hydro-Par, Maxide, Microzide, Oretic) depletes co-Q10, magnesium, potassium, vitamin B6 and zinc. This could cause pain, fatigue, depression, restless leg syndrome, irritable bowel syndrome, spastic colon, and other illnesses.
- **Nonsteroidal Anti-inflammatory Drugs** (fenoprofen, ibuprofen, neproxen, Aleve, Anaprox, Advil, Excedrin, Motrin, Naprosyn, Nuprin, Orudis, and Pamprin) deplete folic acid. This can cause anxiety and depression.
- **Omeprazole** (Prilosec) depletes vitamin B12. This can lead to fatigue, anemia, and depression.
- **Oral contraceptives** deplete vitamin C, vitamin B2, folic acid, magnesium, vitamin B6, vitamin B12 and zinc. This could lead to poor immune function, anxiety, depression, and fatigue.
- **Prevastatin** (Pravachol) depletes co-Q10. This could lead to heart disease, fatigue, and muscle pain.
- **Ranitidine Hydrochloride** (Zantac) depletes calcium, folic acid, iron, vitamin B12, vitamin D, and zinc. This could cause poor immune function, fatigue, depression, anxiety, restless leg syndrome, anemia, and more.
- **Triamterine** (Dyrenium) depletes calcium, folic acid, and zinc. This could cause fatigue, depression, anxiety, and poor immunity.
- **Valproic acid** (Depacote) depletes carnitine and folic acid.¹²

This could contribute to diabetes, depression, and fatigue.

- **Lipitor, Crestor, Zocor, etc.**, or statin drugs block production of co-Q10. This action can lead to muscle aches and pains.

The System is Clearly Broken

The Centers for Medicare and Medicaid stated in a recent report that the nation spent \$140.6 billion in the year 2000 on prescription drugs.

It is estimated that over one billion prescriptions were written last year. But though the US spends more money per capita than any country in the world, the World Health Organization ranks the overall health of the US as 15th among the 25 industrialized countries.¹³

Our current AMA-dominated paradigm is based around controlling symptoms. Conventional medicine has made very little progress (if any) in correcting the causes associated with most of today's chronic illnesses: heart disease, cancer, arthritis, diabetes, and depression.

The Office of Technology Assessment, under the authority of the Library of Congress, published a year-long study entitled "Assessing the Efficacy and Safety of Medical Technology." The study showed that only 10–20% of all present-day medical practice has been shown to be beneficial by scientific controlled clinical trials. The study concluded that the vast majority of medical procedures now being utilized routinely by physicians are "unproven."

The Myth of Health in America

Death from medical errors is now the third leading cause of death in the US, behind heart disease and cancer. As reported in JAMA, over 250,000 Americans die each year from medical therapies, including at least 113,000 from the negative effects of prescription medications.¹⁴

For instance, calcium channel blockers, used to treat high blood pressure and heart disease, actually increase the risk of stroke and of heart attack five times, according to Dr. Kurt Ferber, Wake Forest School of Medicine.

Propulsid, a drug used for GERD and gastro paresis (delayed emptying of the stomach usually found in diabetics), caused severe heart rhythm abnormalities. In June 1998, the FDA issued a statement reporting 38 deaths in the United States from people taking Propulsid: "Due to reports of serious heart arrhythmias and deaths in people taking Propulsid (Cisapride), the label had been changed to reflect these dangers."

- 30 million Americans suffer from serious arthritis.
- 13 million Americans suffer from diabetes.
- 80 million Americans suffer from serious allergies.
- 64% of the population is overweight.
- More than 10 million suffer from psoriasis.
- More than 10 million have asthma.
- 15 million are insomniacs.
- Each year, Americans consume 5 billion sleeping pills.
- Each year, 15,000 Americans die from sleeping pills.
- 13 billion barbiturates and amphetamines are consumed each year.
- 36,000 tons of aspirin are consumed each year.

- Life expectancy for a 1-year-old is no longer now than it was in 1900.
- The life expectancy of an American man ranks 20th in the world.
- The life expectancy of an American woman ranks 15th in the world.
- In 1987, 33,592,000 Americans were admitted to hospitals.
- That same year, we had 300,960,000 outpatient visits in short-stay hospitals.
- 5 million are hospitalized each year for side effects to prescription drugs.
- 50% of Americans die of heart disease.
- 1,000 Americans die each day from cigarettes.
- 461,563 Americans died from cancer in 1985. 469,376 died in 1986. 476,927 died in 1987.
- From March 1990 to March 1991 alone, 508,210 people died of cancer.
- 86% of our children can't pass a minimum physical fitness test.¹⁵

Recommended Reading

- *What Doctors Don't Tell You* by Lynne McTaggart, Avon Books. (Highly recommended!)
- *The Truth About the Drug Companies* by Marcia Angell, MD, former editor of The New England Journal of Medicine.
- *Why I left Orthodox Medicine* by Derrick Lonsdale, MD, Hampton Roads Publishing.
- *What Your Doctor Didn't Learn In Medical School* by Stuart Berger, MD, William Morrow and Company.
- *The Pill Book, 10th edition* by Harold M. Silverman; 2002.

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Chapter 5

Sleep Disorders

The first question I ask new patients is: “How are you sleeping?” If you don’t get a good night’s sleep, you’re not going to get well. It really is that simple. Most people with FMS/CFS haven’t slept well in years. Many of my patients take tranquilizers, muscle relaxants, or over-the-counter sleep aides to get them to sleep. But most of them never go into deep, restorative sleep.

It is in this deep, delta-wave sleep that the body repairs itself. It does this by making human growth hormone (HGH) and other hormones that help repair damaged muscles, tissues, and organs. Deep sleep also builds and rejuvenates the immune system.

Years of poor sleep, on the other hand, create an imbalance within a person’s sleep regulatory system known as the circadian rhythm. The longer someone’s sleep cycle has been compromised, the longer it usually takes for her to experience lasting symptom relief. But just a few nights of consistent deep sleep will provide a tremendous amount of improvement for most patients.

A Good Night's Sleep

Poor sleep has been linked to various health problems including depression, poor immune function, anxiety, weight gain, muscle pain, irritable bowel syndrome, fatigue, CFS, FMS, and headaches. This is not news to those who suffer from FMS and CFS. They already know their symptoms get worse when they don't get a good night's sleep.

Research

One study showed that college students who were prevented from going into deep (REM) sleep for a week developed the same symptoms associated with FMS and CFS: diffuse pain, fatigue, depression, anxiety, irritability, stomach disturbances, and headache.

Another study, conducted by the University of Connecticut School of Medicine, compared the sleep patterns and associated symptoms of fifty women with FMS. The study showed that a poor night's sleep was followed by an increase in the subjects' symptoms, including body pain. Sadly, the study also showed that a poor night's sleep, followed by an increase in symptoms, then went on to prevent the person from getting a good night's sleep the next night, even though the subject was exhausted. This cycle continues and creates a pattern of declining health.¹

Research presented at the Endocrine Society in San Francisco, by Vgontzas in June 2002, showed that sleep deprivation markedly increased inflammatory cytokines (pain causing chemicals)—by a whopping 40%.

Deep, Restorative Sleep

If you're not dreaming, you're not going into deep sleep. Many of my patients have been on brain-numbing medications that render them brain-dead for eight hours. Most of these powerful sedatives (tranquilizers) don't allow a person to go into deep, restorative sleep. So the patients have their eyes closed while they're knocked out for eight hours, but they don't receive the health benefits of deep, restorative sleep. They will often feel hung over in the morning. Rarely do they feel rested and refreshed in the morning.

SLEEP MEDICATIONS THAT DO NOT PROMOTE DEEP, RESTORATIVE SLEEP

- **Gabitril** (tiagabine) and **Neurontin** (abapentin)
- **Zanaflex** (tizanidine)
- **Xanax** (alprazolam), **Ativan** (lorazepam), **Valium** (diazepam), **Tranxene** (clorazepate dipotassium), **Serax** (oxazepam), **Librium** (chlordiazepoxide), and **Restoril** (temazepam)
- **Soma** (carisprodol) – a muscle relaxant that can be very sedating.
- **Klonopin** (clonazepam)
- **Unisom** (doxylamine) – an over-the-counter antihistamine.

SLEEP MEDICATIONS THAT DO PROMOTE RESTORATIVE SLEEP

- **Ambien**
- **Elavil**
- **Flexeril**
- **Trazadone**

These medications do promote deep, restorative sleep. However, they have potential side effects (see previous chapter) and usually start to lose their effectiveness over time. No one has an Ambien deficiency. You may, however, have a serotonin deficiency. The best way to boost serotonin levels is with the natural nutrients that actually make serotonin: 5-Hydroxytryptophan, B vitamins, calcium, and magnesium.

The Importance of Serotonin and Sleep

Serotonin, a neurotransmitter, helps regulate sleep, digestion, pain, mood, and mental clarity. Normal serotonin levels help:

- raise the pain threshold (have less pain).²
- you to fall asleep and stay asleep through the night.³
- regulate moods. It is known as “the happy hormone.”
- reduce sugar cravings and over-eating.
- increase a person’s mental abilities.
- regulate normal gut motility (transportation of food-stuff) and irritable bowel syndrome (IBS).⁴

Irritable Bowel Syndrome and Serotonin

You have more serotonin receptors in your intestinal tract than you do in your brain. Low serotonin interferes with proper intestinal function. Symptoms associated with IBS, such as diarrhea and constipation, usually disappear within 1–2 weeks once serotonin levels are normalized.

More about Serotonin

The amino acid (found in protein) tryptophan turns into 5-hydroxytryptophan, which turns into serotonin, and then into melatonin. Vitamins and minerals are essential, too, of course. A deficiency of any of the synergistic nutrients (magnesium, calcium, and

vitamins B6, B12, B1, and B3), will prevent the production of serotonin. Prescription medications (see chapter 4) can block the production of these nutrients and so deplete serotonin.

Stress, Stimulants, and Serotonin

We are all born with a stress coping savings account. This account is filled up with the chemicals we need for the body to work properly. These chemicals which include serotonin, dopamine, noriepinephrine, cortisol, DHEA, HGH, and others, help us deal with stress. Every time we are exposed to stress (chemically, emotionally, mentally, or physically), we make withdrawals from our stress coping savings account. If we aren't careful we can bankrupt this account. Then we start to have health problems like those associated with FMS and CFS. Individuals with FMS and CSF have bankrupted their stress coping savings account. They're making more withdrawals than they are deposits.

Making Deposits

We make deposits into our stress coping savings account by going into deep, restorative sleep. When a person goes into deep, restorative sleep they make more serotonin which then gets deposited into their stress coping savings account. The more stress a person is under, the more serotonin they'll need.

A Vicious Cycle

A person needs a good deal of serotonin before they can consistently go into deep, restorative sleep each night. If they don't have enough serotonin, they won't be able to go into deep, restorative sleep, and then they don't make more serotonin.

Why Not Just Take an Antidepressant?

Antidepressant drugs have been used with varying degrees of success in treating the sleeplessness of FMS and CFS. Many of my patients are on Selective Serotonin Reuptake Inhibitors or SSRIs (Prozac, Paxil, Celexa, Lexapro, Zoloft, etc.). SSRIs are supposed to help a patient hang on to and use his or her naturally occurring stores of serotonin. This is like using a gasoline additive to help increase the efficiency of your car's fuel. But most of the patients I see are running on fumes. There is no gasoline in their tank (no serotonin in their brain)! A gasoline additive (SSRI) won't help.

SSRIs don't make serotonin. They only help a person hang on to and use the serotonin they already have. Unfortunately, most individuals with FMS don't have any serotonin. There is nothing to reuptake.

NO ONE HAS A SSRI (ANTI-DEPRESSANT) DEFICIENCY.



Most Individuals with Fibromyalgia or
Chronic Fatigue Syndrome don't have
any Serotonin or norepineprine

Their brain is running on FUMES.
A gasoline additive won't help



Normal Brain



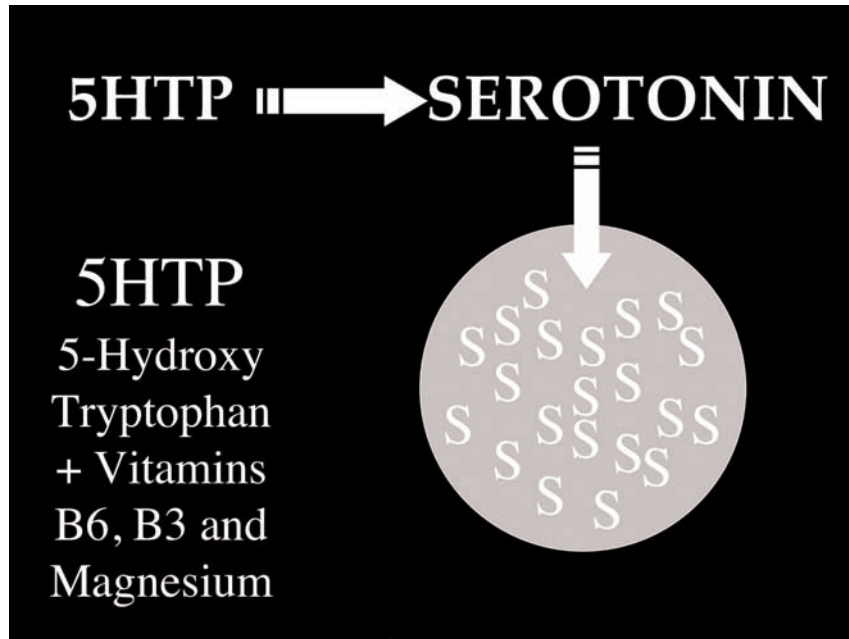
Fibro Brain

5HTP \Rightarrow **SEROTONIN**

5HTP

5-Hydroxy
Tryptophan
+ Vitamins
B6, B3 and
Magnesium

= SEROTONIN



The Importance of 5-Hydroxytryptophan (5HTP)

5HTP is a derivative of the amino acid tryptophan. When taken correctly, it turns right into serotonin. Serotonin is the neurotransmitter or brain chemical that is responsible for regulating your sleep (getting you to sleep), raising your pain threshold (decreasing your pain), and elevating your moods.

Using 5HTP is like pouring gasoline straight into your tank. You fill your brain with serotonin. There's no need for an additive when you can simply replace your serotonin stores any time you get low.

It may take months to get well, but once you start consistently going into deep, restorative sleep, you'll feel better than you've felt in years.

Therapeutic administration of 5HTP has been shown to be effective in treating a wide range of health problems, including depression, FMS, insomnia, binge eating, pain, and chronic headaches.

5HTP and Depression

Studies (including double-blind) comparing SSRI and tricyclic antidepressants to 5HTP have consistently shown that 5HTP is as good if not better than prescription medications. Furthermore, 5HTP doesn't have some of the more troubling side-effects associated with prescription medications:⁵

5HTP and Insomnia

5HTP has been shown to be beneficial in treating insomnia, especially in improving sleep quality by increasing REM sleep (deep sleep).⁶ It has also been shown to increase the body's production of melatonin by 200%.⁷

5HTP and Headaches

5HTP has been used to successfully treat and prevent chronic headaches of various types, including migraines, tension headaches, and juvenile headaches.⁸

5HTP and Obesity

Clinical trials of obese individuals have demonstrated decreased food intake and subsequent weight loss with 5HTP supplementation.⁹

5HTP AND FIBROMYALGIA

Most of my patients are prescribed 5HTP. Double-blind placebo-controlled trials have shown that patients with FMS were able to see the following benefits from taking 5HTP:

- decreased pain
- improved sleep
- less tender points
- less morning stiffness
- less anxiety
- improved moods in general, including in those with clinical depression
- increased energy

Studies comparing 5HTP to prescription antidepressants generally used to treat FMS, including tricyclic (amitriptyline) and SSRIs, showed 5HTP to be as or more effective than prescription medications.¹⁰

One European study showed that the combination of MAOIs, such as Nardil or Parnate, with 5HTP significantly improved FMS symptoms, whereas other antidepressant treatments were not effective. The doctors conducting this study stated that a natural analgesic (pain blocking) effect occurred when serotonin and norepinephrine levels were enhanced in the brain. More norepinephrine means more energy and improved mood.

Other tests in Europe show tryptophan to be just as effective in treating depression as the prescription drugs Elavil and Tofranil, which have side effects.¹¹

5HTP AND CHRONIC FATIGUE SYNDROME

CFS patients are more likely than FMS patients to have trouble taking 5HTP. One theory is that those with CFS have too much serotonin and that this is why they are so tired. Additional serotonin, then, can't be tolerated. This may be true; I don't know. However, increasing serotonin levels is the number one priority for 95% of the patients I see. There are patients—usually at the far end of the CFS scale—who have serotonin sensitivity. And excessively high serotonin levels can cause insomnia, hyperactivity, headache, and increased heart rate. But I suspect that most patients who have a serotonin sensitivity reaction do so because of a sluggish liver. These are usually the same patients who have trouble taking most medications. They get depressed from taking an antidepressant and hyperactive from sleeping pills. They usually can't take the normal dose of medicine and instead need a smaller dose.

If you're having trouble sleeping or test positive for low serotonin (checked a lot of statements on the "S" portion of the Brain Function Questionnaire in chapter 3), try 5HTP for one or two nights. If you have a hypersensitive reaction (5HTP makes you more alert at bedtime), simply discontinue the 5HTP at night and begin to take with food; 100 mg three times a day with food (see below for more details).

Exercise

Walking has been shown to increase the efficient use of serotonin in the brain. From Dr. Batmanghelidj comes this quote: "There is a direct relationship between walking and the buildup of the brain's Tryptophan reserves."

Dr. Batmanghelidj goes on to write about tryptophan's importance: "The brain Tryptophan content, and its dependent neurotransmitter systems, are responsible for maintenance of the 'homeostatic balance of the body.' Normal levels of Tryptophan in the brain maintain a well-regulated balance in all functions of the body—what is meant by homeostasis. With a decrease in Tryptophan supply to the brain, there is a proportionate decrease in the efficiency of all functions in the body."¹²

I don't recommend you begin a strenuous exercise program. Even walking should be done with restraint until you become stronger and feel better on the supplements I recommend in this manual. Exercise is a stress – a good stress, but a stress nevertheless. Until you build up your stress coping savings account and are consistently sleeping through the night, I wouldn't recommend any exercise other than walking for 10–20 minutes a day. Once you start to get stronger, you can increase your walking up to an hour a day. Don't push it. Start slowly and gradually increase the time you walk each day.

SLEEP PROTOCOL

5HTP should be taken on an empty stomach, 30 minutes before bed, with four ounces of grape juice. This allows it to get past the blood-brain barrier and be absorbed directly into the brain.

5HTP will never leave you feeling dopey, drugged, or hung over. If you need to wake up in the middle of the night, you can. And then you should be able to go right back to sleep.

Important! One of three things will happen when taking 5HTP with a beginning dose of 50 mg:

- 1.** The person falls asleep within 30 minutes and sleeps through the night. If this is the case, stay on this dose. After a few days, if you start to have problems with sleep again, increase your dose of 5HTP as described below.
- 2.** Nothing happens. This is the typical response to such a low dose. Continue to add 50 mg each night (up to a maximum of 300 mg) until you fall asleep within 30 minutes and sleep through the night. You should stay at the minimum dose needed for deep sleep (up to a maximum of at 300 mg per night).

Example: You take 50 mg of 5HTP 30 minutes before bed on an empty stomach with 4 ounces of grape juice but don't fall asleep within 30 minutes and/or don't sleep through the night. If this happens, add an additional 50 mg for a total of 100 mg of 5HTP. Take as directed above. If you don't fall asleep within 30 minutes and/or don't sleep through the night (7–8 hours of sleep), add an additional 50 mg for a total of 150 mg. Keep increasing as needed up to 300 mg or until you fall asleep within 30 minutes and sleep through the night.

- 3.** Instead of making you sleepy, the dose makes you more alert. This occurs more often in CFS patients and is due to a sluggish liver. If this happens, you should discontinue taking 5HTP at bedtime. Instead, take 50 mg with food for 1–2 days. Taking 5HTP with food will slow it down and allow the

liver to process it like any other food stuff. Taking 5HTP with food will not (usually) make you sleepy. If after 1-2 days you have no further problems with 5HTP, you should increase to 100 mg of 5HTP with each meal (300 mg a day).

Taking 5HTP with food will help raise your serotonin and normalize your sleep/wake cycles. It may take a little longer to see positive results when taking 5HTP with food (1-2 weeks), but don't worry. You'll eventually build up your serotonin stores and start to see an improvement in your sleep, pain, moods, IBS, and energy.

QUESTIONS AND ANSWERS

Can I take 5HTP along with antidepressant medications?

Yes, you can take 5HTP or any amino acid along with antidepressant medications. In fact, 95% of my patients are already taking antidepressants when they come to see me. Most individuals are on selective serotonin reuptake inhibitors (SSRIs), such as Paxil, Prozac, Zoloft, Lexapro, and Celexa. These medications are trying to reuptake serotonin in the brain (gasoline additive). However, since you don't have any serotonin (bankrupted stress coping account) these medications don't provide much help. Once you start filling your brain up with serotonin (from taking 5HTP) the prescription SSRI medications will then have something to re-uptake.

Can I take 5HTP with sleep medications?

Yes. I don't recommend patients discontinue taking their sleep

medications. Instead I suggest they start using 5HTP and increase the bedtime dose until they sleep through the night. At some point they should be able to work with their medical doctor and slowly wean off the prescription sleep medication. Remember all prescription sleep medications have side effects.

I also remind my patients that 5HTP never causes a hangover. Taking 5HTP with some prescription sleep medications may cause a hangover, but taking 5HTP alone does not.

What if I'm taking a prescription sleep medication and sleeping all night?

If you're taking Elavil (or other tricyclic antidepressant), Trazadone, Ambien, or Flexeril (one of the prescription drugs that promotes deep, restorative sleep) and you're falling asleep within 30 minutes, dreaming, and sleeping 7–8 hours, then you should continue taking the sleep medication. You should add 5HTP (50 mg) three times daily with food. If no problems arise after 2–3 days, you should then increase to 100 mg with each meal. Remember the reason you're taking these prescription drugs is because you have a serotonin deficiency, not a drug deficiency. You want to build up your serotonin levels so that eventually you won't need prescription sleep medications.

A person may be taking a sleep medication that helps them go into deep sleep. This does help them to build up their serotonin stores. However, these medications don't actually produce serotonin. Instead, they help you use serotonin more effectively. You'll quickly use up most of your serotonin from daily stress. So even if you're using sleep medications that help you sleep through the

night, the key is to build up serotonin levels with 5HTP and the vitamin and mineral cofactors. Remember, 5HTP and its cofactors are what make serotonin.

What if I'm using sleep medications that don't promote deep sleep?

If you are using one of the sleep medications that don't promote deep, restorative sleep, then you will definitely need to take 5HTP. Medications which don't promote deep, restorative sleep include the following: Zanaflex, Neurontin, Klonopin, Ativan, Xanax, Restoril, Dalmane, Doral, Halcion, Prosom, Buspar, Librium, Serax, Tranxene, Valium, Risperdal, Symbyax, Topamax, and all muscles relaxants (except Flexeril). You'll want to build up your serotonin levels with 5HTP. Try taking 5HTP with these medications. If this combination makes you feel hungover the next day, try reducing the dose or frequency of your prescription medication. I recommend you consult your medical doctor about slowly weaning off these medications. Severe withdrawal symptoms can occur if these medications are discontinued too quickly.

Another option is to try the following recommendations:

If you're sleeping well, start taking 50 mg of 5HTP with food. After a couple of days, increase to 100 mg with each meal. After a couple of weeks, you can try (with the help of her medical doctor) to slowly reduce your sleep medications and add 5HTP at bedtime. You should start with 50 mg and then increase each night until you fall asleep within 30 minutes and sleep through the night.

Can 5HTP be taken with any medications?

Yes, 5HTP can be safely taken with all prescription medications.

I wouldn't recommend 5HTP be used for patients with manic depression or schizophrenia. These conditions are best referred to orthomolecular psychiatrist who specializes in these complicated disorders.

What if someone has a serotonin syndrome reaction?

Serotonin syndrome occurs when a person gets too much serotonin. This can cause rapid heartbeat, increased pulse rate, elevated blood pressure, agitation, and in a worst case scenario, irregular heartbeats (arrhythmia).

I have thousands of individuals on 5HTP and have seen only one person have a serotonin syndrome reaction. She was not a patient. She had a history of irregular heart beats and chemical sensitivities. She also had CFS. I would have never recommended she take 5HTP at bedtime. Instead, I would have had her start with 50 mg with food (if I would have recommended it at all). She took 50 mg at bedtime. The first night, it made her more alert (a sign not to take it at night). She then increased to 100 mg the next night. She began having serotonin syndrome. This caused her to be anxious and have arrhythmia for the next few hours. This is not to scare you. I use 5HTP with individuals with known heart conditions: MVP and heart disease. I always start with a low dose (50 mg) and warn the patient to stop taking it at bedtime if she has a funny reaction. These people are on incredibly toxic heart medications that increases their risk for heart failure, stroke, and death. If I don't get them to consistently go into deep, restorative sleep each night, they'll never get well. So I don't worry about using 5HTP. Once you start reading about the medications and combinations of medications you've been taking, you'll know just how safe 5HTP is. I have been using 5HTP for the last 4-5

years and now have thousands of individuals taking it around the world.

What are some of the other potential side effects of 5HTP?

Other than some patients becoming more alert when taking 5HTP at bed time, I have very few complaints from patients. The literature says that individuals may have headaches and nausea from taking 5HTP. I have had less than half a dozen patients have one of these side effects. The headaches and any nausea go away after a couple of days. Some patients will complain of fatigue when taking 5HTP during the day with food. If so, I have them take 100 mg at lunch and 200 mg at dinner. If they continue to have problems with fatigue after taking the lunch time dose, I'll suggest they try 300 mg at dinner.

When should I increase my 5HTP dose?

I ask (or have the nurse ask) how the patient is sleeping. This is the most important benchmark for how well he is doing. If he is sleeping through the night, I know he is feeling much better. He'll have less pain, less depression, less anxiety, improved energy, and increased mental clarity. If he is sleeping through the night and dreaming, then I leave him at that dose.

However, if he continues to have IBS symptoms, sugar cravings, low moods, or a lot of pain, I have him continue to take the night dose that is putting him to sleep, along with taking additional 5HTP with food during the day (up to a total of 300 mg daily).

For example: The patient is taking 200 mg of 5HTP at bedtime.

He's sleeping through the night but continues to have a good deal of pain. I'll instruct the patient to take an additional 100 mg of 5HTP a day with food (lunch or dinner). Patients who aren't taking 5HTP at bedtime should simply increase their dose with each meal (up to 400 mg a day if needed).

What do I do when I still can't fall asleep and sleep through the night, even when taking 300 mg of 5HTP?

OK. Nobody said this was going to be easy. Most people will be consistently sleeping through the night within a week of starting the 5HTP protocol. However, there are always those who won't. First, make sure you are taking 5HTP as you should be and at the maximum dose of 300 mg. If after two weeks you are not falling asleep and staying asleep through the night, add melatonin.

Melatonin

Melatonin is the primary hormone of the pineal gland and acts to regulate the body's circadian rhythm, especially the sleep/wake cycle. Serotonin turns into melatonin, which then promotes deep, restorative sleep.

You want to use 5HTP to build up your serotonin levels first and foremost. Remember, serotonin reduces pain, anxiety, depression, and IBS symptoms. It also increases mental clarity. So you never want to take melatonin without taking 5HTP (unless poor sleep is your only complaint).

Dr. Joan Larson discusses how melatonin and the immune system are connected: "Melatonin rejuvenates the thymus gland to protect our immunity...Melatonin will 'reset' your immune system when it

has been under siege from infections, cancer, stress, and so on. Such attacks disrupt its rhythms and diminish its effectiveness. Any disruption in our immune system's twenty-four-hour rhythm lowers our immunity, leaving us prone to more illness."¹³

Human Growth Hormone (HGH)

Deep (delta-stage) sleep initiates the pituitary to release HGH. Eighty percent of HGH is produced during delta stage sleep. Low HGH levels will cause further fatigue, reduced capacity for exercise, muscle weakness, impaired cognition, depression, pain, and decreased muscle mass.¹⁴ The best way to boost HGH levels is to get 8–9 hours of deep, restorative sleep.

Melatonin Supplementation

When administered in pharmacological doses (1–6 mg before bed), melatonin acts as a powerful sleep-regulating agent that controls the circadian rhythm. A low dose of melatonin has also been shown to be effective in treating insomnia and jet lag. In a recent study, volunteers were either given a 0.3 mg or a 1 mg dose of melatonin or a placebo. Both levels of melatonin were effective at decreasing the time needed to fall asleep.¹⁵

Delayed Sleep Phase Insomnia

Patients with altered circadian rhythms (sleep wake cycles) often find it hard to fall asleep before the early morning hours. They then end up sleeping through the day. This causes a further disruption to normal circadian rhythms. It can be hard to get these patients' rhythms normalized. Studies have shown that 5 mg of

melatonin given at 11 p.m. helps advance and reset circadian rhythms.¹⁶

If you aren't falling asleep within 30 minutes and sleeping through the night on 300 mg of 5HTP, then it's time to add melatonin.

If you're taking 5HTP with food, make sure you're taking 300–400 mg a day. Then, if you're still not sleeping well, add 3 mg of sublingual melatonin (dissolves under tongue for rapid absorption) 30 minutes before going to bed.

What if I can fall asleep within 30 minutes but can't stay asleep?

Make sure you're taking 300 mg of 5HTP at bedtime or 400 mg with food. Then, if you're falling asleep within 30 minutes but continue to wake up throughout the night, try taking 3 mg of timed release melatonin.

Can I take 5HTP, melatonin, and prescription sleep medications at the same time?

If you're taking prescription sleep medications and not sleeping through the night, you'll need to follow the protocols above. Start with 5HTP first. If you don't consistently fall asleep and stay asleep while combining your prescription sleep medication (preferably one that puts you into deep sleep, as discussed earlier) with 300 mg of 5HTP, then you need to add melatonin as well. Please follow the advice above.

Seasonal Affective Disorder

Melatonin production is affected by a person's exposure to light. Melatonin levels start to rise as the sun goes down and drop off as the sun comes up. The retinas of the eyes are extremely sensitive to changes in light, and an increase in light striking the retina triggers a decrease in melatonin production—this is nature's wake-up call. Conversely, limited exposure to light increases melatonin production—nature's lullaby. This explains why some individuals suffer from seasonal affective disorder (SAD). This disorder is triggered by the onset of winter and the reduction of sunlight. As melatonin levels increase and serotonin levels decrease, depression sets in. One in 10 people, including children, suffer from SAD. Symptoms associated with SAD include depression, fatigue, lethargy, anxiety, and carbohydrate cravings. One to two hours of exposure to bright, ultraviolet light will usually decrease melatonin levels to a normal range. Special ultraviolet (full spectrum) bright lights are found in various stores and catalogs. Individuals with SAD should use these lights every day during the winter months. Those suffering from insomnia should avoid bright lights two to three hours before going to bed.

Other Effects on Melatonin Production

Melatonin production can also be decreased by exposure to electric and magnetic fields, stress, and the aging process. Exposure to both static and pulsed magnetic fields has been shown to significantly decrease melatonin production in the pineal gland of experimental animals.

*What Can Decrease Melatonin Levels?*¹⁷

- exposure to bright lights at night
- exposure to electromagnetic fields
- NSAIDs: Celebrex, Vioxx, Mobic, Alleve, Bextra, etc.
- SSRIs: yes the very same antidepressants that many take for FMS and CFS including Prozac, Zoloft, Celexa, Paxil, and Lexapro
- Anxiety medications (benzodiazepines): Klonopin, Ativan, Xanax, Restoril, etc.
- Anti-hypertensive medications: Inderal, Torprol, Tenormin, Lorpressor, etc.
- Steroids
- Over 3 mg of vitamin B12 in a day.
- Caffeine
- Alcohol
- Tobacco
- Evening exercise (for up to three hours afterwards)
- Depression

*Foods High in Melatonin:*¹⁸

- Oats
- Sweet corn
- Rice
- Japanese radish
- Tomatoes
- Barley
- Bananas

Drugs That Raise Melatonin Levels:¹⁹

- Fluvoxamine (Luvox)
- desipramine (Norpramin)
- most MAOIs
- St. John's wort (acts as an MAOI and may help raise melatonin levels)

Magnesium

You should already be on CFS/Fibro Formula or some other high-dose, broad-spectrum multivitamin and mineral formula with a minimum of 700 mg of magnesium. If you aren't having a daily bowel movement, then you're probably still deficient in magnesium. Increase your magnesium by 140–150 mg (use magnesium chelate, citrate, or taurate) at dinner each night until you begin to have normal bowel movements each day. If you start to have loose bowel movements, simply reduce the amount of magnesium you're taking.

Magnesium is a natural muscle relaxant and sedative. A deficiency can cause low serotonin states, muscle tightness, constipation, fatigue, anxiety, and insomnia.

I get sleepy after dinner, then catch my second wind right before bedtime. What should I do?

High cortisol levels: Some patients have trouble falling asleep because their cortisol levels are too high at bedtime. These are the individuals who get a little sleepy, then catch their second wind and can't fall asleep. They may be sleepy earlier in the evening but attempt to stay awake a little longer (don't want to go to bed at 8 o'clock or want to finish with household chores, watching a movie, reading, etc). An adrenal cortex test profile would help uncover

any abnormal cortisol fluctuations (see resources at the end of this chapter for test information).

You can do a trial of L-theonine along with phosphatidylserine. Phosphatidylserine helps block the release of cortisol. L-theonine boosts alpha brain waves as it reduces mind chatter. You should take 200–400 mg of phosphatidylserine at dinner or two hours before bed. You should take 100 mg of L-theonine before dinner and 100 mg of L-theonine 90 minutes after dinner (on an empty stomach).

Hypoglycemia: Some patients have bouts of hypoglycemia during the night, and this wakes them up. Low blood sugar stimulates the release of cortisol. If you're waking up during the night, eating half a banana or other carbohydrate-rich food should help you go back to sleep.

Hidden problems: Become a detective. Look for clues.

I had one patient who had a terrible problem with blood sugar levels. She was very sensitive to all juices. I missed this on the intake, but when she couldn't sleep, I started asking her questions. She just happened to bring up that she had trouble with fruit juices. Needless to say, I took her off juice and had her take 5HTP with water. She started sleeping.

Herbal Sleep Formula is Another Option

Some of my patients have had success using all natural herbal remedies. I've taken three of the best herbal remedies for sleep and combined them into one formula.

The relaxing properties of three standardized botanicals are combined in one capsule intended for nighttime use:

Hops (*Humulus lupulus*)

Passion Flower (*Passiflora incarnata*) leaf

Chamomile (*Matricaria chamomilla*) flower

You can order this product through my office by calling 1-888-884-9577 or by visiting my website, www.DrRodger.com. You may also find similar products at your local health food store.

I've tried everything above. Now what?

For individuals who have tried everything recommended above without success, I suggest ordering a Comprehensive Melatonin Profile and an Adrenal Cortex Profile to find out why you can't get to sleep or stay asleep at night (see resource section below for ordering tests).

If you're striking out and just can't sleep at night, I'd recommend you consult your medical doctor for a trial of prescription sleep medications that promote deep, restorative sleep (Trazadone, Ambien, Elavil, or Flexeril).

I recommend you continue taking 5HTP along with the prescription medication. After a few months you may be able to wean off your prescription sleep medication and just use 5HTP and, if needed, melatonin.

Recommended Reading

- *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome* by RH Murphree, DC, CNS; 2003.

Resources

- Supplements mentioned in this chapter, including the CFS/Fibromyalgia Formula, L-Theonine, 5HTP, sublingual and timed release melatonin, are available online at www.DrRodger.com or by calling 1-888-884-9577.
- You can order most of the tests mentioned in this manual, including the Adrenal Cortex Profile (saliva test) and the Comprehensive Melatonin Profile (saliva), online at www.DrRodger.com or by calling 1-888-884-9577.

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Chapter 6

Adrenal Fatigue

The adrenals are a pair of pea-sized glands located atop each kidney. The adrenal gland consists of two sections: the medulla (inner portion), and the cortex (outer portion). The adrenal glands release certain hormones that allow us to be able to deal with immediate and long term stress. These glands and the hormones they release allow us to be resilient to day to day stress.

Under-active adrenal glands are evident in about two-thirds of CFS patients.¹ The majority of patients I see for chronic illnesses, including FMS and CFS, are suffering from it. They have literally burned their stress-coping organ out. Amid years of poor sleep, unrelenting fatigue, chronic pain, excessive stimulants, poor diet, and relying on a plethora of prescription medications, the adrenal glands and the hormones they release have been used up. Once adrenal exhaustion sets in, it's not long before the body begins to break down. Getting "stressed out" and staying "stressed out" is the beginning of chronic illness for most, if not all, of the FMS and CFS patients I evaluate.

An altered or dysfunctional cortisol control system may be the cause of FMS/CFS.²

Adrenal fatigue is known to cause many of the same problems associated with CFS and FMS:

- hypoglycemia (low blood sugar)
- hypotension (low blood pressure)
- neural mediated hypotension (become dizzy when stand up)
- fatigue
- decreased mental acuity
- low body temperature (a sign of low thyroid function)
- decreased metabolism
- a compromised immune system
- decreased sense of well-being (depression)
- weight loss
- hyperpigmentation (excess skin color changes)
- loss of scalp hair
- excess facial or body hair
- vitiligo (changes in skin color)
- auricular calcification (little calcium deposits in the ear lobe)
- GI disturbances
- nausea
- vomiting
- constipation
- abdominal pain
- diarrhea
- crave salty foods
- muscle or joint pains

Individuals with FMS and CFS who suffer from adrenal fatigue (99%) will find that their stress coping abilities are shot. They don't handle stress very well. They will try to avoid stressful situations. Stress will make their symptoms worse and cause them to have flare-ups.

If they have a day when they feel good, they may over-do it (clean the house, paint the playroom, grocery shopping, etc.). Then they usually crash the next day.

Therefore, restoring proper adrenal function is a crucial step in peeling away the layers of dysfunction associated with FMS and CFS. I believe that adrenal fatigue is a major contributory factor to the symptoms associated with FMS and CFS.

THE ADRENAL GLAND

The Medulla

In the inner region of each adrenal gland is what's known as the medulla. The adrenal medulla produces norepinephrine and epinephrine (adrenaline). These hormones are known as catecholamines. The medulla hormones are primarily involved in acute (immediate) responses to stress.

Epinephrine...

- increases the speed and force of the heart beat.
- increases systolic blood pressure (the top number -120/80)
- increases pulse rate
- increases cardiac (heart) function
- dilates (opens) the airways to improve breathing
- increases the rate and depth of respiration to allow more oxygen to reach the bloodstream
- mobilizes sugar from the liver to the blood stream in preparation of the fight or flight response
- regulates circulatory, nervous, muscular, and respiratory

systems when needed.

- inhibits the muscle tone of the stomach, so you may feel a “knot” in your stomach during times of stress.³

Restoring adequate epinephrine levels is important.

However, I’ve found that by restoring the adrenal cortex and its hormones, cortisol and DHEA, adrenal fatigue can be overcome. Please read below.

The Cortex

The adrenal cortex is primarily associated with response to chronic stress (infections, prolonged exertion, prolonged mental, emotional, chemical, or physical stress). The hormones of the cortex are steroids. The main steroid is cortisol.

Chronic over-secretion of cortisol leads to adrenal exhaustion which accelerates the downward spiral towards chronic poor health. Once in adrenal exhaustion, your body can’t release enough cortisol to keep up with the daily demands. Eventually you become deficient in cortisol and then DHEA.

Chronic headaches, nausea, allergies, nagging injuries, fatigue, dizziness, hypotension, low body temperature, depression, low sex drive, chronic infections, and cold hands and feet are just some of the symptoms that occur with adrenal cortex exhaustion.

Abnormal Circadian Rhythm

Cortisol levels are affected by stress and the body’s circadian rhythm (sleep/wake cycle). Cortisol secretions rise sharply in the

morning, peaking at approximately 8 a.m. After its peak, cortisol production starts to taper off until it reaches a low point at 1 a.m.

Fluctuations in cortisol levels can occur whenever normal circadian rhythm is altered (a change in sleep/wake times). Traveling through different time zones (jet lag), changes in work shifts, or changes in bed times can drastically alter normal cortisol patterns.

Some patients will report that their FMS/CFS symptoms began when they began working at night. Some will begin to have symptoms after staying up several nights in a row to take care of invalid family members or newborn babies. Changes in circadian rhythm can lead to insomnia and poor sleep. An example of this occurs when a person tries to go to sleep at a certain time but can't wind down. They may catch a second wind when their cortisol levels kick in.

This is why it is important for you to try to go to bed (preferably before 11:00 p.m.) and wake up at the same time each day. Establishing normal sleep and wake times is crucial in restoring normal circadian rhythms.

Adrenal Burnout

People often experience stress reactions every few minutes when bombarded by stimulus coming from our radios, driving in traffic, cell phones, pagers, and from electromagnetic pollution.

Fibromyalgia and CFS, which may go on for years, puts relentless stress and strain on the adrenal glands.

Studies show that chronic noise exposure, for example, can significantly raise cortisol levels. This leads to fatigue and problems with concentration.⁴ Persistent, unrelenting stress will ultimately lead to adrenal burnout.

Not Enough DHEA

The adrenal cortex, when healthy, produces adequate levels of dehydroepiandrosterone (DHEA). DHEA boosts:

- energy
- sex drive
- resistance to stress
- self-defense mechanisms (immune system)
- general well-being and helps to raise:
 - cortisol levels
 - overall adrenal function
 - mood
 - cellular energy
 - mental acuity
 - muscle strength
 - stamina

DHEA is notoriously low in FMS and CFS patients. Chronic stress initially causes the adrenals to release extra cortisol. Continuous stress raises cortisol to abnormally high levels. Then the adrenal glands get to where they can't keep up with the demand for more cortisol. As the cortisol levels continue to become depleted from on going stress the body attempts to counter this by releasing more DHEA. Eventually they can't produce enough cortisol or DHEA. Aging makes holding on to DHEA even tougher. Even in healthy individuals, DHEA levels begin to drop after the age of 30. By age 70, they are at about 20% of their peak levels.

Stress and DHEA

DHEA helps prevent the destruction of tryptophan (5HTP), which increases the production of serotonin. This helps provide added protection from chronic stress. Studies continue to show low DHEA to be a biological indicator of stress, aging, and age-related diseases including neurosis, depression, peptic ulcer, IBS, and others.⁵

DHEA and Immune Function

The decrease in DHEA levels correlates with the general decline of cell-mediated immunity and increased incidence of cancer. DHEA protects the thymus gland, a major player in immune function.

Billie Jay Sahley, PhD, writes, “over secretions of the stress hormones (cortisone, cortisol, and corticosterone), caused by long-term mental or physical effort, could lead to cancer, arthritis, and susceptibility to infections. Many psychosomatic disorders are transmitted from the brain to the skeletal muscle system. Anxiety, stress, anger, or any other psychic state can greatly change the amount of nervous stimulation to the skeletal muscles throughout the body, and either increase or decrease the skeletal muscular tension.”⁶

These same stimulatory responses that affect the muscles also cause changes in various bodily organs: abnormal heartbeats, peptic ulcers (too much stomach acid), hypertension, spastic colon, and irregular menstrual periods. This is why you can't separate emotional stress from physical stress. As I'll discuss in later chapters, our emotional state plays a major role in determining our level of overall health.

Testing for Adrenal Fatigue

I use saliva adrenal hormone profiles to test for adrenal and DHEA deficiencies. This test is available from my website (under “Lab Testing”).

Self Test Methods

A quick blood pressure test that monitors lying and standing systolic numbers can help us begin a trial treatment of adrenal boosting supplements.

Orthostatic Blood Pressure

Ragland’s sign is an abnormal drop in systolic blood pressure (the top number) when a person goes from a lying to a standing position. There should be a rise of 8–10 mm in the systolic (top) number. A drop or failure to rise indicates adrenal fatigue. Example: Someone takes your blood pressure while you’re lying on your back. The systolic number is 120 and the diastolic number is 60 (120 over 60). Then, your blood pressure is taken again after you immediately stand up. The systolic number (120) should go up 10 points (from 120 to 130). If it doesn’t increase 10 points, adrenal fatigue is indicated.

Note: It’s not unusual for the systolic number to drop 10 or more points. This is a sure sign of adrenal fatigue.

Pupil Dilation Test

Another way to test for adrenal dysfunction is the pupil dilation exam. To perform this on yourself, you’ll need a flashlight and a mirror. Face the mirror, and shine the light in one eye. If after 30 seconds the pupil (black center) starts to dilate (enlarge), adrenal deficiency should be suspected.

Why does this happen? During adrenal insufficiency, there is a deficiency of sodium and an abundance of potassium, and this imbalance causes an inhibition of the sphincter muscles of the eye. These muscles normally initiate pupil constriction in the presence of bright light. However, in adrenal fatigue, the pupils actually dilate when exposed to light.

Rogoff's Sign

Rogoff's sign is a definite tenderness in the lower thoracic (mid-back) spine where the ribs attach.

ADRENAL FATIGUE PROTOCOL

- 1.** Make sure you are consistently going into deep, restorative sleep each night. Please see the previous chapter.
- 2.** Make sure you are taking a comprehensive optimal daily allowance multivitamin and mineral formula, like my CFS/Fibro Formula (or something similar). To order, see resources at end of this chapter.
- 3.** Start taking adrenal cortical extracts. These help repair and restore normal adrenal function: "Adrenal extracts have been recommended and successfully used for a variety of conditions that involve low adrenal function, including asthenia, asthma, colds, burns, depletion from infectious diseases, from colds, coughs, dyspepsia (poor digestion), early Addison's disease, hypotension (low blood pressure), infections, infectious diseases...neurasthenia (low

energy/weakness), tuberculosis, light-headedness and dizziness, and vomiting during pregnancy.”⁷

Adrenal cortical extracts are used to replenish and eventually normalize adrenal function. They have an advantage over prescription cortisol hormone replacement in that they can be instantly discontinued once they have done their job of repairing adrenal function. Adrenal extracts have been successfully used to treat many conditions related to adrenal fatigue, including many symptoms of FMS and CFS. They can increase energy and speed recovery from illness. Adrenal extracts are not a new treatment. In the 1930s, they were very popular and used by tens of thousands of physicians. They were still being produced by leading drug companies as recently as 1968. Today, these extracts are available without a prescription as adrenal cortical glandular supplements.

Important

Don't use whole gland adrenal or adrenal medulla glandular. They are designed to increase adrenaline levels. I used whole adrenal glandular early on, but found that my FMS and CFS patients did much better taking adrenal cortex glandular. Whole adrenal glandular will raise epinephrine (adrenaline) levels and put more stress on your already delicate stress coping mechanisms. Whole adrenal glandular or adrenal medulla glandular can cause anxiety, rapid heart beat, and elevated blood pressure.

Adrenal Cortex Glandular Supplements

I recommend you start with 500 mg of adrenal cortex glandular twice a day with food. My patients usually notice improvements from taking adrenal cortex glandular supplementation (along with the CFS/Fibromyalgia Formula) within one–two weeks.

You should see a difference on the orthostatic blood pressure test and/or pupil test within one to two weeks. If these tests don't improve within two weeks, then double the dose of adrenal cortex, and re-test in another two weeks.

See resources at the end of this chapter.

4. If your blood pressure runs low (99/60 or below) then increase your salt consumption. Yes, it's OK to use salt. The body needs plenty of sodium in order to work properly. Salt (sodium) is a natural antihistamine. This is one reason why saline nasal rinses help prevent sinus congestion. Histamine along with its regulators, prostaglandins and kinins (inflammatory chemicals), can cause pain. Patients with low blood pressure should use salt liberally.

Important

Patients with congestive heart failure, pulmonary edema, and/or high blood pressure should avoid additional salt intake.

5. I recommend you drink at least 70 ounces of water each day.

If you continue to experience adrenal fatigue symptoms after taking the steps above:

6. Take DHEA if needed. It's best to be tested before taking DHEA supplements. This test is available on my website (under "Lab Tests"). However, most females with FMS or CFS will usually need 10–25 mg daily and males 50–100 mg daily. I've found sublingual (dissolving under the tongue) to

be the best form of DHEA, but micronized (much easier to absorb) forms of DHEA are also a good choice.

I normally wait to see patients respond to adrenal cortex supplementation before recommending DHEA. Individuals with CFS are much more likely to need DHEA and to benefit from adding it to their adrenal cortex glandular supplement. Remember that DHEA and cortisol are both contained in the adrenal cortex.

- 7.** Increase vitamin C intake if necessary (the CFS/Fibro Formula provides 1,800 mg). It's perhaps the most important nutrient in facilitating adrenal function and repair. Dr. Wilson writes, "The more cortisol made, the more vitamin C is used. Vitamin C is so essential to the adrenal hormone cascade and the manufacture of adrenal steroid hormones that before the measurement of adrenal steroid hormones became available, the blood level of vitamin C was used as the best indicator of adrenal function level in animal research studies." ⁸

Vitamin C Dosing: I recommend all patients take a minimum of 1,800 mg a day of vitamin C. I don't usually find a patient who needs to increase their vitamin C dose above 1,800 mg (the amount that's in the CFS/Fibro Formula).

However, if all the steps have been taken above, then I recommend you start to add additional vitamin C. Much larger amounts of vitamin C may be needed for adrenal restoration, but it's best to begin with 1,800–2,000 mg daily and increase by an additional 1,000–2,000 mg a day, up to 10,000 mg or until you have a loose bowel movement. If you have such a bowel movement, reduce

your dose by 1,000 mg. Keep reducing the dose by 500–1,000 mg daily until you no longer have loose stools. This is the ideal dose of vitamin C you should be on.

- 8.** If your blood pressure remains low, even after taking the steps above, start taking licorice root extract (*Glycyrrhiza glabra*) to raise blood pressure. It has been used for over 5,000 years and is one of China's most popular herbal medicines. Licorice root extract acts like the adrenal hormone, Aldosterone, which is involved in salt and water metabolism. Large amounts of licorice root can cause water retention, potassium deficiency and elevated blood pressure. Raising the blood pressure can have dramatic effects on those suffering from hypoadrenia. Many times their nausea, dizziness and fatigue will simply disappear. I recommend licorice root extract when blood pressure is at or below 95/60.

The adrenal cortex glandular contains aldosterone as well as cortisol and DHEA. Supplementation of adrenal cortex will often normalize low blood pressure. Flonase, a prescription medication, can be used for raising low blood pressure, but it rarely raises the blood pressure to normal levels.

Eat Breakfast

I'd like to encourage you to always eat breakfast and to never skip meals. Individuals with low adrenal function are usually not hungry when they wake up. They instead rely on chemical stimulants (coffee, sodas, cigarettes, etc.) to get them going. These stimulants raise blood sugar levels as well as serotonin levels. However, these stimulants also increase adrenaline and cortisol levels. This curbs their appetite even further. However, the body needs to break the

eight hour fast (breakfast) it has been under. The brain especially needs to be fed, as forty percent of all food stuff fuel goes to maintain proper brain function. This is one reason you may have problems with “Fibro fog” and mood disorders (anxiety and depression).

Cortisol levels are at their highest around 8:00 a.m. You may be hypoglycemic (low blood sugar) and your cortisol levels will be extremely high in the morning. You may feel nauseated, mentally and physically drained, and jittery. You may also suffer from headaches, so eating is the last thing you want to do. You need to eat anyway! A small snack (avoid simple sugars) is all you need until hunger comes, usually a couple of hours later. Then eat another balanced snack to tie you over until lunch. Then, don't skip lunch! It's best to eat little meals throughout the day. Don't let your blood sugar drop too low. Avoid simple sugars. As any “sugarholic” can attest, a soda, doughnut, or pastry can provide a quick energy fix. But this rapid rise in blood sugar is followed by an equally rapid nosedive. And low blood sugar produces all the unwanted symptoms associated with low adrenal function: fatigue, irritability, fibro fog, depression, nausea, and more.

Slowly Reduce Caffeine Consumption

Start to eliminate—or at least limit—all caffeine, nicotine, sugar, and alcohol. I know this can be tough. But if you want to get well, this is really not an option. At the very least, drastically reduce your consumption of these adrenal hormone robbers. You'll need to wean off caffeine slowly to avoid headaches. Its best to wean off caffeine over a period of two to three weeks.

HYPOGLYCEMIA (LOW BLOOD SUGAR) PROTOCOL

Hypoglycemia is a complex set of symptoms caused by faulty carbohydrate metabolism. It's also synonymous with low blood sugar. Normally, the body maintains blood sugar levels within a narrow range through the coordinated effort of several glands and their hormones. If these hormones, especially glucagon (from glucose) and insulin (produced in the pancreas), are thrown out of balance, hypoglycemia or type-2 diabetes can result.

Hypoglycemia (in people not taking insulin) is usually the result of consuming too many simple carbohydrates (sugars). "Syndrome X" describes a cluster of abnormalities that owe their existence largely to a high intake of refined carbohydrates leading to the development of hypoglycemia, excessive insulin secretion, and glucose intolerance. This condition is followed by decreased insulin sensitivity, elevated cholesterol levels, obesity, high blood pressure, and type-2 diabetes.

Numerous studies have demonstrated that depressed individuals have faulty glucose/insulin regulatory mechanisms. Other studies have clearly shown the relationship between low blood sugar and decreased mental acuity. Hypoglycemia has also been implicated as a major trigger for migraine headaches.

Hypoglycemia Diet

The following foods are not recommended for anyone with hypoglycemia or hypoadrenia tendencies: table sugar, maltose, honey, sucrose (fruit sugar), bananas, raisins, dates, fruit juices, apricots, beets, white flour, white potatoes, white rice, cooked corn, corn flakes, and cereals.

It's best to combine protein, fat, and carbohydrate in each snack or meal. Avoiding simple sugars and consuming a balanced diet help stabilize blood sugar levels. Eating healthy snacks throughout the day can also help keep your blood sugar levels stable. One simple snack that combines protein, fat, and carbohydrate is a handful of nuts (such as cashews, almonds, walnuts, or pecans) along with an apple, pear, or whole wheat crackers.

Supplements to Combat Hypoglycemia

If you're following my advice above (ie: taking the CFS/Fibromyalgia Formula, taking the adrenal cortex, drinking 70 ounces of water, avoiding simple sugars, and not skipping meals), you'll probably not need any of the following supplements.

- **Chromium** is a trace mineral that helps reduce glucose-induced insulin secretion. Chromium works with insulin to facilitate the uptake of glucose into the cells. Glucose levels remain elevated in the absence of chromium. A normal dose is 200 mcg. Taken 30 minutes before or after meals, two–three times daily. Chromium is in the CFS/Fibro Formula.
- **Vitamin B3** (niacin) helps regulate blood sugar levels and may help alleviate the symptoms of hypoglycemia. This should be in your multivitamin and mineral formula (Like the CFS/Fibro Formula).
- **Magnesium** levels must be sufficient in order to avoid hypoglycemic reactions. This should be in your multivitamin and mineral formula. Magnesium is in the CFS/Fibro Formula.

- **Zinc** levels must be sufficient in order to avoid hypoglycemic reactions. This should be in your multivitamin and mineral formula. Zinc is in the CFS/Fibro Formula.
- **L-Glutamine**, an amino acid, helps regulate blood sugar levels. I've found it to be very effective in eliminating sugar cravings and hypoglycemic episodes. A normal dose is 500–1,000 mg once or twice daily on an empty stomach.
- **Gymnema** sylvestre is a climbing plant found in Asia and Africa. It's used in Ayurvedic medicine, an indigenous healing practice from India, for the treatment of type-2 diabetes. Scientific studies have shown this herb to be a valuable addition in preventing the symptoms of hypoglycemia. It's also routinely used to reduce sugar cravings. Nature's Way makes a product called Blood Sugar. This product contains chromium and gymnema Sylvestre.

All of the above vitamins and minerals (excluding gymnema sylvestre) are included in the CFS/Fibro Formula.

Resources

- The CFS/Fibromyalgia Formula is the specialized multivitamin/mineral pack I recommend for all of my patients. It contains all the needed vitamins, minerals, amino acids, essential fatty acids, malic acid, and extra magnesium needed to help those with CFS and FMS get well.
The CFS/Fibro Formula is available online at www.DrRodger.com or by calling 1-888-884-9577.
- Adrenal Cortex is available at some health food stores. I use a special form of adrenal cortex certified to be organic and free of

any contaminants, available online at www.DrRodger.com or by calling 1-888-884-9577.

- DHEA is available at most health food stores. My website offers both forms of the most absorbable and potent forms of DHEA. You can order online at www.DrRodger.com or by calling 1-888-884-9577.
- All the supplements recommended for Hypoglycemia are available at your local health food store. Most of these are in my CFS/Fibro Formula.
- Blood Sugar by Nature's Way, Licorice Root, Vitamin C, and L-Glutamine are available at most health food stores or you can order online at www.DrRodger.com or by calling 1-888-884-9577.
- Adrenal Cortex Testing
Adrenal cortex test profiles (measures the need for adrenal cortex or cortisol and DHEA) is available online at www.DrRodger.com or by calling 1-888-884-9577.

For Further Reading

- *Boosting Immunity: Creating Wellness Naturally* by Len Saputo, MD and Nancy Faass MSW MPH; 2002.
- *Adrenal Fatigue: The 21st-Century Stress Syndrome* by James L. Wilson; 2002.
- *Boost Your Energy* by Sandra Cabot, MD; 1997.

NOTES

1. This is research cited by J. Teitelbaum and B. Bird, Effective Treatment of Severe Chronic Fatigue: A Report of A Series of 64 Patients. *Journal of Musculoskeletal Pain* 3 (4) 1995; 91-110.
2. Author borrows from Demitrack MA. Chronic fatigue syndrome: a disease of the hypothalamic-pituitary-adrenal axis? *Ann Med* 26 (1) 1994: 1-5.
3. Textbook on Physiology by Guyton
4. Author borrows from Melamed S, Bruhis S. The effects of chronic industrial noise exposure on urinary cortisol, fatigue and irritability: a controlled field experiment. *J*

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5. Safe Uses of Cortisol by William Jefferies, MD, FACP
 6. The Anxiety Epidemic by Billie J Sahley. Pain and Stress Therapy Center Publications, 1995.
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Chapter 7

Digestion and GI Disorders

Digestive Enzymes

Most digestion and absorption takes place in the small intestine and is regulated by pancreatic enzymes and bile. The pancreas aids in digestion by releasing proteolytic enzymes, which help break proteins down into amino acids.

These enzymes break down food stuff and allow the smaller molecules and nutrients to be absorbed into the bloodstream. The enzymes may become deficient for a variety of reasons, including advancing age, excess sugar, deficient essential fatty acids, excessive trans-fatty acids, and overeating. Eating processed food also depletes normal pancreatic enzymes.

Raw, unprocessed foods contain their own digestive enzymes. When we eat these foods, we help spare our own pancreatic enzymes. However, eating processed foods requires our body to secrete extra amounts of pancreatic enzymes. Over time, processed foods deplete a person's own pancreatic enzyme stores.

Proteolytic enzymes also help regulate inflammatory reactions by reducing the amount of kinins in the body. Kinin is a tissue hormone capable of causing severe and painful inflammatory reactions. It is triggered by allergic foods or chemicals and can cause inflammation anywhere in the body, including the brain.

I recommend that all patients over the age of 35 or with chronic health problems take digestive enzymes, even if they're not currently suffering from a digestive illness.

You should be having at least one bowel movement every 24 hours. Having a bowel movement after each meal is optimal. Notice how often your pets have a bowel movement...after every meal. Having three or more bowel movements can seem like a lot when you were, until recently, having one every few days.

I recommend my patients use a potent pancreatic digestive enzyme formula that utilizes USP porcine-derived high-potency pancreatin for reliable and consistent enzyme activity.

Important: I recommend that everyone with FMS or CFS take a digestive enzyme with each meal.

BLOATING, GAS, AND INDIGESTION PROTOCOL

Take a digestive enzyme with each meal. If after one week you continue to have bloating gas or indigestion, add 3 capsules of high dose probiotics (good bacteria, acidophilous, etc.). Probiotics should be taken on an empty stomach. Usually, one to two months of probiotic therapy is enough.

Heartburn, Reflux, and GERD

One estimate is that 40% of the US population has some degree of esophageal reflux, with 20% of adults complaining of weekly episodes of heartburn and 7–10% complaining of daily symptoms. Esophageal reflux occurs when the lower esophageal sphincter

malfunctions, allowing the backward flow of acid, bile, and other contents from the stomach into the esophagus.

Gastritis (inflammation of the stomach itself), peptic or duodenal ulcers, and chronic use of nonsteroidal anti-inflammatory drugs (NSAIDs) can result in reflux. A hiatal hernia can also result in esophageal reflux.

The most obvious symptom of esophageal reflux is heartburn. It occurs after eating and can last from a few minutes to a few hours. Heartburn feels like a burning sensation in the pit of the stomach. The pain may also move up into the chest and throat.

GERD (gastroesophageal reflux disease) can cause esophageal scarring or Barrett's syndrome, a chronic irritation from acid-bile reflux that causes the normal esophageal lining cells to be replaced by precancerous cells. These cells are associated with an increased risk for development of cancer.¹

Diagnosis

An endoscopy test is used for the diagnosis of GERD. This test involves examining the esophagus through a flexible viewing tube, which can also take a biopsy to correctly identify acid reflux.

Conventional Treatment of GERD

H₂ antagonists (Tagament, Pepcid, Zantac, etc.) and antacids (Tums, Maalox, etc.) are usually the first line of treatment. If these fail to work, proton-pump inhibitor drugs (Nexium, Prevacid, or Prilosec) are initiated. Yet, many physicians now prescribe proton-pump inhibitor drugs as a first-line therapy. These medications block the absorption of zinc, folic acid, B12, calcium, and iron.

Long-term use of these medications can block all stomach acid (hydrochloric acid). The stomach needs hydrochloric acid to break down proteins for digestion. Failure to do this can lead to all sorts of problems, including intestinal permeability, anemia, fatigue, increased allergy disorders, depression, anxiety, and bacterial and yeast overgrowth.

Are Antacids the Answer?

No! First, the esophageal sphincter is stimulated to close by the release of stomach acids. When there's not enough stomach acid present—because antacids have neutralized them—the esophageal sphincter may not close properly. This allows acid to travel back up into the esophagus and cause heartburn, also called esophageal reflux or gastro-esophageal reflux disease—GERD. GERD is usually treated by antacids, but antacids could make GERD worse.

Second, the stomach needs an acidic environment for hydrochloric acid to turn the enzyme pepsinogen into pepsin. No acid equals no pepsin, which is needed for digestion, especially protein. No protein digestion means no amino acids. No amino acids, no neurotransmitters (serotonin, dopamine, norepinephrine, etc.).

Last, an acidic environment is one of the body's first lines of defense, destroying viruses, parasites, yeast, and bacteria.

ACHLORHYDRIA (LOW STOMACH ACID) PROTOCOL

Numerous studies have shown that acid secretion declines with advancing age. It's been estimated that 50% of Americans over the age of 60 suffer from achlorhydria, a deficiency in hydrochloric acid. The resulting rise in stomach pH can cause many of the symptoms associated with FMS and CFS.

Low stomach may also cause the very same symptoms associated with GERD. Unless you've had an upper GI endoscopy, biopsy, or blood test that shows a definitive case of GERD or H. pylori, then you may be causing more problems by using antacid medications.

For example, one study found that 34% of those with low stomach acid reported indigestion and excessive gas. Forty percent complained of fatigue.

We need gastric acid and pepsin for optimal digestion of food, absorption of nutrients, and release of pancreatic enzymes. A hydrochloric-acid deficiency triggers a chain reaction of digestive disorders, including malabsorption. Foods may be incompletely digested and subsequently absorbed into the bloodstream, where they can lead to food allergies, triggering pain and inflammation throughout the body.

Some symptoms associated with achlorhydria:²

- bloating
- gas
- indigestion
- heartburn

- distention after eating
- diarrhea
- constipation
- hair loss in women
- parasitic infections
- rectal itching
- malaise
- multiple food allergies
- nausea
- nausea after taking supplements
- restless legs
- sore or burning tongue
- dry mouth

Other associated signs:²

- abnormal intestinal flora
- chronic Candidiasis
- chronic intestinal parasites
- dilated capillaries in the cheeks and nose (in non-alcoholics)
- iron deficiency
- post-adolescent acne
- undigested food in the stool
- fingernails that are weak, peeling, and cracked

Diseases linked to low gastric acidity:²

- vitiligo (skin disorder of milky white patches)
- urticaria (itching)
- Celiac disease
- asthma
- Addison's disease
- chronic autoimmune disorders

- eczema
- psoriasis
- rosacea
- pernicious anemia
- lupus
- gastritis
- food allergies
- diabetes mellitus
- osteoporosis

HEARTBURN/GERD PROTOCOL

If you're suffering from heartburn, try the solutions below rather than antacids.

1. Take a pancreatic digestive enzyme with each meal.
If you've been taking Nexium, Prevacid, Pepcid, Prevpac, Prilosec, Propulsid, Reglan, or Zantac for over three months, then you may have to stay on the medications along with taking digestive enzymes. Many of my patients have found that they don't need these prescription medications once they start taking a good, high potency digestive enzyme like the one I use in my practice.
2. If you continue to have problems with reflux even after taking digestive enzymes, then try taking Betaine with pepsin. See the information below.

Supplementing With Hydrochloric Acid

Adequate protein intake and a relaxed emotional state can help

increase stomach acidity, but supplementation might also be necessary. Follow the guidelines below. I don't recommend HCL for a patient who has been diagnosed with a peptic ulcer because HCL can irritate sensitive tissue. It can also corrode teeth. Capsules should not be emptied into food or beverages. I recommend taking pancreatic enzymes along with HCL.

1. Take one capsule containing 600–650 mg of hydrochloric acid, along with 100–200 mg of pepsin, at the beginning of your meal. Continue taking one capsule with each meal for the next five days.
2. After five days, increase your dose to two capsules with each meal. Continue this dose for five days.
3. If you are experiencing no side effects (such as warmth, fullness, or other odd sensation in your stomach), increase your dose by one capsule each day until you do. Then reduce your dose by one capsule at your next meal.
4. Once you've established a comfortable per-meal dose (five capsules or fewer), continue at that level. As your stomach regains the ability to produce an adequate concentration of HCL, you will probably require fewer capsules. Listen to your body and reduce your dose as necessary. You may wish to reduce your number of capsules at smaller meals.
5. Be consistent. Individuals with low HCL and pepsin typically don't respond as well to botanicals and supplements, so to maximize the benefits, keep up supplementation as directed.³

Treating with Diet and Eating Habits

Certain foods relax the esophageal sphincter and can make heartburn, reflux, and GERD worse. These foods include:

- fried, spicy, or fatty foods
- carbonated drinks
- citrus fruits
- peppermint
- chocolate
- coffee
- tea
- alcohol
- tomatoes
- garlic
- onions

You should also avoid lying down within three hours of eating and should eat smaller meals more frequently (perhaps four or five daily). You can also elevate the head of your bed about six inches (to facilitate keeping gastric contents in the stomach) and try sleeping on your side, which would remove pressure from the esophageal sphincter, helping to keep gastric contents from backing up.

If you continue to have problems even after trying the recommendations, then you should be tested for GERD and H. Pylori. Please ask your doctor if you've been tested for either of these conditions. If not, I recommend you be tested.

Stomach Ulcers and H. pylori

Most stomach ulcers are now considered to be caused by the *Helicobacter pylori* bacteria. *H. pylori* is associated with ulcers, heartburn, and reflux. Special antibiotic regimens are now the therapy of choice in treating ulcers. Blood tests can reveal the presence of the *H. pylori* antibody. Special antibiotic combinations

can be used to eliminate H. pylori bacteria from the stomach within a matter of weeks. Those who fail to eradicate H. pylori are at a far greater risk for contracting stomach cancer.

If you're complaining of heartburn in spite of being on digestive enzymes, then have your blood tested for H. pylori. If you test positive for H. pylori, it can be treated with antibiotics and over-the-counter products such as Pepto-Bismol. Treatment should only be for a couple of weeks. Then you should be able to discontinue taking prescription antacids.

Supplement with probiotics 12 hours apart from antibiotics (see below information on probiotics).

Questions and Answers

I have bloating and gas that seems to be worse when I eat certain foods. Will taking digestive enzymes help this?

Digestive enzymes help you digest and utilize proteins, fats, and carbohydrates. You should notice that your bloating and gas are eliminated once you start taking digestive enzymes.

I've been diagnosed with GERD and have been taking Nexium (Prevacid, Zantac, Prilosec, etc.) for several months. Can I stop taking this medication and just take the digestive enzymes you recommend?

I would encourage you to try the digestive enzymes (with each meal) for a week or two and see if this alone prevents you from getting any reflux symptoms. The longer you've been on prescription medications for reflux, the harder it becomes to discontinue

them. However, you may find you don't need the prescription medication once you start taking a digestive enzyme. If you continue to have reflux while taking the digestive enzyme, then try adding the betaine HCL with pepsin (see achlorhydria protocol) and probiotics (see below). If you continue to have a problem, then you'll need to go back on the prescription medication. If so, then discontinue the betaine HCL with pepsin, but keep taking the digestive enzyme with each meal.

Irritable Bowel Syndrome (IBS)

This syndrome is characterized by disruptions in normal bowel function. Individuals with this disorder will swing back and forth between diarrhea and constipation. Over 40 million Americans have been diagnosed with irritable bowel syndrome, and surveys have shown that as many as 73% of FMS patients have it.⁴

IBS is frequently associated with stress, depression, and anxiety. Studies show that 54–94% of IBS patients meet the diagnostic criteria for depression, anxiety, or panic disorder.⁵

IBS's Relation to FMS/CFS

Research has shown that the causes of, FMS, CFS, and IBS are related to neuroendocrine immune system dysfunction (brain and stomach hormones). This connection is largely mediated by the neurotransmitter serotonin.

The brain and gut are connected through the neuroreceptors 5-hydroxytryptamine-3 (5-HT₃) and 5-hydroxytryptamine-4 (5-HT₄).

These serotonin receptors regulate the perception of intestinal pain and the GI motility (contractions that move food through the intestinal tract). Serotonin controls how fast or how slow food

moves through the intestinal tract.⁶

There are more serotonin receptors in the intestinal tract than there are in the brain. This is one reason people get butterflies in their stomach when they get nervous.⁷

Poor sleep, increased pain, sugar cravings, depression, anxiety, and IBS are all signs of low serotonin and classic symptoms of fibromyalgia.

Warning: Prescription Medications for IBS

Some of you are taking prescription medications for their IBS. These medications include smooth muscle relaxants (Bentyl, Levsin, and Levsinex), antidepressants (Prozac, Paxil, etc.), anti-diarrhea meds (Immodium, Lomotil), bulk forming laxatives (Metamucil), or Zelnorm, which modulates 5-HT3 and 5-HT4. These medications range from innocuous to life endangering.

Zelnorm (Tegaserod) is a 5-HT4 agonist. This medication is used for short-term constipation associated with IBS. The side effects include severe liver impairment, severe kidney impairment, bowel obstruction, diarrhea, constipation, abdominal pain, headaches, abdominal adhesions, gallbladder disease, and back pain.

Lotrinex (Alosetron), a 5-HT3 agonist, is prescribed for diarrhea associated with IBS. Within 8 months of being on the market, reports of ischemic colitis (a life endangering situation in which the blood supply to the intestines is blocked) began to grow each day. Lotrinex was responsible for at least four deaths. Many who took the drug reported severe abdominal pain from constipation. The drug was taken off the market. It is now being approved with

strict prescribing guidelines. An editorial in *The British Medical Journal* suggests that as many as 2 million Americans will be eligible for the drug under the new guidelines. According to previous reported side effects, this would result in 2,000 cases of severe constipation, almost 6,000 cases of ischemic colitis, 11,000 surgical interventions, and at least 324 deaths.

Why in the world would someone prescribe this crap? (No pun intended.) This is typical of what is wrong with “cookbook” (symptom-focused) medicine. It is absurd to suggest that high doses of vitamins and minerals are dangerous while at the same time promoting life-threatening medications that only cover up symptoms.

IBS Protocol

I've found that IBS symptoms usually disappear within two weeks of taking 200–300 mg of 5HTP, a digestive enzyme with each meal, and 1–2 packs of the CFS/Fibro Formula daily. Once a person gets her serotonin levels up, IBS goes away, never to return. This can be life-changing for many of my patients.

I find IBS to be to the easiest layer of the onion to correct.

Normalizing serotonin levels with the approach above should correct IBS within two weeks.

Questions and Answers

What if I'm taking 300 mg of 5HTP, the digestive enzymes, and your CFS/Fibromyalgia Formula and still have constipation?

Magnesium is a natural muscle relaxant (relaxes the colon), so too much will cause loose bowel movements. The CFS/Fibromyalgia Formula contains 700mg of magnesium chelate. This is usually enough to promote normal daily bowel movements. However, some

individuals will need to increase their dose of magnesium in order to overcome problems with constipation.

If you continue to have constipation, increase magnesium (use magnesium citrate or chelate) by 140–150 mg daily (at dinner) until you begin to have normal daily bowel movements. Then stay on this extra magnesium. You'll find that after a few months of taking the supplements I recommend for FMS and CFS, you'll be able to discontinue the extra magnesium.

What if I continue to have loose bowel movements?

Low serotonin will cause loose bowel movements. Make sure you're taking 300 mg a day of 5HTP either at bedtime or with food (see chapter 5, Sleep Disorders).

If you're taking 300 mg of 5HTP, digestive enzymes, and the CFS/Fibromyalgia Formula and continue (or start) to have loose bowel movements, then decrease the amount of magnesium you're taking. I don't reduce magnesium until the patient has been on 300 mg of 5HTP for at least two weeks.

If after two weeks of taking 300 mg of 5HTP you continue to have daily loose bowel movements, then it's time to explore the possibility that you're taking too much magnesium.

Start to reduce your magnesium by eliminating the smallest white tablet in the CFS/Fibromyalgia Formula. If after a couple of days you continue to have a loose bowel movement, then take only one CFS/Fibromyalgia pack a day.

If the problem persists then start taking 3 probiotics a day on an empty stomach for 2–3 months. Please read more about probiotics below. I recommend you stay on one pack of CFS/Fibromyalgia Formula or an optimal daily dose multivitamin. The amino acids, vitamins, and especially the fish oil in the formula will help normalize your intestinal tract. Individuals with persistent IBS will need to treat their leaky gut. Please see protocol below.

If you suspect you have a yeast overgrowth (from the new patient questionnaire in chapter 3), then treat according to the protocol in chapter 13, Yeast Overgrowth.

Intestinal Dysbiosis

The intestinal tract contains hundreds of microorganisms (unhealthy bacteria and yeast) that normally don't cause any health problems. However, when the intestinal tract is repetitively exposed to toxic substances (antibiotics, steroids, anti-inflammatory medications, etc.) these microorganisms (yeast and bad bacteria) begin to proliferate and create an imbalance in the bowel flora. This is known as intestinal dysbiosis.

Probiotics and Normal Human Microflora

The intestinal tract contains some 2–3 lbs. of bacteria. The GI tract contains approximately 100,000 billion viable bacteria. The skin harbors approximately 1,000 billion viable bacteria. There are a total of 10,000 billion cells in the body. As you can see, there are more of them (bacteria) than there are of us (human cells). In addition, 30% of fecal material is bacteria. When healthy intestinal bacteria levels are depleted, a person becomes more susceptible to disease. For instance, the infective dose of *Salmonella enteritidis* decreases from 100,000 to approximately 10.

Protective Effect of Microflora against Yeast Overgrowth

Candida only causes a problem when it can attach to the epithelial lining and insert a hook-like tentacle. Once it does this, it creates increased permeability, and toxins begin to leak across the intestinal tract membrane. But in a normal microflora environment, numerous Lactobacilli are attached to the epithelial surface and prevent the attachment and overgrowth of *Candida albicans*.

Probiotics

Lactobacillus (*acidophilus*, *casei*, and *rhamnosus*) and *Bifido bacterium bifidum* are the two most important probiotics. Studies show that probiotics can reduce and even eliminate yeast overgrowth. Lactobacilli *acidophilus* have been shown to inhibit *H. pylori*.

Dysbiosis or disruption of the intestinal bacteria can cause these microorganisms to secrete toxic chemicals that can cause a myriad of health problems: ⁸

- Candida yeast syndrome
- Allergies
- Eczema
- Vitamin B12 deficiency
- Autoimmune diseases (rheumatoid, lupus, etc.)
- Chronic fatigue
- Irritable bowel syndrome
- Colitis
- Psoriasis.

Intestinal Permeability or Leaky Gut

Intestinal permeability occurs when the lining of the digestive tract becomes permeable (leaky) to toxins that cause chronic inflammation. It allows toxins to leak out of the digestive tract and into the bloodstream. This triggers an autoimmune reaction that can create pain and inflammation in any of the body's tissues.

The use of nonsteroidal anti-inflammatory drugs, steroids, antibiotics, antihistamines, caffeine, alcohol, and other prescription and nonprescription drugs renders the intestinal mucosa permeable to toxins and undigested food particles.

Intestinal permeability is associated with such illnesses as:⁹

- Ankylosing spondylitis
- Rheumatoid arthritis
- Food allergies
- Crohn's disease
- Eczema
- CFS
- IBS
- Cystic fibrosis
- Chronic hepatitis
- Autoimmune diseases

Studies show that most individuals with CFS are plagued with intestinal permeability. A treatment program for patients with CFS that reduced allergic foods and used nutritional supplements to increase liver detoxification pathways (phase I and phase II) yielded an 81.2% reduction in symptoms.¹⁰

Testing and Treating Intestinal Permeability and Malabsorption

Intestinal permeability can be measured by using a special functional medicine test available from Great Smokies Laboratory. To order this test call 1-888-884-9577 or go online to www.DrRodger.com

INTESTINAL PERMEABILITY PROTOCOL

If you suspect you have malabsorption syndrome, intestinal permeability, or irritable bowel syndrome, take the following steps:

- Take 3 probiotics a day on an empty stomach for 2 months.
- Start supplementing digestive enzymes, including hydrochloric acid.
- Treat and eliminate any parasite or yeast overgrowth. You should do this while you're on the intestinal permeability elimination diet (see below).
- Immediately begin an elimination diet to pinpoint any food allergies. Pay particular attention to gluten, a protein found in most grains, because it can be very irritating to the intestinal lining.
- Make sure you're taking fish oil, 1,000–2,000 mg daily. The omega-3 fatty acids in fish oil help repair the intestinal tract. They also help reduce inflammation associated with leaky gut. One study showed that 2.7 grams daily put Crohn's disease patients into remission.¹¹

The CFS/Fibromyalgia Formula contains 2,000 mg of fish oil.

If you're taking this formula, then there is no need to add additional fish oil supplements.

Leaky Gut Formula

I use a product especially developed for intestinal permeability known as Leaky Gut Formula. It has all the essential nutrients to help correct intestinal permeability. Large amounts (6,000 mg) of the amino acid glutamine, the primary fuel for intestinal cell function, are included to meet the high energy demands of the GI tract, liver, and immune system during periods of physiological stress. Glutamine also transports potentially toxic ammonia concentrations to the kidneys for excretion. Intestinal uptake of glutamine accounts for 40% of total body uptake.

Chronic intestinal insults from Xenotoxins (NSAIDs, antibiotics, etc.) create a shortage of glutamine.¹²

Acacia contributes soluble, non-bulking fiber that is readily fermentable into acetic, butyric, and propionic short-chain fatty acids that create a supportive environment for growth of beneficial Lactobacillus bacteria, assist water absorption, and support colonic cell function.

Nutraflora FOS supplies non-digestible fructooligosacharides to further encourage growth of beneficial microorganisms.

N-acetyl-D-glucosamine is used as a structural component of intestinal mucous secretions that protect intestinal tissues and help food pass through the GI tract. Dosage: 6 capsules daily. Best taken between meals in divided doses.

THE INTESTINAL PERMEABILITY ELIMINATION DIET

If you suspect you have yeast overgrowth, then I recommend you do the Elimination Diet at the same time you start the Yeast Overgrowth Diet. Please see the yeast diet in chapter 13, Yeast Overgrowth.

You should avoid all known and suspected food allergens.

For two weeks, you should avoid all gluten-containing foods: wheat, barley, oats, millet, spelt, sourdough, and rye. This includes wheat flour, breads, taco shells, muffins, cereals, pastries, cakes, pizza, crackers, pasta, oatmeal, pretzels, and other flour based products.

You should also avoid all dairy products including milk, ice cream, cream, yogurt, and cheese. Butter is allowed.

No sodas (Coke, Diet Coke, Pepsi, Etc.)

Reduce all caffeine consumption, including tea (green/herbal tea is allowed), coffee, chocolate, and cocoa. The less caffeine intake, the better. To help prevent withdrawal symptoms (headaches, mood disturbances, fatigue) slowly wean off caffeine. Start by eliminating one quarter of daily caffeine consumption.

For example: each serving of coffee, soda, diet soda, tea, and each chocolate bar equals one caffeine serving. If you consume four cups of coffee in the morning, three glasses of tea at lunch, and a diet Coke before dinner, you consume a total of eight servings of caffeine daily. You should begin by reducing your caffeine servings by one quarter (2 servings). This would still allow 6 servings a day.

After 7 days, you should reduce your caffeine servings by another quarter (in this case, 1.5 servings). After another five days, you should reduce daily caffeine servings by half and then slowly discontinue all caffeine over a manageable period of time.

It is not necessary for every patient to go off all caffeine. Patients help themselves by reducing their intake to no more than one or two caffeine servings a day.

Reintroduction of Eliminated Food Groups

After one month, start to reintroduce one item from the eliminated food group at a time. The day of the challenge, eat a few servings of the eliminated food group (Wheat: pasta, toast, crackers, bread, etc.), then wait three days and reintroduce another food group (Dairy: milk, cheese, ice cream, etc.) and again, eat a few servings. If there's no associated negative reaction (headaches, stomach pain, bloating, runny nose, congestion, muscle or joint pain, low moods, fatigue, heaviness, etc.) after three days of challenging a food group, then start to slowly add these items back into the regular diet.

If you experience a negative reaction to any food within three days of challenging a specific group, you should discontinue that particular food group for another month and then repeat the process.

Protecting from Future Damage

- Please try to avoid all NSAIDs including Advil, Motrin, etc. If you need antibiotics, then take Probiotics (take them 12 hours apart) as well. Please see the natural remedies for chronic pain in chapter 9.

Resources

- Testing for Leaky Gut is available online at www.DrRodger.com or by calling 1-888-884-9577.
- Digestive enzymes and probiotics are available at your local health food store. I use an 8x (8 times the strength) high potency digestive enzyme that reduces the amount of tablets a person needs (from 2–4 with each meal to one).
- The Leaky Gut Formula is available online at www.DrRodger.com or by calling 1-888-884-9577.

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Chapter 8

Immune System Dysfunction

The immune system of a human is nothing short of amazing. It's so complex and sophisticated that we only now understand a small fraction of it, maybe 1–2%. And boosting your immunity is a major step toward getting well. I find that if my patients follow my recommendations, their immune function starts to increase within a couple of weeks. Over the years, I've tried various prescription and natural immune boosting protocols. None of them can compare to the dramatic health restoring affects of getting enough sleep, correcting adrenal fatigue, and restoring nutritional deficiencies through the use of mega dose multivitamin/mineral formulas (with amino acids and essential fatty acids).

It's not the Seed but the Soil the Seed is Planted in that Matters

Pathogens (disease-producing microorganisms) are ever present in our environment. They are in the air we breathe, the food we eat, and the surfaces to which we are exposed. In fact, if our skin, throat, or other mucous membranes were cultured, most all of us would be found to contain one type of pathogen (disease causing bug) or another. At any given time, 5–40% of us have pneumococcus bacteria in our nose and throat, yet we rarely develop pneumonia, because our immune system keeps these pathogens under control.

So why does one person come down with the flu, but her co-worker or family member doesn't? There are many factors that affect who gets sick and who doesn't, but the strength of our immune system ultimately determines our fate. To put it figuratively, it's not the planted seed that determines who gets sick, but the state of the soil it's in.

The Thymus Gland

The thymus gland is the master gland of the immune system but is especially susceptible to free radicals, stress, infection, chronic illness, and radiation. When overly stressed, it becomes smaller. It is in charge of cell-mediated immunity and is the source of powerful hormones that transform newly formed immune cells into mature T-cells.

T-Cells

T-cells make up the majority of the cell-mediated immune system. These specialized cells patrol every part of the body for foreign invaders and help prevent cancer by destroying abnormal cells before they can proliferate.

T-cells also help fight against bacteria, fungi, parasites, and yeast. The production of T-cells creates resistance to many viruses, including herpes simplex, Epstein-Barr, and the viruses associated with hepatitis.

There are many different kinds of T-cells. The most important ones are helper T-cells, which enhance the action of the other T-cells (they sound the alarm); killer T-cells, which destroy invaders, including viral and cancerous cells (they answer the call to battle);

and suppressor T-cells, which dampen or turn down the immune system (they signal “all clear”).

B-Cells

The other type of blood cell that plays a major role in the immune response is the B-cell. The B-cell is an agent of the fast-acting humoral immune system. It helps manufacture antibodies and releases them into the blood stream where they are carried to the specific site of infection. These antibodies can perform in various ways. Some neutralize the poisons produced from bacteria. Others coat the bacteria and allow phagocytes (scavenger cells) to engulf and digest it.

Natural Killer Cells

Null cells are neither T- nor B-cells. One of the most important of these is the natural killer cell (NK cell). NK cells are especially important for those with CFS, because boosting NK cell function helps contain and eliminate the viruses associated with the syndrome. This is because NK cells seek out and destroy virally infected cells. Those with CFS tend to have lower NK cell levels than others.

Essential Fatty Acids

There are several interesting interrelationships between EFA metabolism and viral infections. EFAs have direct antiviral effects and are lethal at surprising low concentrations to many viruses. The antiviral activity of human mother’s milk seems to be largely attributable to its EFA content. Interferon is dependent on EFAs and, in their absence, will be compromised.

Viral infections lower the blood level's EFAs. This has been confirmed in the case of the Epstein Barr Virus (EBV). Of particular interest was the observation that at 8 and 12 months, those who have recovered from EBV showed normal or near normal EFA blood levels. In contrast, those who were still clinically ill from Epstein-Barr show persistently low EFA levels. This study and others like it are one of the reasons the CFS/Fibromyalgia Formula contains 2,000 mg of essential fatty acids.

Immune Zappers

- **Sugar** in any form—table sugar, honey, or fruit juice—lowers immunity. Just one tablespoon of simple sugar results in a 50% reduction in white blood cell activity for up to five hours.
- **Alcohol** and other simple carbohydrates can reduce the activity of certain white blood cells.
- **Pesticides** and other environmental toxins, including heavy metals, can overwhelm the immune system.
- **Drugs**, both prescription and over-the-counter, decrease antibody production.

Immune Boosters

- A healthy diet and plenty of rest can go a long way toward fixing a sluggish immune system. Avoid simple sugars, trans-fatty acids, and eat balanced meals.

Thymus Extract Supplements

Thymus extracts have proven to be one of the best immune-boosting agents for treating CFS. A recent study published in the

Journal of Nutritional and Environmental Medicine showed that patients taking ProBoost, a patented thymus extract, obtained dramatic improvements in their CFS symptoms. The increase in their immune function, as demonstrated by blood tests, resulted in myriad benefits: a 47% improvement in sleep quality, a 43% reduction in food sensitivities, a 53% reduction in chemical sensitivities, a 47% improvement in short-term memory, a 79% improvement in depression symptoms, and a 100% improvement in panic disorder symptoms. A substantial amount of clinical data now supports the effectiveness of using thymus extracts. They may well provide the answer to chronic viral infections and low immune function. Double-blind studies reveal not only that orally administered thymus extracts are able to effectively eliminate infection, but also that treatment over the course of a year significantly reduced the number of respiratory infections and significantly improved numerous immune parameters.

Thymus extracts may provide the answer to chronic viral infections and low immune function. Double-blind studies reveal not only that orally administered thymus extracts were able to effectively eliminate infection, but also that treatment over the course of a year significantly reduced the number of respiratory infections and significantly improved numerous immune parameters.

Thymus glandular extracts (like other glandular extracts) are able to raise T-cells when needed but will lower T-cells when an autoimmune disease is present. This balancing act is the big advantage glandular extracts, and many natural herbs, have over prescription (synthetic) drugs.¹

Other Immune Boosting Supplements

- **Astragalus membranaceus**, a Chinese herbal, is used to treat a wide variety of viral infections. Clinical studies in China have even shown it to be effective (with ongoing use) against the common cold. Research in animals has revealed that it apparently works by stimulating NK cells and T-cells. Astragalus appears particularly useful in cases where the immune system has been damaged by chemicals or radiation.
- **Echinacea** (purple coneflower) is one of the most popular herbal medicines in the United States and Europe. In 1994, German physicians prescribed echinacea more than 2.5 million times. There are over 200 journal articles written about echinacea. This herb, from the sunflower family, can be grown in your garden and is thought to stimulate the immune system by increasing the production of and activity of white blood cells, especially NK cells. Persons with autoimmune illnesses such as multiple sclerosis, lupus, or tuberculosis should not take echinacea. A typical dose is up to 900 mg three times daily. Some physicians suggest discontinuing use after two–three weeks, then restarting as needed after one week.
- **Goldenseal** (*Hydrastis canadensis*) is a perennial herb native to eastern North America, and it has shown itself to be a potent immune stimulator. It increases the blood flow to the spleen and the number and activity of macrophages. A typical dose is 250–500 mg, one–three times daily.
- **Cold water bath therapy** promotes increased health. The Thrombosis Research Institute found dramatic value in

carefully graduated cold baths taken daily for six months. The institute gathered 5,000 volunteers, many of them suffering from CFS. The results of their first study showed that cold water baths, when properly applied, resulted in a boost to sex hormone production (which helps regulate potency in men and fertility in women), renewed energy in many CFS sufferers, rapidly improved circulation, increased levels of specific enzymes that aid in circulation, improved immune function (through an increase in white blood cell levels), reduced risk of heart attack and stroke (due to improved blood clotting abilities), and a reduction in unpleasant menopause symptoms. The key to experiencing these inexpensive, dramatic benefits is consistency. Follow these steps. (Important: cold water bath therapy is not recommended for people with heart disease, high blood pressure, or chronic disease, except under a doctor's supervision.)

Cold Water Bath Therapy Instructions

Step one: For the first one–four weeks, simply stand daily in 55–60°F bath water for one–five minutes. Use a nonslip bath mat.

Step two: Once fully used to this temperature, take time to walk in place while standing in the bathtub. Do this for two full weeks. The internal thermostat is now stimulated and at the ideal level for the next step.

Step three: After standing in the cold water, sit down in it for another one–five minutes. Do this for four–six weeks, until you feel used to it.

Step four: Over the next four–six weeks, build up to being fully immersed in cold water for 10–20 minutes daily. You may need to start off at one–two minutes. This is the most important part of the program. After bathing in cold water, exit the tub and towel dry. Then move around for a few minutes to warm up.

IMMUNE FUNCTION PROTOCOL

- 1.** You should be consistently sleeping through the night. Poor sleep results in suppressed NK cell activity and poor immune function.
- 2.** You should be on 500 mg of adrenal cortex twice a day. This helps bolster your stress coping mechanisms. The ability to even produce secretory IgA also appears to be influenced by stress. Even a single five-minute experience of anger can produce a significant decrease in secretory IgA levels (an important antibody that helps squelch bacteria, viruses, and yeast) and the decrease can still be measured up to five hours after the emotional experience.
- 3.** You should be taking an optimal daily allowance multivitamin/mineral formula (I use my CFS/Fibro Formula). Optimal levels of selenium, vitamin A, vitamin C, zinc, and other nutrients are needed to repair and maintain a healthy immune system (these nutrients should be in your vitamin/mineral formula). Zinc is an important cofactor in the manufacture, secretion, and function of thymus hor-

mones. When zinc levels are low, T-cell numbers drop. This might explain why zinc lozenges, when used at the first sign of a cold, can reduce the number of sick days.

Selenium boosts the “killer instinct” of your blood cells. One study, using 200 mcg. daily in individuals with normal blood selenium levels, resulted in a 118% increase in the ability of their white blood cells to kill tumor cells, and an 82.3% increase in NK cell activity.

4. You should be taking a free form amino acid supplement (such as in the CFS/Fibro Formula). Amino acids play an essential role in immune function.

5. You should be taking essential fatty acids, especially omega-3 (also found in the CFS/Fibro Formula). Essential fatty acids are the major components of all cellular membranes in the body, and the integrity of these membranes is the key to preventing infection. Our bodies, including our skin, digestive tract, mouth, sinuses, lungs, and throat are covered with trillions of bacteria, virus, parasites, and yeasts. So a membrane’s capacity to recognize what is beneficial and to keep out what is harmful is vital for the immune system. But without enough EFAs, these membranes are compromised. New evidence reveals that EFAs have direct antiviral effects and are lethal at surprisingly low concentrations to many viruses. In the case of the Epstein-Barr virus, for example, a good 90% of the US population carries this virus, yet only a fraction become ill from it. One theory is that those who actually develop symptoms have below-normal levels of EFAs and their derivatives. A study investigating sufferers of the EBV par-

ticularly confirms this: Both eight and 12 months into the study, subjects who had recovered from the virus showed normal or near normal EFA blood levels. In contrast, those who were still clinically ill from the EBV showed persistently low EFA levels.

- 6.** You should be avoiding all allergy foods and repairing intestinal permeability. Food allergies can cause a 50% reduction in white blood cell count (lowered immune function). When the allergic food is eaten daily, the allergy can cause intestinal inflammation and destruction of white blood cells. Food allergies can also lead to leaky gut symptoms and autoimmune reactions.
- 7.** All pathogenic (disease causing) intestinal, yeast, parasites, viruses or bacteria should be eliminated. Please see chapter 13 for more information on yeast overgrowth.
- 8.** Probiotics should be supplemented as needed. Please see chapter 7, Digestive Disorders, for more information.
- 9.** Any thyroid dysfunction should be corrected. Hypothyroidism can lower metabolism and reduce enzyme activities associated with initiating proper immune functions. Chronic infections, especially sinus infections, usually drastically improve once low thyroid is corrected.
- 10.** Start taking 140–280 mg of thymus glandular (whole or extract) twice a day.
- 11.** Consider being tested for and taking DHEA. Most individu-

als will need between 25–50 mg a day. DHEA is an important hormone for boosting the immune system.

CHRONIC SINUSITIS PROTOCOL

Chronic sinus infections may be the result of bacterial or fungal infections. Sinus infections are usually treated with antibiotics and steroids. However, antibiotics will only make fungal sinus infections worse. I've found that many of my patients find relief from chronic nasal congestion and infections by using the following protocol:

1. You should be using a daily nasal rinse program.

I use a nasal rinse kit from Neil Med Products (available from my office or by calling Neil Med directly [1-877-477-8633]). Patients simply add warm water and one of the (50 to a box) buffered sodium packets into the plastic six ounce bottle. For stubborn infections, I encourage patients to add several drops of liquid betadine. Betadine is a topical anti-septic that kills viruses, bacteria, and yeast.

Making Your Own Nasal Rinse Kit

Mix together the following:

- one teaspoon of betadine
- one teaspoon of baking soda
- one teaspoon of liquid glycerin
- 15–20 ounces warm water

Draw up into a baby bulb syringe, and flush each nostril several times. Don't inhale through your nose. Just let mixture rest in your nose for a few seconds and then gently blow nostril clean. Note: Betadine will stain your clothes, so be sure to cover your upper body with a towel.

Use 1 time a day for 2 weeks, then as needed at first sign of cold, flu, or sinusitis.

2. I suggest you avoid all dairy products until you become congestion free. Dairy products increase mucous production.
3. Use the strategies above as needed; Thymus extract, extra vitamin C, etc.

For more detailed information about the immune system, please see my book, *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome*.

Recommended Reading

- *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome* by RH Murphree, DC, CNS; 2003
- *Beyond Antibiotics: 50 (Or So) Ways to Boost Immunity and Avoid Antibiotics* by Michael A. Schmidt, et al; 1994
- *From Fatigued to Fantastic* by Jacob Teitelbaum, M.D.

Resources

- Supplements mentioned in this chapter are available online at www.DrRodger.com or by calling 1-888-884-9577.

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Chapter 9

Chronic Pain and Inflammation

Chronic pain and inflammation may be from wear-and-tear arthritis (osteoarthritis), autoimmune reactions (rheumatoid, lupus, etc.), scar tissue, lactic acid (trigger points), allergic reactions, leaky gut, intestinal dysbiosis (yeast overgrowth), nightshade sensitivity, deficient serotonin, or poor detoxification processes. Finding and successfully treating the source of chronic pain can be difficult.

Most FMS/CFS patients will show tremendous improvement by implementing the suggestions already covered in this manual.

- 1.** Correct sleep disturbances. One study showed that college students who were prevented from going into deep sleep (REM sleep) for a period of a week developed the same symptoms associated with fibromyalgia (FMS) and chronic fatigue syndrome (CFS): diffuse pain, fatigue, depression, anxiety, irritability, stomach disturbances, and headaches.¹

A study conducted by the University of Connecticut School of Medicine compared the sleep patterns and associated symptoms of fifty women with FMS. The study showed that a poor night's sleep was followed by an increase in the subject's symptoms, including increased pain.

For more information on sleep disorders, please see chapter 5, Sleep Disorders.

- 2.** Boost serotonin levels with 5HTP (work up to 300 mg a day).
Specific information regarding serotonin levels can be found in chapter 5, Sleep Disorders.
- 3.** Supplement adrenal cortex to build up stress-coping abilities (500 mg twice a day).
For more information, please see chapter 6, Adrenal Fatigue.
- 4.** Start taking an optimal daily allowance multivitamin/mineral formula (CFS/Fibromyalgia Formula or something similar).
- 5.** Start taking a minimum of 2,000 mg of fish oil a day (already in the CFS/Fibromyalgia Formula).
- 6.** Supplement free form amino acids (already in the CFS/Fibromyalgia Formula).
- 7.** Add extra magnesium up to 700 mg or to bowel tolerance (already in the CFS/Fibromyalgia Formula).
- 8.** Use malic acid to reduce pain. Malic Acid is found in a variety of foods. It is a vital nutrient needed for the production of cellular energy (Krebs cycle). Malic acid helps boost cellular energy and reduce achy muscles. It removes unwanted waste material from muscle cells including lactic acid, a byproduct of oxygen deficiency. Lactic acid has been implicated as one reason for achy muscles and may accumulate

in muscles after periods of anaerobic and aerobic exercise. It may also be involved in the trigger point pains associated with fibromyalgia. “Malic acid gave subjective improvement within 48 hours in one study.”²

Studies involving FMS patients who were taking magnesium and malic acid together showed dramatic reduction in pain levels that returned within 24 hours of discontinuing the supplements.³

High doses of magnesium and malic acid are included in the CFS/Fibromyalgia Formula.

9. Hydrochlorhydria (low stomach acid) is associated with rheumatoid arthritis patients.⁴

I recommend you take a digestive enzyme with each meal.

For more information, please see chapter 7, Digestive and GI Disorders.

I suggest you focus on the things above before starting the recommendations below.

How the Inflammatory System Works

Trauma, infection, ischemia (reduced blood flow), toxins, poisons, and normal wear and tear cause damage and destruction to cells. This damage then triggers an orderly inflammatory response by the body’s self-regulating mechanisms.

Inflammatory Chemicals

The first group of chemicals, histamine, leukotriens, and pro-inflammatory hormones (prostaglandins), cause the blood vessels to dilate or expand. The dilation of the blood vessels causes the area to become hot, red, and swollen.

The healthy tissue surrounding the damaged area releases anti-inflammatory prostaglandins (PG1 and PG3) to combat the inflammatory prostaglandins (PG2). Certain chemicals (proteolytic enzymes) are responsible for telling the white blood cells that their job is done. These chemicals sound the alarm for the white blood cells to stop attacking and digesting cells and tissues.

Proteolytic enzymes are manufactured to squelch the white blood cells from continuing to eat up cellular debris. As the damaged cells and tissues are removed, less of the pro-inflammatory chemicals and more of the anti-inflammatory chemicals are released. Once the inflammation process is finished, the body begins to repair itself.

The balance between inflammation, destruction, and repair is an ongoing process. Normally, this process is kept in check. When the process becomes unbalanced, chronic inflammation takes over. Inflammation is largely regulated by the prostaglandin hormones.

Prostaglandins

There are several different groups of prostaglandins, but inflammation is largely controlled by prostaglandin 1 (PG-1), prostaglandin 2 (PG-2), and prostaglandin 3 (PG-3).

Prostaglandins are a group of regulatory hormones produced in the body from fatty acids. Essential fatty acids are essential for our existence. They can not be manufactured by the body but must be obtained from the foods we eat. Essential fatty acids are made up of polyunsaturated fatty acids (PUFAs).

PUFAs are divided into two families of essential fatty acids (EFAs)

- 1.** Omega-3 oils, including alpha linolenic acid (ALA), are found in flax seed, soybean, walnut, and chestnut oils, as well as some dark green leafy vegetables. Eicosapentaenoic acid (EPA) and docosahexanoic acid (DHA) are omega-3 derivatives and are found in most cold water fish. These fish include salmon, tuna, and mackerel.
- 2.** Omega-6 is found in pure vegetable oils, including sunflower, safflower, and corn oil. Some individuals are genetically unable to convert linoleic acid (LA) into its derivative, gamma linolenic acid (GLA). This can be overcome by taking primrose or borage oil; both are high in GLA.

Anti-Inflammatory Hormones

PG-1 and PG-3 are anti-inflammatory hormones. They help reduce and eliminate inflammation and pain. The best source for PG-1 and PG-3 is fish oil supplements or a diet high in cold water fish.

Arachidonic Acid (AA) PG-2

The pro-inflammatory (causes inflammation) hormone PG-2 is made from arachidonic acid (AA).

AA is found in corn and corn oil products. Corn products are used as the prominent foodstuff in westernized livestock. Red meat and pork products have a high AA content.

Arachidonic acid is derived from the consumption of land-animal foods (meats, cheese, eggs, etc.). Arachidonic acid stimulates the production of inflammatory chemicals including leukotriens (notorious in causing allergic reactions), thromboxanes, and prostacyclins. Several research articles have demonstrated that the more animal fats a human eats, the more arachidonic acid they have in their blood and cell membranes and the more likely they are to have inflammation. Conversely, a diet high in fish oils promotes less inflammation and a lower level of inflammatory chemicals.

The average AA/EPA of Americans is approximately 11:1. In patients with inflammatory conditions and neurological disorders, the AA/EPA ratio is 20:1 or more. An AA/EPA ratio of 1.5:1 is considered ideal. This is the ratio found in Japanese populations, which have the highest life expectancy and the lowest rate of cardiovascular disease.⁵

Our inflammatory reactions and their chemicals are therefore largely determined by what foods (fatty acids) we eat. Since most Americans are carrying around at least 10–20 pounds of excess fat, it is no wonder that arthritis and other inflammatory diseases are out of control in our country.

The average adult weighs 150 pounds; 30% of this is fat. This means that on average a person is carrying around 45 pounds of inflammatory imbalanced fatty acids!

Reduce Red Meat, Dairy, and Vegetable oils

Since all grains, vegetable and seed oils, and corn-fed livestock have high AA levels, I suggest patients reduce these products. I recommend you reduce or avoid red meat, dairy, and all vegetable and seed oil products.

An increase in omega-6 fatty acids results in an increased risk of rheumatoid and other inflammatory-related illnesses.⁶

Fish Oils Research

Some studies have shown that supplementing with fish oils results in a dramatic reduction in a person's leukotriens (one of the chemicals implicated in asthma and other allergic reactions) by 65%. This correlates with a 75% decrease in their clinical symptoms.⁷

Another fish oil study, involving rheumatoid arthritis sufferers (often treated with incredibly toxic and life threatening prescription drugs) who took 1.8 grams of EPA fish oil and reduced their saturated fats (land animal foods), showed significant improvement over and above a placebo.⁸

Sixty percent of the US population is deficient in omega-3 fatty acids.⁹

S-adenosyl-l-methionine (SAME)

Several studies involving SAME and fibromyalgia patients yielded substantial improvement in all pain levels (as well as depression).¹⁰ Dosage is up to 1,200 mg daily on an empty stomach. I also recommend SAME when other therapies fail.

S-adenosyl-1-methionine (SAME) comes from the amino acid methionine. It acts as a natural anti-inflammatory and blocks pain without the side effects associated with NSAIDs. SAME helps boost serotonin and epinephrine levels. It also helps increase the production of endorphins. Endorphins are the body's natural pain blocking chemicals and are more powerful than morphine. SAME helps manufacture and repair cartilage components. A study of osteoarthritis patients compared SAME with NSAID drugs in its ability to reduce pain. One double-blind study showed SAME was superior to ibuprofen in the treatment of osteoarthritis.¹¹

DL-Phenylalanine

DL-Phenylalanine is a combination of the D and L form of the amino acid phenylalanine. This form of phenylalanine acts as a natural pain-reliever. DL-phenylalanine blocks the enzymes responsible for the breakdown of endorphins and enkephalins, substances within the body that help relieve pain.

Endorphins are actually far more powerful than the drug morphine. Small cells throughout the nervous system, brain, spinal cord, and nerve endings are able to produce these morphine-like proteins that act as an appetite suppressant and mild stimulant.

Although caution is advised for individuals with high blood pressure, DL-phenylalanine is an effective supplement in treating musculoskeletal pains, including those associated with FMS. Many of my fibromyalgia and chronic pain patients have benefited from DL-phenylalanine. A clinical study shows subjects taking DL-phenylalanine had a remarkable improvement in their condition. Improvements were seen in 73% of patients with low back pain, 67% with migraines, 81% with osteoarthritis, and 81% with RA.¹²

For pain control, or as an antidepressant, take 1,000–4,000 mg twice a day on an empty stomach. Phenylalanine can elevate blood pressure, and very high doses can cause rapid heart beat. Start with a low dose and increase to higher doses only as needed—and only if no side effects are noticed.

Avoid Instant Coffee

Instant coffee contains substances that block the receptor sites for endorphins.¹³

Rheumatoid Arthritis

Over 50 million Americans suffer from arthritis. It is associated with pain, stiffness, inflammation, and decreased range of motion. There are over 100 different forms of arthritis, with osteoarthritis the most common. Rheumatoid arthritis is an autoimmune disease in which the body actually attacks itself and antibodies develop in joint tissues and cause pain. Women are three times more likely to develop this arthritis than men.

What Causes It?

The definitive cause of rheumatoid arthritis is not known. It appears to result from a dysfunction in the autoimmune system.

Symptoms

Rheumatoid arthritis usually affects the knuckles, wrists, elbows, and shoulders with painful, warm, red swelling.

Unlike osteoarthritis, which tends to be unilateral (one sided), rheumatoid attacks joints bilaterally (both sides).

Traditional Arthritis Treatments

- Nonsteroidal anti-inflammatories (NSAIDs) and analgesics such as aspirin, Tylenol, indocin, sulindac, tolectin, ibuprofen, Daypro, naprosyn, Celebrex, and Vioxx can cause intestinal permeability. They cover up the symptoms but do not address the cause, and they can actually cause further joint destruction.¹⁴
- Corticosteroids are strong hormonal drugs that can have serious side effects: peptic ulcer, osteoporosis, diabetes, glaucoma, depression, acne, water retention and weight gain, insomnia, facial hair growth, hypertension, and depressed immunity.
- Methotrexate is an immune-suppressing drug used to treat psoriasis, psoriatic arthritis, adult and juvenile rheumatoid arthritis, and Reiter's syndrome. It is a toxic therapy that can cause kidney failure and severe liver damage.
- Gold injections can cause serious side effects: damage to the liver and kidneys, stomach disorders, anemia, headache, neuritis, and ulcerations of the mouth and gums.

Avoid Nightshades

In one study, 70% of those with arthritis reported relief from chronic pain over a period of seven years after eliminating all white potatoes, tomatoes, peppers (except black), eggplant, and tobacco.¹⁵

Other Factors

Food allergies are common and are responsible for a wide variety of health problems! In fact, food allergies and intestinal permeability play a large role in causing and/or aggravating arthritis. Individuals with intestinal permeability are prone towards developing arthritis. A permeable, or leaky gut, allows fragments of intestinal bacteria to penetrate into the joints. These bacteria fragments may cause the body to release anti-bodies which then attack the joint tissue—a typical autoimmune response (typical of rheumatoid arthritis). Food allergies are now being implicated as one cause of rheumatoid arthritis.¹⁶

For more information, please see chapter 10, Food Allergies.

Intestinal Permeability

Intestinal permeability occurs when the lining of the digestive tract becomes permeable (leaky) to toxins. This, in turn, causes chronic inflammation. The use of non-steroidal, anti-inflammatory drugs such as steroids, antibiotics, antihistamines, caffeine, alcohol, and other prescription and nonprescription drugs renders the intestinal mucosa permeable to toxins and undigested food particles. Studies have demonstrated the role intestinal permeability plays in such illnesses as chronic pain, ankylosing spondylitis, rheumatoid arthritis, food allergy, Crohn's disease, eczema, chronic fatigue, irritable bowel syndrome, cystic fibrosis, chronic hepatitis, and many other illnesses.¹⁷ Increased intestinal permeability allows undigested chemicals to leak out of the digestive tract and into the bloodstream. This triggers an allergic reaction and can create pain and inflammation in any of the body's tissues.

Please see chapter 7, Digestion and GI Disorders.

Fish Oil Reduces Rheumatoid Arthritis

Omega-3 deficiencies increase the risk of rheumatoid arthritis. Greenland Eskimos consuming diets high in omega-3 fatty acids (mostly from fish oils) rarely suffer from arthritis. In more than a dozen studies over the past decade, rheumatoid arthritis patients taking omega-3 oils drastically reduced their pain and stiffness.

Osteoarthritis

Sometimes wear and tear of the boney cartilage of the body causes bone spurs or calcium deposits to form on the ligaments surrounding the joint. This leads to inflammation, pain, and decreased joint motion. This is osteoarthritis (OA), also known as degenerative joint disease (DJD). OA first appears asymptotically in the 2nd and 3rd decades but becomes universal by age 70. Almost all persons by the age of 40 have some signs of OA in their weight-bearing joints, but only a minority report any symptoms. Surveys show that over 40 million Americans have OA.

Causes

Osteoarthritis is usually caused by trauma or joint injury (wear and tear). Many of my patients can trace the onset of their arthritis to a car accident, but some don't remember anything that could be causing their neck or low back pain.

Some individuals develop osteoarthritis from repetitive motions, poor posture, or from simply carrying more weight than their joints can handle. Losing weight can often provide dramatic relief to those with weight-bearing osteoarthritis of the knees and hips. That's because these joints bear loads 2.5–10 times a person's weight. For a 200-pound individual, this can translate to one ton of pressure. Heredity also plays a role in osteoarthritis.

Hypothyroid and Osteoarthritis

Patients with hypothyroid have been shown to be at increased risk of developing osteoarthritis.¹⁸

Symptoms

Osteoarthritis is characterized by early morning stiffness or pain that eases up as the day goes on, only to return again in the evening. This form of arthritis generally affects the joints of the knees, hands, feet, and spine. It develops gradually over several years and usually doesn't cause joint redness, warmth, or swelling like rheumatoid arthritis.

NUTRITIONAL SUPPLEMENTS FOR OSTEOARTHRITIS

Glucosamine Sulfate

- Glucosamine sulfate is an excellent approach to eliminating the destruction of osteoarthritis. A growing body of research supports the use of this natural supplement. Studies in Italy showed that glucosamine reduced arthritis symptoms by one half in 73% of the group, and 20% enjoyed total symptom relief.¹⁹

A Portugal study involving 1,208 patients and 252 physicians showed glucosamine to be quite effective in eliminating pain and stiffness caused by the disease.²⁰

A study of patients with osteoarthritis of the knee, performed at the National Orthopedic Hospital in Manila, Philippines, showed that patients who were administered glucosamine had an 80% reduction in pain.²¹ Other studies have

demonstrated that glucosamine is more effective than ibuprofen (Motrin, Advil, or Nuprin) in relieving the symptoms of osteoarthritis.²²

Glucosamine is not only superior to NSAIDs such as ibuprofen, it is also free of the side effects of most arthritic medications.²³

More importantly, glucosamine and chondroitin sulfate actually slow or arrest the destruction of cartilage.

Glucosamine, which is made up of glucose and the amino acid glutamine, actually helps repair damaged articular joint tissue. It does this by stimulating collagen cells within the articular cartilage to produce more proteoglycans. Proteoglycans are responsible for forming a protective netting within the articular cartilage, which helps prevent its destruction.

Dosage is 500 mg three times daily. You should see improvement in three–four weeks. Treatment should continue for a minimum of three months and, since there are little or no side effects, long-term therapy is advisable.

Chondroitin Sulfate

- Chondroitin sulfate is composed of a large number of sugar molecules. It attracts fluid into the proteoglycan molecules, and this fluid acts as a shock absorber. Chondroitin inhibits certain enzymes that can damage cartilage, while stimulating the production of proteoglycans and other molecules needed for healthy new cartilage growth.

A study conducted in France showed patients who received three months of chondroitin therapy had actually repaired a significant portion of their degenerated joint tissues.²⁴

Dosage is 800–1,200 mg daily. You should see improvement in three to four weeks. Treatment should continue for a minimum of three months and, since there are little or no side effects, long-term therapy might be advisable.

- Niacin (vitamin B3) may decrease the pain associated with osteoarthritis, especially in the knee. Dr. Abram Hoffer, author of *Orthomolecular Medicine For Physicians*, writes: “I suspect vitamin B3 is necessary for everyone for tissue repair, and that one of the earliest symptoms of deficiency is a decrease in the rate of repair.” Begin with 100 mg daily, and slowly increase until one gram three times daily can be tolerated. Caution: high doses of timed release niacin can cause nausea, flushing, and elevated liver enzymes, though elevated enzymes caused by high niacin are not a concern according to Dr. Hoffer.

DR. MURPHREE’S ARTHRO FORMULA

This product contains the following:

- **Glucosamine Sulfate** 1500 mg (see above).
- **Chondroitin Sulfate** 1200 mg (see above).
- **Boswellia:** one of the oldest herbs in Indian ayurvedic medicine. Studies show it to be a potent pain-relieving anti-inflammatory. Boswellia helps shrink inflamed tissue, build cartilage, increase blood supply, and repair damaged blood vessels.²⁵

- **Bromelain:** a protein-digesting enzyme derived from pineapple. There is considerable research (over 200 medical journal articles) on its effectiveness in treating such conditions as inflammation, pancreatic insufficiency, and respiratory diseases. It blocks inflammatory chemicals called kinins. It also digests excess fibren, a chemical implicated in osteoarthritis, sciatica, ankylosing spondylitis, and scleroderma. As an anti-inflammatory, bromelain needs to be taken on an empty stomach. If taken with food, it acts as a digestive enzyme.²⁶
- **Turmeric:** a perennial plant found in eastern Asia and parts of India. It is a popular arthritis remedy in India and a powerful pain-relieving anti-inflammatory. It is as strong as hydrocortisone without the side effects.²⁷
- **Devil's Claw:** a perennial vine native to South Africa. It is a potent anti-inflammatory and pain reliever. Studies in Germany have shown this herbal medication to be very effective in relieving lower back pain and associated sciatica.²⁸

Rheumatoid Arthritis Protocol

- Important! Correct intestinal permeability if present. This is necessary in order to reduce inflammatory reactions.
- Consider an intestinal permeability test. Many of my patients have enjoyed a reduction or elimination of arthritic symptoms after repairing their leaky gut. You may treat without testing, especially if you've been on NSAIDs for long periods.

Please visit www.DrRodger.com. to find out about this test.

- Strongly consider food allergy testing. Rheumatoid arthritis was absent in prehistory, when cereals and dairy products were not part of a daily diet. Some researchers believe that our bodies have simply not yet adapted to our modern eating habits. The most common allergy producing foods include wheat, corn, dairy, beef, and nightshades.²⁹

Allergy test kits are available through my website, www.DrRodger.com.

- Avoid nightshade foods. These include tobacco, eggplant, bell peppers, tomatoes, and white potatoes. Nightshade foods have been linked to an increase in arthritis symptoms.
- Treat any yeast or bacterial overgrowth of the intestinal tract. Please see the yeast questionnaire in Chapter 3. If you suspect you may have a problem, please read chapter 13, Yeast Overgrowth.
- Supplement with omega-3 essential fatty acids. Research suggests that the therapy must be continued for a minimum of 4–12 weeks before results are seen, and large doses of these oils are needed for the desired result: 3,000–9,000 mg of fish oil (EPA/DHA).³⁰
- Supplement with digestive enzymes, hydrochloric acid, and pancreatic enzymes (pepsin, amylase, lipase, etc.) with each meal. I recommend everyone with FMS or CFS take a digestive enzyme with each meal.

- Use the Essential Therapeutics Arthro Formula or Inflammation Formula, or an alternate formula with similar ingredients.
- Exercise to keep the joints moving. Walking on a daily basis helps keep you limber and fit. Many of the back pain patients that I see are shocked to discover that they can severely reduce or eliminate the back problems they've had for years by simply walking 30–60 minutes a day.

Recommended Reading

- *Arthritis* by Anthony Di Fabio, MA and Gus J. Prosch, Jr., MD; 1997.
- *Textbook of Natural Medicine* by Joseph E. Pizzorno, ND, (ed.) and Michael T. Murray (ed.); 1999.

Resources

- All the supplements mentioned in this chapter are available online at www.DrRodger.com or by calling 1-888-884-9577.
- Allergy and Intestinal Permeability tests are available online at www.DrRodger.com or by calling 1-888-884-9577.
- For an in depth look at pain, consider ordering my 2 hour/2 CD recording on Beating Pain, available online at www.DrRodger.com or by calling 1-888-884-9577.

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Chapter 10

Food Allergies

Food allergies are known as the great masqueraders for their ability to cause or contribute to virtually any disease. So it's crucial to discover and eliminate all allergic reactions.

I've found over the years that individuals with FMS/CFS have several food sensitivities or food allergies that contribute to their fatigue, depression, joint pain, muscle pain, and digestive problems.

Symptoms of Food Allergies

Food allergies can cause:

- headache
- eczema
- psoriasis
- diarrhea
- colitis
- asthma
- hyperactivity
- rheumatoid arthritis
- gout
- chronic pain syndromes
- edema
- ear infections
- anxiety
- depression¹

Allergy Protocol

1. Uncover any hidden food sensitivities through the elimination diet, Coca pulse, and/or blood testing. Once uncovered, these foods should be avoided for one to six months, depending on the severity of reactions. Please see testing for allergies below.
2. Begin a rotation diet to reduce the chances of developing further food allergies. Please see below.
3. Treat for intestinal permeability. Please see chapter 7, Digestion and GI Disorders, and the section on Intestinal Permeability.
4. Use adrenal cortex glandular supplements; 500 mg twice a day with food. Adrenal cortex supplements reduce allergic reactions.
5. Make sure you're taking a good digestive enzyme. Undigested food can lead to allergic reactions. For more information on digestive enzymes, see chapter 7.
6. Use natural remedies. I use an inflammation formula (see below) to reduce and/or eliminate allergy symptoms.

My Inflammation Formula²

- **Turmeric root extract** inhibits enzymes associated with arachidonic acid PG2 inflammatory hormones ("The bad guys"). PG2 hormones are a major trigger for allergic reactions.

- **Rosemary leaf extract** helps block synthesis of leukotriens (a cause of allergic inflammation) and PG2 hormones. The prescription medication Singular, works by blocking leukotriens.
- **Holy basil leaf extract** helps boost natural anti-inflammatory chemicals (PG1 and PG3).
- **Green tea leaf extract** is a potent antioxidant and increases the body's own anti-inflammatory activity.
- **Ginger root extract** reduces inflammation.
- **Chinese goldenthread root** helps regulate prostaglandins; it reduces the inflammatory PG2 hormones and boosts the anti-inflammatory PG1 and PG3 hormones.
- **Barberry root extract** helps reduce the inflammatory PG2 hormones and increases the anti-inflammatory PG1 and PG3 hormones.
- **Baikal skullcap root extract** reduces inflammatory chemicals.
- **Protykin polygonum cuspidatum extract** is a potent antioxidant and reduces inflammatory chemicals including PG2.

Other choices:

- Supplement with extra vitamin C. It's a natural antihistamine and may reduce the symptoms associated with allergic reactions. Take an additional 2,000 mg above your multivitamin/mineral formula. Keep increasing by 1,000 mg a day, until you experience a loose bowel movement. Once you start having a loose bowel movement, reduce your dose by 1,000 mg or until you have a normal bowel movement once again.
- Supplement with stinging nettle root, which helps reduce allergic rhinitis (runny nose) and hay fever symptoms. It also

helps prevent the bronchial spasms associated with asthma. Take 500–1,000 mg three times daily.

- Supplement with quercetin, a bioflavonoid (plant pigment) found in black tea, blue-green algae, broccoli, onions, red apples, and red wine. It inhibits the synthesis of certain enzymes responsible for triggering allergic reactions. It is chemically similar to the allergy prevention medication Cromolyn. Take 500–1,000 mg twice daily. It may take months before quercetin reaches its peak of effectiveness. It can interfere with the absorption of certain antibiotics, so don't take quercetin and antibiotics together.
- Supplement with methylsulfonylmethane (MSM), a natural organic sulfur compound found in plant and animal tissues. MSM has proven beneficial in the treatment of allergic and inflammation disorders. It provides sulfur, an essential component in detoxification. Due to its strong anti-inflammatory properties, it's included in my Essential Therapeutics Arthritis Formula. Normal dosage is 500 mg three–four times daily.
- Reduce grains (wheat, breads, pasta, corn, etc.) and other foods high in omega-6, including red meat. Omega-6 foods produce arachidonic acid, which leads to more inflammatory chemicals. Try to limit your intake of these foods.
- Increase fish oil (omega-3) consumption. Studies have shown that supplementing with fish oils results in a dramatic reduction in a person's leukotriens (one of the chemicals implicated in asthma and other allergic reactions)

by 65%. This correlates with a 75% decrease in their clinical symptoms. I recommend you start taking between 2,000 mg and 9,000 mg a day. The CFS/Fibromyalgia Formula contains 2,000 mg of fish oil. ³

TESTING FOR FOOD ALLERGIES

Blood Tests for Food and Inhalant Allergies

The two most common allergy tests, a skin prick test and the radioallergosorbent test (RAST), are good at detecting acute or immediate allergic responses (IgE antibodies). But, they don't measure the delayed sensitivity responses to food.

Ninety-five percent of all food allergies occur one hour to three days after eating allergic foods. These delayed reactions must be measured using a different antibody, immunoglobulin G1-4 (IgG1-4). Many of my patients come to me having already been tested and told they had allergies. Unfortunately, they were only tested for IgE antibodies. Their airborne allergies were detected, but many of their food allergies were not.

Two tests that do measure delayed IgG1-4 reactions are the Enzyme-linked Immuno-absorbent Assay (ELISA) test and the Food Immune Complex Assay (FICA) test. Both offer the convenience and accuracy of measuring both types of antibodies, while costing hundreds less than RAST and skin prick tests.

All allergy tests are associated with some degree of error. Even ELISA and FICA tests are no better than 85% accurate. False positives and missed allergic foods are a common occurrence on

most tests, so the gold standard for uncovering allergen sensitivities is still the two-week elimination diet.

If you'd like to know about ELISA testing, please visit my website, www.DrRodger.com, and click on the link for Recommended Lab Tests.

THE ELIMINATION DIET FOR FOOD ALLERGIES

I don't put patients on this diet for at least two weeks after their first visit. I don't recommend you start this diet until you're feeling stronger, sleeping through the night, and feeling improved overall. If I have a patient with severe chemical sensitivities, I might go ahead and put her on the diet right away, even on the first visit. However, for most of you reading this manual, I recommend you start this diet as soon as you start sleeping through the night.

The diet removes foods that have consistently been shown to cause allergic reactions. The elimination process creates an opportunity to uncover any hidden food allergies or intolerances that may be contributing to the overall "toxic burden."

The elimination diet is an important part of our treatment plan, but following it can be a challenge. The problem most people run into is not being able to stay on the diet when they are away from home; a sudden wave of hunger comes over them, and they can't find anything in the office vending machine to eat. I encourage you to have appropriate snack foods available. You should always have plenty of snacks available at home, in the car, in your briefcase or purse, and at work.

- Reduce all caffeine consumption, including caffeinated teas (green tea is allowed), coffees, chocolate, and cocoa. The less caffeine, the better. To prevent withdrawal symptoms (headaches, mood disturbances, fatigue), slowly wean off.

Start by eliminating one quarter of your daily caffeine consumption. Consider each cup of coffee, soda, diet soda, tea, and each chocolate bar as one caffeine serving. If you consume four cups of coffee in the morning, three glasses of tea at lunch, and a Diet Coke at dinner, consider this eight servings of caffeine for that day. Reduce your caffeine servings by one quarter (two servings). This would still allow you six servings a day. After seven days, reduce your caffeine servings by another quarter (in this case, 1.5 servings). Wait another five days, and then reduce the daily caffeine servings by half. Slowly discontinue all caffeine consumption over a manageable period of time.

Note: It is not necessary for every patient to go off all caffeine. You help yourself by reducing your intake to no more than one or two caffeine servings a day. The sicker you are, the more important it is to wean off all caffeine.

- Avoid all known and suspected food allergens.

Eliminating Food Groups

- **For 2–4 weeks, avoid all gluten-containing foods:** wheat, barley, oats, millet, spelt, sourdough, and rye. This includes wheat flour, breads, taco shells, muffins, cereals, pastries, cakes, pizza, crackers, pasta, oatmeal, pretzels, and other flour-based products.

- **Avoid all dairy products**, including milk, ice cream, cream, yogurt, and cheese. Butter is allowed.
- **Drink no sodas**, including diet, caffeine-free, and clear sodas.

Reintroduction of Eliminated Food Groups

After 2–4 weeks, start reintroducing one item at a time from the eliminated food group. This is called “challenging” the food. The day of the challenge, eat a few servings of the eliminated food group (such as wheat: pasta, toast, crackers, bread, etc.), then wait three days. If there’s no associated negative reactions (such as headaches, stomach pain, bloating, runny nose, congestion, muscle or joint pain, low moods, fatigue, heaviness, etc.), then start to slowly add this food group back into your regular diet and start challenging another food group (such as dairy: milk, cheese, ice cream, etc.). Again, start with a few servings.

If you experience a negative reaction to any food within three days of challenging a specific group, discontinue that food, and challenge it again in a month. After challenging all the eliminated food groups, follow a rotation diet to help prevent future food allergies.

Dr. Coca’s Pulse Test

The forbidden foods listed in the elimination diet are by far the most common allergic foods. However, practically any food can trigger an allergic reaction. For this reason, you might want to dig a little deeper to pinpoint sensitivities to specific foods. Foods can actually be tested by merely tasting them. If a food elicits a rise in resting pulse rate, this indicates an allergic reaction. The pulse is controlled by the autonomic nervous system, and stress causes this system to increase blood flow and pulse rate.

Pulse Testing

To use Dr. Coca's pulse test, you must first determine your resting pulse rate: count your pulse for a full minute while sitting still. (Sites commonly used to check the pulse are the underside of the wrist and the neck near the Adam's apple). It's best to check your pulse several times throughout the day and to notice if it changes at different times. Is it lower or higher in the morning? At night?

Your resting pulse is the pulse consistently found before eating or an average of the lowest pulses most commonly recorded.

To get the most accurate baseline reading:

- 1.** Take your pulse in bed before rising, before breakfast, after breakfast, in the middle of the morning, before lunch, after lunch, in the middle of the afternoon, before dinner, after dinner, in the middle of the evening, and before bed.
- 2.** Keep a food diary to record your pulse rates along with any symptoms. Does a pattern emerge? If there is no consistent pattern, there may be too many interfering substances undermining the process.
- 3.** Try the elimination diet for four–five days. Along with the obvious elimination foods, other foods or chemicals in question should also be avoided during this time.

Testing Foods Using the Pulse Test

- 1.** While sitting quietly, take your pulse.
- 2.** Then challenge this pulse by chewing a small amount of food or food supplement (don't swallow) for a full minute. Liquids can be held and swished around in the mouth.

3. After one minute, take your pulse for a full minute.
4. At the end of this time, expel the substance, and rinse out your mouth with pure water, which should also be expelled.
5. Take your pulse again.
6. If it returns to the resting value, you can repeat the process with another substance.

A positive-reaction food or supplement will elevate the pulse above six points. Avoid all foods for two–three months that elevate the resting pulse rate above five points.

Note: If other symptoms occur after testing, such as headache, sore throat, or fuzzy thinking, this is also a positive test, and the food should be avoided for three–six months. Severe-reaction foods should be avoided for at least three months.

All reactive foods should be reintroduced on a four-day rotation diet. If you continue to have reactions to reintroduced allergic foods, avoid them once again for three months.

THE ROTATION DIET

Once someone becomes sensitive to foods, damage to the intestinal tract has most likely occurred. Repetitive exposure to the same foods may initiate allergic reactions. Left untreated, intestinal permeability and over stimulation of the immune system can create an allergy to almost any food. A rotation diet helps reduce the chances of developing further allergies.

On this diet, you eat non-allergic foods every day for four–seven days. Allergic foods (as determined by testing or elimination dieting) are slowly reintroduced into the diet over a period of months. Consult a nutritionist for help in devising a suitable rotation diet, or follow the guide below:

Food Groups

- **Grains:** wheat, barley, oats, rice, rye, buckwheat, millet, corn
- **Seeds:** sesame, sunflower, pumpkin seeds
- **Nuts:** almonds, walnuts, pecans, pistachios, cashews, filberts, Brazil nuts, chestnuts, coconut
- **Oils:** safflower, sunflower, soy, cottonseed, olive, sesame, corn, peanut oils
- **Sweeteners:** maple sugar, beet sugar, cane sugar, corn syrup, honey
- **Vegetables:** olives, eggplant, tomato, potatoes, peppers, paprika, sweet potatoes, yams, broccoli, cauliflower, kale, artichokes, cabbage, Brussels sprouts, radishes, turnips, parsnips, carrots, celery, zucchini, Swiss chard, spinach, winter squash, summer squash, cucumbers, lettuces, onions, garlic, chives, asparagus
- **Legumes:** black-eyed peas, navy beans, pinto beans, wax beans, string beans, green beans, chick-peas, soybeans, lima beans, mung beans, peanuts, lentils, carob
- **Fruits:** lemons, limes, oranges, pineapples, peaches, plums, pears, apples, tangerines, grapefruit, nectarines, bananas, grapes, prunes, papayas, figs, mangoes, kiwi, cherries, apricots, cranberries, strawberries, blackberries, raspberries
- **Melons:** watermelons, cantaloupe, honeydew melon
- **Dairy:** milk, cheese, yogurt, goat's milk, cream, butter, ice cream

- **Poultry:** chicken, eggs, turkey, duck, pheasant, quail, goose
- **Meat:** beef, lamb, and pork
- **Seafood:** fish, shrimp, oysters, clams, mussels, lobster, scallops, crayfish, crab
- **Flavorings:** dill, comfrey, tarragon, coriander, pepper, cinnamon, mustard, caraway, ginger, vanilla, cocoa, thyme, basil, oregano, alfalfa, rosemary, sage, peppermint, clove, nutmeg
- **Fungus:** mushrooms, hops, bakers and brewers yeast

YOUR ROTATION DIET: A SAMPLE MENU

Create your own rotation diet using the food groups listed above. Use a calendar with space to write out three meals a day plus snacks. Avoid known allergic foods for three–six months, and make sure you wait at least three days before repeating a food.

Monday

Breakfast: eggs, wheat toast, orange

Snack: apple and cashews

Lunch: romaine lettuce with olive oil and vinegar; turkey breast with wheat bread, mustard, tomato, and mayo

Dinner: egg omelet with cheddar cheese, broccoli, and onions

Snack: cashews and strawberries

Tuesday

Breakfast: pork bacon or sausage with oatmeal and raisins

Snack: almonds and a pear

Lunch: chicken salad (no bread or mayo), pear, and grapes

Dinner: baked chicken, asparagus, and corn on the cob

Snack: popcorn

Wednesday

Breakfast: cream of rice topped with banana and blueberries; rice milk

Snack: tangerine and Brazil nuts

Lunch: corned beef on plain rye with sauerkraut and Swiss cheese (no mayo or mustard) and baked potato fries

Dinner: steak with okra, wild rice, and pinto beans

Snack: walnuts, blueberries, and dates

Thursday

Breakfast: honeydew melon or cantaloupe, peanut butter on millet bread

Snack: Pumpkin seeds and sunflower seeds

Lunch: Baked fish with cauliflower, squash, and zucchini

Dinner: Lobster, crab cakes, or shrimp salad and olive, artichoke, tomato, and yellow peppers

Snack: cherries and pistachios

Friday

(Repeat Monday's menu.)

This is an example of how to rotate your food groups, but you can create your own plan. Eating out can present a challenge, but most restaurants will accommodate your special needs once you mention you've got food allergies.

For more detailed information about allergies, digestive enzymes, and intestinal permeability, please see my book, *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome*.

Recommended Reading

- *Reversing Asthma: Breathe Easier With This Revolutionary New Program* by Richard N. Firshein, DO; 1998
- *Dr. Braly's Food Allergy and Nutrition Revolution* by James Braly, MD. Keats Publishing

Resources

- The Inflammation Formula is available online at www.DrRodger.com or by calling 1-888-884-9577.
- Most of the other supplements mentioned in this chapter are available from your local health food store, online at www.DrRodger.com, or by calling 1-888-884-9577.
- The ELISA blood allergy test kit is available online at www.DrRodger.com or by calling 1-888-884-9577.

NOTES

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Chapter 11

Thyroid Dysfunction

Every cell in the body depends on having enough thyroid hormone. If your thyroid gland becomes dysfunctional, every cell in the body suffers. This is why thyroid disorders can cause so many problems.

Hypothyroid can cause many of the symptoms of FMS/CFS. Most of my patients, in fact, are suffering from low (hypo) thyroid function.

A study of thyroid function showed that 63% of FMS patients studied suffered from some degree of hypothyroidism, a percentage much higher than of the general population. Some researchers claim that thyroid hormone deficiency might be a key factor in FMS, as patients have responded well to thyroid hormone treatment (as part of a comprehensive regimen). They state that nearly all FMS and CFS sufferers “dramatically improve or completely recover from the symptoms with this regimen. As long as the patient does not take excessive amounts of thyroid hormone there are no adverse side effects.”¹

It’s been estimated that 1% of the population suffers from hypothyroidism, but this number is widely disputed. Many scientists, researchers, and physicians believe it to be as high as 40%.

Symptoms Associated with Hypothyroid²

- fatigue (the most profound symptom)
- headache
- dry skin
- swelling
- weight gain
- cold hands and feet
- poor memory
- hair loss
- hoarseness
- nervousness
- depression
- joint and muscle pain
- burning or tingling sensations in the hands and/or feet (hypothyroid neuropathy)
- yellowing of skin from a build up of carotene (conversion of carotene to vitamin A is slowed by hypothyroidism)
- carpal tunnel syndrome
- problems with balance and equilibrium (unsteadiness or lack of coordination)
- constipation (from slowed metabolism)
- myxedema (nonpitting edema due to the deposition of mucin in the skin) around the ankles, below the eyes, and elsewhere
- observation of delayed Achilles tendon reflex test
- hypertension (high blood pressure)
- angina (chest pain)
- atherosclerosis (hardening of the arteries)
- hypercholesterolemia (high cholesterol)
- hyperhomocysteinemia (a marker for heart disease)
- menstrual irregularities
- infertility

- PMS
- fibrocystic breast disease
- polycystic ovary syndrome
- reactive hypoglycemia
- psoriasis
- urticaria
- allergic rhinitis

A Short Course on Thyroid Hormones

The hypothalamus stimulates the pituitary gland (both are contained in the brain) to produce thyroid-stimulating hormone (TSH). TSH then stimulates the thyroid to produce and release thyroxine (T4). T4 is then converted into triiodothyronine (T3), which is vital for life and four times more active than T4. This conversion of T4 to T3 takes place in the cells. (T4 can also be converted into reverse T3, which is physiologically inactive.)

Euthyroid Syndrome

Euthyroid is a medical term for patients who have normal thyroid blood tests but have all the symptoms associated with hypothyroidism: fatigue, low metabolism, headache, etc. Euthyroid patients often have a problem with T4 converting into active T3, even though blood tests show normal levels. Individuals might take synthetic thyroid hormones (like Synthroid, which contains T4 only), but since the T4 is not converting efficiently, they continue the symptoms of low thyroid.

A majority of FMS and CFS patients complain of low thyroid symptoms. They relate that they, and sometimes their doctors, suspected a thyroid problem only to have their blood work return normal. Most physicians, in this case, won't recommend thyroid

replacement therapy. Many don't know about (or they choose to ignore) well documented studies that show that low body temperature is indicative of euthyroid hypothyroidism.

Body Temperature, Metabolism, and Thyroid Hormones

Blood tests for thyroid function measure the amount of TSH, T4, and T3 in the bloodstream. But thyroid hormones don't operate within the bloodstream; the action takes place in the cells themselves. What good is a blood test that only shows what is racing around the bloodstream one second out of a day? It's inadequate for measuring true thyroid hormone levels.

Self-test for Low Thyroid

Dr. Broda Barnes was the first to show that a low basal body temperature was associated with low thyroid. His first study was published in 1942 and appeared in JAMA. This study tracked 1,000 college students and showed that monitoring body temperature for thyroid function was a valid if not superior approach to other thyroid tests.³

The test for low thyroid function, according to Dr. Barnes's protocol, starts first thing in the morning. While still in bed, shake down and place the thermometer (preferably mercury; digital thermometers are not as accurate) under your arm and leave it there for 10 minutes. Record your temperature in a daily log. Women who are still having menstrual cycles should take their temperature after the third day of their period. Post menopausal women can take their temperature on any day. A reading below the normal 97.2° strongly suggests hypothyroid. A reading above 97.6° may indicate hyperthyroidism (overactive thyroid). Add one degree to axillary (under arm) temperatures. You can also use a digital

thermometer if needed. I recommend you take your underarm temperature as described above and take your temperature under the tongue two hours after waking up in the morning. Don't eat or drink anything ten minutes before taking your oral temperature.

Treatment for Hypothyroid, The Barnes Method

Dr. Barnes recommends patients take a desiccated glandular (derived from pigs) prescription medication known as Armour Thyroid, which was used before synthetic medications such as Synthroid were introduced. Armour Thyroid and other prescription thyroid glandulars (including Nuthroid and Westroid), contain both T4 and T3.

Synthroid and other synthetic thyroid medications contain T4 only. Since some individuals have a difficult time converting inactive T4 to active T3, these medications may not work at the cellular level. Individuals may take T4 medications for years and never notice much improvement.

Wilson's Syndrome

Wilson's Syndrome was first described by E. Denis Wilson, MD. He was refining some of the pioneering clinical research first performed by Dr. Barnes. Dr. Wilson showed that symptoms of low thyroid function could be present with normal thyroid blood tests. The group of symptoms that he studied he called Wilson's syndrome.⁴

These symptoms can include severe fatigue, headache and migraine, PMS, easy weight gain, fluid retention, irritability, anxiety, panic attacks, depression, decreased memory and concentration, hair loss, decreased sex drive, unhealthy nails,

constipation, irritable bowel syndrome, dry skin, dry hair, cold and/or heat intolerance, low self-esteem, irregular periods, chronic or repeated infections, and many other complaints.

A lot of symptoms for such a little hormone problem, huh? Perhaps the greatest obstacle Dr. Wilson has had to overcome in his attempts to be recognized by mainstream medicine is the vast symptoms associated with Wilson's Syndrome. Yet all these symptoms can be seen in hypothyroid patients.

Causes of Low Thyroid Function

The symptoms of low thyroid tend to come on or become worse after a major stressful event. Childbirth, divorce, death of a loved one, job or family stress, chronic illness, surgery, trauma, excessive dieting, and other stressful events can all lead to hypothyroidism.

Under significant physical, mental, or emotional stress the body slows down the metabolism by decreasing the amount of raw material (T4) that is converted to the active thyroid hormone (T3). This is done to conserve energy. However, when the stress is over, the metabolism is supposed to speed up and return to normal. This process can become derailed by a buildup of reverse T3 (rT3) hormone. Reverse T3 can build to such high levels that it begins to start using up the enzyme that converts T4 to T3. The body may try to correct this by releasing more TSH and T4 only to have the levels of rT3 go even higher. A vicious cycle is created where T4 is never converted into active T3.

Certain nationalities are more likely to develop Wilson's syndrome: those whose ancestors survived famine, such as Irish, American

Indian, Scotch, Welsh, and Russian. Interestingly, those patients who are part Irish and part American Indian are the most prone of all. Women are also more likely than men to develop Wilson's syndrome.

One study showed that all the symptoms associated with FMS could be eliminated while the patient was taking high-doses (120 mcg.) of T3.⁵

Thyroid Testing

Normal TSH Parameters Change

According to the American Association of Clinical Endocrinologists (AACE), doctors have typically been basing their diagnoses on the "normal" range for the TSH test. The typical normal levels at most laboratories have fallen in the 0.5 to 5.0 range.

The new guidelines narrow the range for acceptable thyroid function. The AACE is now encouraging doctors to consider thyroid treatment for patients who test the target TSH level of 0.3 to 3.04, a far narrower range. The AACE believes the new range will result in proper diagnosis for millions of Americans who suffer from a mild thyroid disorder but have gone untreated until now.

At a press conference, Hossein Gharib, MD, FACE, and president of AACE, said: "This means that there are more people with minor thyroid abnormalities than previously perceived."

The AACE estimates that the new guidelines actually double the number of people who have abnormal thyroid function, bringing the total to as many as 27 million, up from 13 million thought to have the condition under the old guidelines.⁶

Over the Counter Glandular Thyroid Supplements

The prescription thyroid glandular medications Armour, Westhroid, and Nuthroid are the preferred method of treating low thyroid disorder. Dr Wilson's timed release prescription T3 therapy is another option. However, many of my patients have trouble getting their medical doctor to write them a prescription for one of these medications. If you have trouble getting your doctor to prescribe one of these medications, then you should consider using the over-the-counter thyroid supplement I recommend to my patients.

Over-the-counter thyroid glandular supplements can also be used to correct low thyroid function.

Since these raw thyroid tissue concentrates contain T3, they can be used as a first line of treatment for low to moderate hypothyroid, euthyroid disorder, or Wilson's syndrome.

Individuals taking synthetic prescription thyroid medicines (Synthroid, Levathyroid, etc.) may find that adding an over-the-counter T3 glandular supplement helps them feel better.

A study by the New England Journal of Medicine showed that patients who received a combination of T4 and T3 were mentally sharper, less depressed, and feeling better overall than a control group who received T4 only.⁷

Potent, high quality thyroid glandular supplements are not easy to find.

Biotics Research

I've been in dialogue with Biotics Research and have been impressed with their thyroid supplements. I'm encouraged by the research they've done on their products. They have been manufacturing glandular supplements since the 1980s.

Their glandular products are prepared strictly from USDA inspected bovine and porcine tissues and are certified BSE-free. Most of their glandular products come from the tissues of neonatal (newborn) pigs, harvested specifically for Biotics Research. Tissues from newborn animals possess high anabolic activity and they have minimal exposure to environmental stressors.

GTA Forte II

GTA is a porcine (pig) over the counter thyroid glandular supplement (20 mg). Armour thyroid comes from porcine glands as well. Pig hormones are closer to human hormones than bovine (cow) sources. T4 has been removed leaving 20 mg of T3 hormone.

Dosing

I start my patients on one GTA Forte II twice a day. It is best to take on an empty stomach (30 minutes before or 90 minutes after eating). I encourage my patients not to take the second dose any later than 3 p.m.

I have patients monitor their basal or oral temperatures (preferably with a mercury thermometer).

After two weeks, if your temperature is not going up, you should increase the dose to two GTA Forte II's in the morning and one in the afternoon.

Continue to monitor your temperature. If your temperature still doesn't increase to at least 98.0, consider adding an additional GTA Forte II in the afternoon (total of 4 a day). If your temperature continues to run low and your symptoms haven't improved, then it is best to attempt to find a doctor to personally work with you.

Questions

I'm taking Synthroid or other prescription thyroid medication. Should I take the GTA Forte II as well?

If you're taking a prescription thyroid medication and your temperature is running 98.2 or below, then yes you should consider adding GTA Forte II. I'd recommend taking one GTA Forte II in the A.M. and one in the early afternoon.

Monitor your temperatures as outlined below. If your temperature rises above 98.2, then discontinue or reduce the GTA Forte II.

If my lab tests are normal, does this mean I don't need thyroid medication?

Blood tests aren't very accurate. You may have hypothyroid (low thyroid) even if your blood tests are normal. Temperature testing is more accurate.

My doctor has me on Synthroid or Levathyroid. Should I switch to Armour or Nuthroid, or Westhroid?

If you've been taking one of the "T4 only" synthetic prescription drugs and haven't noticed much difference in your symptoms, such as fatigue, weight gain, hair loss, tingling in your hands or

feet, etc., then yes, you should consider asking your doctor to try you on one of these T3–T4 combination drugs.

What if I'm taking one of these combination drugs (Armour, Westhroid, or Nuthroid) but still have a low body temperature and symptoms of low thyroid?

I'd recommend you ask your doctor to consider increasing your prescription medication. If this is not an option or doesn't help, then I suggest you start taking GTA Forte II along with the prescription medication.

Basal Temperature Testing

The test for low thyroid function, according to Dr. Barnes's protocol, starts first thing in the morning.

- While still in bed, shake down and place the thermometer (preferably mercury as digital thermometers are not as accurate) under your arm and leave it there for 10 minutes. Women should not take their temperature on the first three days of their period. Menopausal women can take their temperature on any day.
- Add one degree to the body temperature reading (a 97.2° under-arm reading becomes 98.2°). A reading below the normal 97.2° strongly suggests hypothyroid. A reading above 98.0° may indicate hyperthyroidism (overactive thyroid).
- Repeat these steps for seven days.

Oral Temperature Testing

Take your temperature with a mercury or digital thermometer two hours after waking up in the morning. Don't eat or drink anything for ten minutes before taking your temperature under your tongue. Record your temperatures for one week. If your under tongue temperature averages below 98.2, then you're suffering from a low thyroid.

Recommended Reading

- *Hypothyroidism: The Unsuspected Illness* by Broda Barnes, MD, and Lawrence Galton; 1976.

Resources

- For more detailed information about thyroid disorders, please see my book, *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome*.
- GTA Forte II is available from my office and from other doctor's offices that use Biotics Research products. Please call 1-888-884-9577 or go online to www.DrRodger.com.
- www.wilsonssyndrome.com
- www.brodabarnes.org

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Chapter 12

Mood Disorders

Mood and mental fatigue complaints usually result in a prescription for one or more medications. Many of these antidepressants are in the form of selective serotonin reuptake inhibitors (SSRI). These drugs (Lexapro, Prozac, Paxil, Effexor, Celexa, and Zoloft) are supposed to help the brain be more efficient at using the serotonin it produces.

Shortcomings of Antidepressants

Antidepressants are sometimes helpful for my patients because they correct low serotonin levels, but they usually don't correct the cause of the deficiency. And while prescription drugs have helped millions of people overcome mental illnesses, their side effects can be life threatening. Prozac alone has been associated with over 1,734 suicide deaths and over 28,000 adverse reactions.

Prescription antidepressants can cause depression, addiction, suicidal tendencies, tardive dyskinesia (involuntary muscle spasms), and tardive dementia (senility). These side effects are due to drug-induced nutritional deficiencies and poor liver function—most of my patients have these anyway.

Note: *to reduce antidepressant-induced tremors, take an additional 50–100 mg of zinc citrate. This is a tip from another orthomolecular physician. I've found it to be helpful. To get the best results, add up to a gram of manganese with the zinc .*

Mood Disorders and “Fibro Fog”

Depression, mental fatigue, and mental confusion share several underlying causes:

- Poor sleep depletes mood-controlling neurotransmitters, including serotonin. Decreased serotonin leads to depression, mental fatigue, lowered pain threshold, and sugar cravings.
- Low protein diets, poor digestion, and malabsorption syndromes contribute to amino acid deficiencies. Remember, amino acids—along with certain vitamin and mineral cofactors—create the neurotransmitters (brain chemicals).
- Nutritional deficiencies are quite common in America. In one study, up to 50% of patients admitted for hospital care had nutritional deficiencies.
- Magnesium deficiency affects 50% of the population. Magnesium and vitamin B6 are cofactors in the production of dopamine, GABA, and serotonin.
- A chromium deficiency, which is especially common among those taking cholesterol-lowering drugs, can cause hypoglycemia and mood disorders.
- A deficiency in any of the B vitamins can lead to depression, brain fog, and mental fatigue.
- Birth control pills and Premarin can deplete vitamin B6. Vitamin B6 is needed for transforming amino acids (tryptophan and phenylalanine) into neurotransmitters (serotonin and epinephrine).

- Vitamin C deficiency hurts the production of dopamine, norepinephrine, and serotonin. Vitamin C plays a major role in the production of the adrenal “fight-or-flight” hormone, adrenaline. A deficiency in adrenal function can contribute to fatigue, depression, and confusion.
- A deficiency of any of the essential nutrients can create a chain reaction leading to all sorts of mood disorders, anxiety, depression, and panic disorders.

Allergic Disorders

Food and chemical sensitivities can cause all sorts of symptoms. Allergic inflammation of the intestinal tract causes irritable bowel. Allergic inflammation of the nasal membranes creates sinusitis. Allergic reactions in the respiratory tissue create bronchial spasms (asthma).

Allergic reactions can also occur within the brain, creating mental confusion, depression, anxiety, and other mood disorders.

Neurotransmitters

Neurotransmitters are brain chemicals that help relay electrical messages from one nerve cell to another. Neurotransmitters are produced from the amino acids in the foods we eat. Amino acids join together in different patterns to form a protein. Eating a protein-rich food allows us to replenish our ongoing demand for the essential amino acids. Half of the amino acids are essential. This means our bodies can't manufacture them and we must get them from the foods we eat (protein). Certain amino acids along with vitamins (B6, B3, and C) and minerals (magnesium) produce the neurotransmitters. The amino acid tryptophan turns into

serotonin. The amino acid phenylalanine turns into epinephrine. Amino acids are the raw nutrients needed to manufacture the neurotransmitters which regulate our moods.

What Do Neurotransmitters Do?

Neurotransmitters help regulate pain, reduce anxiety, promote happiness, initiate deep sleep, and boost energy and mental clarity.

The neurotransmitters that cause excitatory reactions are known as catecholamines. Catecholamines, epinephrine, and norepinephrine (adrenaline) are derived from the amino acid phenylalanine. Inhibitory or relaxing neurotransmitters include serotonin and gamma-aminobutyric acid (GABA). The neurotransmitter serotonin is produced from the amino acid tryptophan (5HTP). GABA is produced from the amino acid glutamine.

Our Happy Hormones

- **Serotonin**, created from the amino acid tryptophan (5HTP), elevates mood, reduces food cravings, increases pain threshold (reduces pain), increases mental clarity, reduces IBS symptoms, promotes deep sleep, relieves tension, and calms the body.
- **Dopamine and Norepinephrine** are synthesized from the amino acid phenylalanine. They increase mental and physical alertness, reduce fatigue, and elevate mood.

- **Epinephrine** is a neurotransmitter that helps increase energy and boost mental clarity. When low, it causes depression and fatigue. Prescription medications like Wellbutrin and Effexor attempt to boost the brain's level of epinephrine. However, you can simply take the right amino acids, L-phenylalanine or SAME, to increase your epinephrine levels.
- **Gamma-aminobutyric acid (GABA)** is a tripeptide made from three amino acids. It has a calming effect on the brain. You may have heard of prescription antidepressants called MAOIs, such as Nardil and Marplan. These work by increasing the effectiveness of GABA. This is another example of a “gasoline additive.”

“After 26 years in medicine, if I had to choose the number one food that has caused the most depression, it would be sugar.”

*—Sherry Rogers, MD
Depression Cured At Last*

The average American eats 125 lbs. of sugar each year.

Euthyroid Syndrome

It's estimated that 1% of the population is suffering from hypothyroidism. This number is widely disputed. Many scientist, researchers and physicians believe as many as 40% of the population has hypothyroidism.¹

Euthyroid is a medical term for patients who have normal thyroid blood tests but have all the symptoms associated with hypothyroidism: fatigue, low metabolism, headaches, etc.

A majority of FMS and CFS patients complain of symptoms of low thyroid. They relate that they and sometimes even their doctors suspected a thyroid problem only to have their blood work come back “normal.” A euthyroid patient will have normal blood work but still suffer from low thyroid. Most physicians won't recommend thyroid replacement therapy if the blood tests come back “normal.” Most don't know or choose not to accept the well documented studies that show a low body temperature is indicative of euthyroid hypothyroidism.

Euthyroid patients often have a problem with T4 converting into active T3. The blood tests may show normal levels, but since T4 is not being converted to T3 within the cells, fatigue and other symptoms associated with low thyroid begin to appear. Individuals taking synthetic thyroid hormones like Synthroid (T4 only) may continue to have the symptoms of low thyroid for years, even in spite of normal blood tests.

A Good Night's Sleep

Americans take over 5 billion sleeping pills each year. 15,000 Americans die each year from prescription sleep medications.² We've all heard that we need eight hours of restful sleep each night. The amount of sleep an individual actually needs will vary from person to person. A five-year-old may need 11–12 hours of sleep, an adult 7–9 hours of sleep. But why is a good night's sleep

so important? Poor sleep has been linked to various health problems including depression, fatigue, CFS, FMS, and headaches. Several studies have shown that a lack of sufficient sleep will cause a host of health issues.

One study showed that college students who were prevented from going into deep (REM) sleep for a period of a week develop the same symptoms associated with FMS and CFS: diffuse pain, fatigue, depression, anxiety, irritability, stomach disturbances, and headaches.³

Serotonin

Serotonin is the neurotransmitter responsible for regulating your sleep, raising your pain threshold (decreasing your pain), and elevating your moods.

Many of my patients are on Serotonin Reuptake Inhibitors (SSRIs). SSRIs are supposed to help a patient hang onto and use her naturally occurring stores of serotonin. This is like using a gasoline additive to help increase the efficiency of your car's fuel. But most of the patients I see are running on fumes, and a gasoline additive won't help. Using 5HTP is like pouring gasoline straight into the tank. It fills your brain with serotonin. There's no need for an additive when you can simply replace your serotonin stores anytime you get low.

Years of poor sleep create an imbalance within a person's sleep-regulatory system (the circadian rhythm). The longer someone's sleep cycle has been compromised, the longer it usually takes for her to experience lasting symptom relief. But just a few nights of

consistent deep sleep will provide a tremendous amount of improvement for most patients.

Stress

Stress is another reason people become deficient in serotonin. Emotionally stressful situations cause the body to release adrenaline, cortisol, and insulin. These stress hormones stimulate the brain to secrete serotonin. Long-term stress and poor dietary habits can deplete the body's serotonin stores. Stimulants like caffeine, nicotine, chocolate, diet pills, sugar, and nicotine cause a rapid rise in blood-insulin levels. This is then followed by the brain releasing serotonin. Serotonin helps the person feel better and think clearer, but only temporarily. A stimulant high is always followed by a low. This then leads to further use of stimulants to keep serotonin levels high. This is how addictions are created. People become dependent on stimulates to help raise serotonin levels, and this addictive process causes further depletion of serotonin.

A deficiency in any of the synergistic nutrients magnesium, B6, B12, B1, B3, and calcium, will prevent the production of serotonin. Stress can deplete the body of magnesium (a common occurrence in FMS and CFS patients) and B6. Vitamin B5 or pantothenic acid can counter the effects of stress and may help spare magnesium and B6.

Hypoglycemia

Hypoglycemia is a complex set of symptoms caused by faulty carbohydrate metabolism. It is usually the result of consuming too many simple carbohydrates (sugars). Hypoglycemia has also been shown to be a major trigger for the onset of migraine headaches.

The following foods are not recommended for anyone with hypoglycemia or hypoadrenia tendencies:

- table sugar
- maltose
- honey
- sucrose (fruit sugar)
- bananas
- raisins
- dates
- fruit juices
- apricots
- beets
- white flour
- white potatoes
- white rice
- cooked corn
- corn flakes
- cereals

It's always best to combine protein, fat, and carbohydrate in each snack or meal. Avoiding simple sugars and consuming a balanced diet helps create a stable blood sugar. Eating healthy snacks throughout the day can also help keep your blood sugar levels stable.

Healthy snacks that combine protein, fat, and carbohydrate include nuts (cashews, almonds, walnuts, pecans, etc.) along with an apple, pear, or whole wheat crackers.

“Fibro Fog”

Decreased mental clarity, forgetfulness, and mental fatigue usually start to disappear when an individual starts sleeping through the night. Your mental abilities will improve once your brain chemistry is normalized. Raising serotonin is first on the list, and patients notice rapid improvement once they begin taking 5HTP. If after a few weeks, you're still complaining of mental fatigue, depression, low moods, or lethargy, reevaluate your Brain Function Questionnaire. More than likely, you've checked a lot of N (epinephrine) or D (dopamine) statements. You would benefit from taking SAME along with the 5HTP.

You should already taking 1000 mg of adrenal cortex each day. This allows you to become more resistant to stress (a major cause of depression and “fibro fog”).

Amino Acid Replacement: Correcting the Causes

I've been using amino acid replacement therapy for several years. I've found this approach to be far superior to using prescription medicines (in most cases) for treating mild to moderate mood disorders. I've treated thousands of patients with such disorders. Over the years I've used various questionnaires or tests to determine which amino acids needed to be recommended. I've found that the one below provides a quick and accurate assessment for diagnosing a person's brain chemistry. I've found very few problems with mixing the recommended supplements with prescription antidepressants.

BRAIN FUNCTION QUESTIONNAIRE

The “O” Group

If three or more of these descriptions apply to your present feelings, you are probably part of the “O” group:

- Your life seems incomplete.
- You feel shy with all but your closest friends.
- You have feelings of insecurity.
- You often feel unequal to others.
- When things go right, you sometimes feel undeserving.
- You feel something is missing in your life.
- You occasionally feel a low self-worth or -esteem.
- You feel inadequate as a person.
- You frequently feel fearful when there is nothing to fear.

The “O” Group is named for the opioid neurotransmitters contained in the hypothalamus gland. These neurotransmitters have two primary functions:

1. First, opioids are released in small bursts when we feel a sense of urgency (stress). Some individual seem to feed off of this adrenaline rush. A sense of urgency can also help us get out of bed in the morning or get the kids off to school. However, if you can never turn this sense of urgency off, you’ll eventually deplete the opioids, along with other vital hormones including cortisol and DHEA.

As a way to turn off the constant mind chatter, those in the “O group” use stimulants and mind numbing chemicals (alcohol, marijuana, food, etc.) to escape the constant pressure they place on themselves to be more, do more, have more.

These chemicals can temporarily relieve the anxious feelings associated with opioid overload by providing artificial opioids. Unfortunately, these artificial opioids also cause the opioid manufacturing cells in your brain to reduce their output. These cells then lose their ability to produce the needed opioid neurotransmitters. You then crave the artificial opioids, and an addiction has been born.

- 2.** Second, when you exercise, your body releases extra opioids. This takes away the pain of sore muscles and may provide a feeling of euphoria. The opioids play an important role in pain modulation, so a deficiency of opioids can lower our pain threshold and make us more sensitive to painful stimuli.

DL-phenylalanine (a special form of the amino acid phenylalanine) can be extremely helpful in restoring proper opioid levels. Start with 1,000 mg of DL-phenylalanine one–two times daily on an empty stomach. If you don't seem to notice any benefits, keep increasing the dose, up to 4,000 mg twice a day. If you experience a rapid heartbeat, agitation, or hyperactivity, reduce or stop taking DL-phenylalanine. L-glutamine increases the effectiveness of DL-phenylalanine, so take 500 mg of L-glutamine one–two times daily on an empty stomach.

Phenylalanine can increase blood pressure. If you already have high blood pressure, consult your doctor before taking this supplement. Phenylalanine can be stimulating and shouldn't be taken past 3:00 in the afternoon.

The “G” Group

If three or more of these descriptions apply to your present feelings, you are probably part of the “G” group:

- You often feel anxious for no reason.
- You sometimes feel “free-floating” anxiety.
- You frequently feel “edgy,” and it’s difficult to relax.
- You often feel a “knot” in your stomach.
- Falling asleep is sometimes difficult.
- It’s hard to turn your mind off when you want to relax.
- You occasionally experience feelings of panic for no reason.
- You often use alcohol or other sedatives to calm down.

The “G” group symptoms are from the absence of the neurotransmitter gamma-aminobutyric acid (GABA). GABA is an important neurotransmitter involved in regulating moods and mental clarity. Tranquilizers used to treat anxiety and panic disorders work by increasing GABA.

GABA is made from the amino acid glutamine. Glutamine passes across the blood-brain barrier and helps provide the fuel needed for proper brain function. A shortage of L-glutamine can reduce IQ levels. L-glutamine supplementation has been shown to increase IQ levels in some mentally deficient children. That’s because L-glutamine is brain fuel! It feeds the brain cells, allowing them to fire on all cylinders. A deficiency in L-glutamine can result in foggy thinking and fatigue.

Even a small shortage of L-glutamine will produce unwarranted feelings of insecurity and anxiousness. Other symptoms include continual fatigue, depression, and occasionally, impotence.

For anxiety symptoms take GABA 500–1,000 mg twice daily. Some individuals may need to take it three–four times a day. Like most amino acids, GABA needs to be taken on an empty stomach.

The “D” Group

If three or more of these descriptions apply to your present feelings, you are probably part of the “D” group:

- You lack pleasure in life.
- You feel there are no real rewards in life.
- You have unexplained lack of concern for others, even loved ones.
- You experience decreased parental feelings.
- Life seems less “colorful” or “flavorful.”
- Things that used to be fun aren’t any longer enjoyable.
- You have become a less spiritual or socially concerned person.

Dopamine is a neurotransmitter associated with the enjoyment of life: food, arts, nature, your family, friends, hobbies, and other pleasures. Cocaine’s (and chocolate’s) popularity stems from the fact that it causes very high levels of dopamine to be released in a sudden rush.

A dopamine deficiency can lead to a condition known as anhedonia. Anhedonia is the lack of ability to feel any pleasure or remorse in life. It also reduces the person’s attention span. The attention span of a person who has taken cocaine for some time is often reduced to two–three minutes, instead of the usual 50–60 minutes. Learning, for such a person, is nearly impossible. Brain fatigue, confusion, and lethargy are all by-products of low dopamine.

The brain cells that manufacture dopamine use the amino acid L-phenylalanine as raw material. Like most cells in the hypothalamus, they have the ability to produce four–five times their usual output if larger quantities of the raw materials are made available through nutritional supplementation.

Start with 1,000 mg of L-phenylalanine one–two times daily on an empty stomach. If you don't seem to notice any benefits, keep increasing the dose, up to 4,000 mg twice a day. If you experience a rapid heart beat, agitation, or hyperactivity, reduce or stop taking L-phenylalanine. L-glutamine increases the effectiveness of L-phenylalanine, so take 500 mg of L-glutamine one–two times daily on an empty stomach.

Phenylalanine can increase blood pressure. If you already have high blood pressure, consult your doctor before taking any form of it. Phenylalanine can be stimulating and shouldn't be taken past 3:00 in the afternoon.

The “N” Group

If three or more of these descriptions apply to your present feelings, you are probably part of the “N” group:

- You suffer from a lack of energy.
- You often find it difficult to “get going.”
- You suffer from decreased drive.
- You often start projects and then don't finish them.
- You frequently feel a need to sleep or “hibernate.”
- You feel depressed a good deal of the time.
- You occasionally feel paranoid.
- Your survival seems threatened.
- You are bored a great deal of the time.

The neurotransmitter norepinephrine, when released in the brain, causes feelings of arousal, energy, and drive. On the other hand, a short supply of it will cause feelings of a lack of ambition, drive, and/or energy. Deficiency can even cause depression, paranoia, and feelings of apathy.

Norepinephrine is also used to initiate the flow of adrenaline when you are under psychological stress. The production of norepinephrine in the hypothalamus is a 2-step process. The amino acid L-phenylalanine is first converted into tyrosine. Tyrosine is then converted into norepinephrine. Tyrosine, then, can be supplemented to increase norepinephrine (and dopamine). But too much tyrosine can cause headaches, so I usually recommend L-phenylalanine replacement first.

Start with 1,000 mg of L-phenylalanine one–two times daily on an empty stomach. If you don't seem to notice any benefits, keep increasing the dose, up to 4,000 mg twice daily. If you experience a rapid heartbeat, agitation, or hyperactivity, reduce or stop taking L-phenylalanine. L-glutamine increases the effectiveness of L-phenylalanine, so take 500 mg of L-glutamine one–two times daily on an empty stomach.

Phenylalanine can increase blood pressure. If you already have high blood pressure, consult your doctor before taking any form of it. Phenylalanine can be stimulating and shouldn't be taken past 3:00 in the afternoon.

Supplementing with SAmE

S-Adenosyl-methionine (SAmE) is involved in regulating the brain's neurotransmitters. Normally the brain manufactures all the SAmE

it needs from the amino acid methionine. However low protein diets, malabsorption and deficiencies developed from excess methionine use in certain detoxification pathways can create a need for SAMe replacement. SAMe has been shown through several well designed studies to be one of the best natural antidepressants available. Only its relatively high cost keeps it from replacing other natural remedies.⁴

Start with 200 mg in the morning on an empty stomach then if needed add an additional 400-800 mg.

The "S" Group

If three or more of these descriptions apply to your present feelings, you are probably part of the "S" group:

- It's hard for you to go to sleep.
- You can't stay asleep.
- You often find yourself irritable.
- Your emotions often lack rationality.
- You occasionally experience unexplained tears.
- Noise bothers you more than it used to; it seems louder than normal.
- You flare up at others more easily than you used to; you experience unprovoked anger.
- You feel depressed much of the time.
- You find you are more susceptible to pain.
- You prefer to be left alone.

Serotonin is a hypothalamus neurotransmitter necessary for sleep. A lack of serotonin causes difficulty in getting to sleep as well as staying asleep. It is often this lack of sleep that causes the symptoms mentioned above.

Serotonin levels can easily be raised by supplementing with the essential amino acid L-tryptophan, but dietary supplements of L-tryptophan are banned in the United States.

However, 5-hydroxytryptophan (5HTP), a form of tryptophan, is available over-the-counter and works extremely well for most patients. You should start with 50 mg of 5HTP, 30 minutes before bed. You should take 5HTP on an empty stomach along with 4 oz of grape juice. You may need to increase this dose, up to 300 mg per night. If you feel hungover the next day, decrease your dose. Individuals who don't have trouble sleeping at night but do have other symptoms of the "S" group might want to take 100 mg of 5HTP three times daily, with food. 5HTP doesn't usually cause drowsiness when taken with food.

For more information about 5HTP and recommended dosing for sleep disorders, see chapter 5, Sleep Disorders.

Research in 5HTP and Depression

In one study, individuals with depression who took 5HTP showed a drop of 50% in unipolar and bipolar depression.⁵

BRAIN FUNCTION PROTOCOL

Please Note: For FMS, the "S" group (serotonin) is usually the most checked. You will also check a lot of the "N" group (norepinephrine). You might have checked several statements in all the neurotransmitter categories. This means you have either been under long-term stress and/or on legal or illegal mood-altering drugs for a long time.

The "S" Group

Always lean towards boosting serotonin first (use 5HTP). People usually lose a lot of their anxiety once their serotonin levels start to go up. If a person is having trouble sleeping, pain, IBS, and craves sugar then they need to be taking 5HTP.

The "N" Group

If a patient doesn't check any of the "S" statements, they either didn't understand the questions or they're what I call "True CFS" patients. True CFS patients will have a lot of "N" statements checked but relatively few if any "S" statements checked.

Adrenal cortex will help boost norepinephrine levels and should be used first (1000 mg a day).

Use L-Phenylalanine as recommended above.

SAMe

An alternative to L-Phenylalanine is S-adenosyl-methionine (SAMe).

It works rather quickly and seems to provide the needed pep that many of my patients are looking for.

I've started to use a good deal of SAMe in my practice.

S-adenosyl-methionine (SAMe) is involved in regulating the brain's neurotransmitters.

I find that SAMe seems to work faster and perhaps better than L-phenylalanine to boost norepinephrine levels. It seems to stabilize serotonin and norepinephrine levels. I've had several patients comment that after they started taking SAMe, something kind of "shifted" and they felt better overall, better than they had felt in a long time.

Not all SAME is created equal. The price has come down for SAME, but it is still around \$27 for 30, 200 mg tablets. You may be tempted to buy your SAME at Wal-Mart or other discount stores. This is a mistake. SAME starts to deteriorate rather quickly when exposed to air. It needs to be vacuum packed. I use SAME that comes from Italy. I've found it far superior to any other I've tried. I think this is why I'm getting such good results.

The "O" Group

If you're predominantly "O" with few or no other categories showing positive (rare for FMS/CFS), then start DL-phenylalanine right away.

Remember, if you have at least 3 "S" statements checked, start with 5HTP first.

The "G" Group

I normally don't recommend GABA on the first visit. I prefer to try 5HTP first. However, as stated above, if a patient is really suffering (checked several "G" statements), I may go ahead and add GABA with 5HTP. But I always have them on 5HTP.

Other Helpful Supplements

- St. John's wort is a perennial plant native to Great Britain and northern Europe. It has antibacterial, antidepressant, antiviral, and anti-inflammatory abilities but has received the most attention for its use in treating depression. (It's been described as "natural Prozac.") Hypericin, along with other chemicals contained in St. John's wort, acts as both a weak MAOI and an SSRI.

A review of 23 studies shows St. John's wort to be as or more effective as several prescription drugs (Elavil, Zoloft, and Tofranil) in treating depression. Each year, over 60 million prescriptions for St. John's wort are written in Germany alone. Dosage is standardized (0.3% hypericin) 300 mg three times daily.

It may also increase the potential for sunburn, especially if taken with Propulsid, Prevacid, Feldane, or sulfa drugs. St. John's wort may decrease the effectiveness of certain medications, including digoxin, Coumadin, theophylline, birth control pills, and cyclosporine.

St. John's wort should not be taken along with prescription antidepressant medications, unless you are working with a knowledgeable physician. It can be combined with the amino acids (5HTP, L-Phenylalanine, SAMe, etc.) as long as you're not taking prescription antidepressants.

I find that some of my most difficult patients respond well to taking a combination of 5HTP, SAMe, and St. John's Wort.

Reducing Fibro Fog

I find that most of my patients "fibro fog" will correct itself once they start taking the jump start products (CFS/Fibromyalgia Formula, digestive enzyme, adrenal cortex, and 5HTP) and begin to consistently go into deep, restorative sleep each night.

If they continue to have mental clarity problems, then I'll suggest they use a "fibro fog" formula below:

DR. MURPHREE'S FIBRO FOG FORMULA

Essential Therapeutics Fibro Fog Formula

Serving size: two tablets. Amount per serving:

- acetyl-L-carnitine hydrochloride 500 mg
- glutamine (as L-glutamine USP) 250 mg
- L-pyroglutamic acid 100 mg
- L-tyrosine (as L-tyrosine USP) 250 mg
- ashwagandha (*Withania somnifera*) (dried extract, min. 1.5% withanolides, min. 1% alkaloids) 100 mg
- blueberry (*Vaccinium corymbosum*) (fruit, dried 5:1 extract) 100 mg
- ginkgo biloba (leaf, dried extract, min. 24% ginkgo flavone glycosides, min. 6% terpene lactones) 80 mg
- Siberian ginseng (*Eleutherococcus senticosus*) (root, dried extract, min. 0.8% ginsenosides) 100 mg
- vinpocetine 15 mg
- phosphatidylserine (from soy lecithin) 50 mg
- neuromins DHA powder 300 mg
- docosahexaenoic acid (DHA) 39 mg
- lecithin (from soy) 300 mg
- phosphatidylcholine 65 mg
- phosphatidylethanolamine 50 mg
- phosphatidylinositol 35 mg
- other ingredients: silicon dioxide, cellulose, carboxymethyl-cellulose sodium, stearic acid, and cellulose coating.

Recommended Reading

- *Nutrition and Mental Illness: An Orthomolecular Approach to Balancing Body Chemistry* by Carl Curt Pfeiffer; 1988
- *Healing the Mind the Natural Way* by Pat Lazarus; 1995
- *Anxiety Epidemic* by Billie J. Sahley; 1994
- *Orthomolecular Medicine for Physicians* by Abram Hoffer; 1997

Resources

- All of the supplements mentioned in this chapter are available by calling 1-888-884-9577 or by ordering online at www.DrRodger.com.
- My one-hour CD on Beating Anxiety and Depression is also available by contacting my office at 1-888-884-9577 or by going to www.DrRodger.com.

NOTES

1. Hypothyroidism: The Unsuspected Illness by Broda O. Barnes, M.D. and Lawrence Galton.
2. Tired or Toxic? by Sherry A. Rogers; 1990
3. P.Koch-Sheras and A. Lemley, *The Dream Sourcebook* (Los Angele: Loweel House).
4. Mischoulon D, Fava M. Role of 5-adenosyl-L-methionine in treatment of depression: a review of the evidence. *Am J Clin Nutr* 2002 Nov;76(5):11585-615.
5. Costa and Greengard (1984). *Frontiers in Biochemical Pharmacological Research in Depression*. *Advances in Biochemical Psychopharmacology*. Vol 39, p. 301-13.

Chapter 13

Yeast Overgrowth

Candida albicans is a particular form of yeast found living in the intestinal tracts of most individuals. Yeasts cohabitate in a symbiotic relationship with over 400 healthy intestinal bacteria. These bacteria help produce short-chain fatty acids, vitamin K, biotin, vitamin B12, thiamin, and riboflavin. These bacteria also keep the yeast that inhabit our intestinal tract in check. When these good bacteria die (from antibiotics) or are suppressed (by prescription steroids), the yeasts are allowed to grow to unhealthy levels, causing dysbiosis. Yeast overgrowth is similar to food allergies in that there are a plethora of associated symptoms. This can lead to skepticism in many doctors as the symptoms are tough to define. Candidiasis commonly infects the ears, nose, and urinary and intestinal tracts.

Signs and Symptoms of Yeast Overgrowth

- constipation, diarrhea, and irritable bowel syndrome
- abdominal pain
- bloating, gas, and indigestion
- rash
- bladder spasms and infections
- ear infections
- sinus infections
- rectal itching
- itchy ears or nose
- sugar or starch cravings

- white tongue (thrush)
- toe or finger nail infections
- jock itch
- chronic vaginal yeast infections
- intestinal permeability
- increased body odor
- PMS
- asthma
- depression
- chronic fatigue¹

Like most opportunistic infections, Candida and other yeasts may increase during times of stress. This overgrowth leaks toxins into the bloodstream or other tissues, allowing antigens (foreign invaders) to set up residence in various bodily tissues. Antigens then trigger complex allergic reactions. (This might explain why most individuals with chronic yeast overgrowth develop food, inhalant, and environmental allergies).²

Allergic reactions can manifest in a variety of symptoms: fatigue, brain fog, depression, joint and muscle pain, digestive disorders, headache, rash, and breathing problems. Inflammation of the nose, throat, ears, bladder, and intestinal tract, can lead to infections of the sinus, respiratory, ear, bladder and intestinal membranes. In an attempt to arrest these infections, doctors might prescribe a broad spectrum antibiotic. Such antibiotics promote yeast overgrowth and often times, additional symptoms. It invades the intestinal wall creating intestinal permeability. This allows toxins from microorganisms and protein molecules from your food enter the blood stream.

Yeast, remember, feeds on sugars and on carbohydrates that easily convert to sugars. In turn, yeasts produce a series of chemical products as waste, among which are acetaldehyde and ethanol. Ethanol is alcohol, and there are cases of people who have never drunk a drop of alcohol yet are daily inebriated. Acetaldehyde is produced as the alcohol breaks down and is about six times more toxic to brain tissue than ethanol.

What Causes Yeast Overgrowth?

Birth control pills, food allergies, antibiotics, and corticosteroid therapy are all initiators of yeast overgrowth.

A minor increase in intestinal yeast is usually not a problem, leading possibly to infection of the mouth (thrush) or vaginal lining (vaginitis or “a yeast infection”). The body’s immune defenses are usually strong enough to keep the yeast from taking over the intestinal tract. However, if yeast overgrowth is left unchallenged, more sinister symptoms appear. Yeasts can change into an invasive mycellial fungus with rhizoids (tentacle-like projections) that penetrate the lining of the intestinal tract. These projections can cause intestinal permeability and leak toxins across the cellular membranes.

Treatment of Yeast Overgrowth

I don’t treat yeast overgrowth until a patient has been under my care for awhile. I want to make sure she is consistently going into deep sleep each night. Before I start killing off yeast and creating die-off reactions, I want my patient’s nutritional deficiencies shored up. She should be reporting more energy and enjoying more resilience to daily stress. It is usually several weeks before I attempt to treat yeast overgrowth.

THE CANDIDA DIET

- Avoid sugar for at least three months. Sugar is the chief nutrient for *Candida albicans*, so restricted sugar intake is an absolute necessity to effectively treat chronic Candidiasis. Avoid refined sugar, honey, maple syrup, fruit juice, milk, white potatoes, corn, beans, processed or bleached (white) flour, bakery goods, muffins, cereals, and anything containing sugar. This includes ice cream, cake, cookies, and other sweets; potato or corn chips, pretzels, or crackers; and dried fruits, including raisins.
- Avoid alcoholic beverages, malted milk, and other malted products for at least two months.
- Avoid mold- and yeast-containing foods for at least two months. These include peanuts, dried fruits (including prunes, raisins, and dates), vinegar, pickled vegetables, sauerkraut, relishes, green olives, vinegar-containing salad dressings, catsup, mayonnaise and, pickles.
- Avoid fruits and fruit juice (except the fruit juice taken with 5HTP if that has been prescribed for you) for at least two weeks. After two weeks, try introducing apples and pears to see if you have any reactions. (Reactions might include fatigue, depression, aches and pain, rectal itching, itching of the ears or nose, and digestive disturbances.) If not, then try berries: strawberries, blueberries, blackberries, and raspberries. Avoid all other fruits.

- Avoid milk and dairy products for at least two months. All natural (unsweetened) yogurt is allowed.
- Most vitamin and mineral supplements purchased at a drug store are contaminated with yeast. Follow your doctor's recommendations about which supplements are acceptable.
- Take one tablespoon of virgin olive oil each day on your salads or vegetables. Add lemon juice if you'd like.

Candida Diet Allowables:

- vegetables and salads (remember your olive oil!)
- meats and proteins (lean cuts)
- fish and shellfish
- game birds and animals
- nuts and seeds (in small amounts)
- cold-pressed or expeller-pressed, non-hydrogenated oils
- artificial sweeteners (plant-based like Stevia or FOS are best). Fructo-oligosaccharide (FOS) is a short-chain polysaccharide used in Japan for dozens of years. It isn't digested by humans but does stimulate the growth of good bacteria within the intestinal tract. It also helps with liver detoxification, lowers cholesterol, and eliminates various toxins. It can be used as a natural sweetener. Dosage for powder is

2,000–3,000 mg daily. Stevia is a remarkable (no calories, no carbs) herb, native to Paraguay. It has been used as a sweetener and flavor enhancer for centuries.

- butter (not margarine)
- one cup of old-fashioned oatmeal per day

Herxheimer Reaction

Sometimes, when a lot of *Candida* organisms are killed off during initial treatment, a sudden release of toxic substances results in an immune response and intensified symptoms, called the herxheimer reaction. The body becomes extremely acidic. This is known as a die-off reaction. It normally lasts no longer than a week and is frequently confused as an allergic or adverse reaction to the antifungal treatment.

Symptoms can be minimized by taking Alka-Seltzer Gold or 2 tablespoons baking soda in 8 oz. of water two–three times daily as needed. If the reaction is severe, you might need to reduce your antifungal medications. Half the dosage (or take every other day) for a week and then return to the original dose. Then continue antifungal medications for a minimum of three months. If treatment is discontinued too early, symptoms will gradually return.

Once fungus overgrowth has subsided and yeast levels have returned to normal (three–four months), medications and supplements can be gradually decreased over six–eight weeks, and you can gradually add previously forbidden foods to your diet. Continue to be vigilant in monitoring your sugar and simple carbohydrate intake.

YEAST OVERGROWTH PROTOCOL

Step 1: Eliminate yeast-producing foods with the Candida diet above. Also make sure you're taking yeast-free supplements. All of the protects I recommend to my patients, including the Essential Therapeutics CFS/Fibromyalgia formula, 5HTP, adrenal cortex, etc. are yeast free.

Step 2: Improve digestion. Gastric hydrochloric acid and pancreatic enzymes help keep Candida from overgrowing in the small intestine. Patients on Zantac, Nexium, or other acid-blocking drugs increase their risk for developing yeast overgrowth.³

- Supplement with pancreatic enzymes with each meal.
- Supplement with betaine hydrochloric acid with each meal. Yeast can't live in an acidic environment.

Step 3: Replace good bacteria, such as *Lactobacillus acidophilus*, *L. bulgaricus*, *L. catnaforme*, *L. fermentum*, and *Bifidobacterium bifidum*. These normally inhabit vaginal and gastrointestinal tracts; help digest, absorb, and produce certain nutrients; and keep potentially harmful bacteria and yeast in check.

Yogurt contains certain strains of good bacteria, but it isn't standardized for a particular amount. Also, most yogurts are made from *L. bulgaricus* or *Streptococcus thermophilus*. Both are friendly

bacteria, but neither will help colonize the colon. So it's best to use live organisms that are shipped on ice and then kept refrigerated until purchase. Live *L. acidophilus* and *B. bifidum* powders or capsules are preferred.

- Supplement with probiotics for three months: 5–10 billion organisms on an empty stomach each day. Some extremely resistant yeast infections may need continuous probiotic replacement therapy.

Step 4: Reduce liver toxicity. Always take milk thistle and or alpha lipoic acid when taking yeast overgrowth (antifungal) prescription or natural medication.

Step 5: Increase immune function. Low secretory IgA levels allow yeast to become active (see immune protocol). Consider using thymus glandular supplements, 120 mg twice daily.

Step 6: Supplement with natural remedies as indicated by stool analysis, or treat based on positive yeast questionnaire (from new patient questionnaire chapter 4). Use natural remedies either by themselves or in combination with prescription medications. Patients should use a natural remedy or prescription antifungal medication for at least three months. Difficult cases of yeast overgrowth will require longer treatment of six months or more.

I use a product called Yeast Formula with the following ingredients:

- calcium undecylenate 150 mg Undecylenic acid (10-Undecylenic acid) is one of the most powerful anti-yeast medications available. It is a mono-unsaturated fatty acid found in the body (occurring as sweat) and is produced commercially from castor bean oil. It has been used as a topical (Desenex) and oral antifungal medication.⁴
- sorbic acid 50 mg
- beberine sulfate 200 mg
- Indian barberry (*Berberis aristata*) min. of 6% berberine 50 mg.⁵
- Chinese goldenthread, min. 20% berberine 25 mg Another form of Beberine.
- green tea leaf, min 80% 50 mg. The polyphenols in green tea kill harmful bacteria and promote the growth of friendly bacteria (bifidobacteria).⁶

I have patients take one tablet a day and slowly increase up to three tablets a day with food. This concentrated, broad-spectrum formula combines specific natural agents useful in supporting a healthy balance of intestinal microflora, thus discouraging the overgrowth of yeast. Sustained-release and pH balanced, this potent formula is readily absorbed into the small and large intestine.

Other Natural Antifungal Medications

- Caprylic acid is a naturally occurring fatty acid and a potent antifungal medicine. It should be taken as an enteric-coated timed-release capsule. Dosage is 500–1,000 mg three times

daily with food. The Caprylic Acid is fungicidal for *Candida albicans*. It is harmless to friendly intestinal flora, and effective against the invasive mycelial form as well as the yeast form, because it is absorbed by the intestinal mucosal cells. Caprylic Acid is metabolized by the liver and does not get into the general circulation. It must exert its fungicidal effect in the intestinal tract or not at all. According to studies, just ten minutes after oral intake of straight caprylic acid, more than 90% can be traced in the portal vein on its way to the liver. Consequently, caprylic acid should be taken with psyllium powder which will form a gel in the intestinal tract and release the caprylic acid trapped within over a period of time.⁷

- Oleic Acid, the major (56–83%) component of virgin olive oil, hinders conversion of *Candida albicans* yeast to the more harmful mycelial fungal form.⁸
- Berberine (sulfate) has a wide range of antimicrobial properties. It is a proven herbal medicine used successfully to treat fungal, bacterial, and parasitic infections. Dosage of standardized extract (4:1) is 250–500 mg three times daily with food.⁹
- Garlic has been used for medicinal purposes for centuries. It is an effective treatment for the overgrowth of *Candida albicans* and other yeasts. It has been shown more potent than Nystatin for *Candida albicans*. Dosage of standardized garlic (1.3% alliin) is 600–900 mg, two–three times daily with food.¹⁰

Step 7: Treat your intestinal permeability. Yeast overgrowth can cause intestinal permeability and contribute to food sensitivities or allergies. Treat leaky gut and yeast overgrowth at the same time. *See Intestinal Permeability Profile in chapter 7.*

Prescription Medications for Yeast Overgrowth

Prescription drugs include Nizoral, Nystatin, and Diflucan.

Nystatin is the safest of the three, because it doesn't penetrate the intestinal lining. However, this is also one reason I find it less helpful than other prescription drugs. The majority of the yeast sensitivity assays I see from positive stool samples show that Nyastatin is usually the weakest prescription medication. Most prescription anti-fungals, including Nizoral and Diflucan, have potentially serious side effects and should be used with caution. Those with yeast overgrowth must weigh the benefits and risks, but treating a raging infection with anything other than prescription medication might be futile.

Resources

- All of the supplements mentioned in this chapter are available online at www.DrRodger.com or by calling 1-888-884-9577.
- Yeast Overgrowth tests are available online at www.DrRodger.com or by calling 1-888-884-9577.

Recommended Reading

- *The Yeast Connection and the Woman* by William G. Crook, MD, et al; 2003
- *The Missing Diagnosis* by Dr. C. Orian Truss; 1985

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Chapter 14

Liver Detoxification

Chemically sensitive patients will have sluggish detoxification processes. They may or may not have had elevated liver enzymes (from blood tests), hepatitis, or a fatty liver. They tend to have adverse reactions to prescription medications. They may take something to put them to sleep, but it wakes them up. They have to take very small doses (a little goes a long way) of recommended medications.

Strong odors tend to give them problems: newsprint, gasoline, copy machine toner, tobacco, perfumes, etc. The longer they've had the illness the more sensitive they've become.

I don't routinely use detoxification supplements or procedures on my new patients. However, some of the severely chemically sensitive patients won't be able to take any of the usual supplements (CFS/Fibro, 5HTP, adrenal cortex, etc.).

You already know if this applies to you. You've tried in the past to take supplements or medications and have had adverse reactions. This doesn't include allergic reactions or funny reactions to specific types of medicines. Those with chemical sensitivities have had adverse reactions to most all drugs they've tried. This may also include most of the supplements they've tried. They've also found that they can't tolerate caffeine or alcohol.

CHEMICALLY SENSITIVE PATIENTS WILL NEED TO START SLOWLY.

1. Begin taking milk thistle (*silybum marianum*) and alpha lipoic acid (Essential Therapeutics Liver Detox Formula).
 - Milk thistle, protects the liver from free-radical damage. It prevents certain toxins from entering liver cells and stimulates regeneration of damaged liver cells.

Medical use of milk thistle can be traced back more than 2000 years. Over 30 years ago, intensive research on the liver-protecting properties of milk thistle began in Germany.

Milk thistle helps prevent damage caused by certain drugs including acetaminophen, antidepressants, cholesterol lowering drugs, and tranquilizing drugs. One study showed that increasing antioxidants (including milk thistle) in patients receiving psychotropic drugs (Prozac, Celexa, Paxil, Klonopin, Ativan, Xanax, etc.) reduced the production of potentially damaging free radicals in the liver.

- Alpha lipoic acid is a powerful antioxidant compound that helps recycle glutathione. It is both fat and water soluble, so it works in both mediums. It can help prevent and repair damage to liver cells and is being studied for its regenerative properties in neurological diseases including Alzheimer's diseases, multiple sclerosis, Lou Gehrig's disease, and Parkinson's disease. To increase liver detoxification and boost cellular energy, take between 200–400 mg of ALA daily.

I recommend Essential Therapeutics Liver Detox Formula which contains both ALA and milk thistle.

- 2.** After one week I add a hypoallergenic multivitamin/mineral powder formula.

I use Douglas Labs (pea protein) Protein Powder. Start with half the normal recommended daily dose, then gradually increase the dose.

Available at doctors offices who sell Douglas Labs products or from my office.

- 3.** Take a digestive enzyme with each meal (takes work off the liver).
- 4.** Follow the elimination diet.

Ideally, you want to gradually (after 2 weeks of being on powdered multivitamin formula) work your way up to the following:

- 5.** Take 5HTP if needed according to the Brain Function Questionnaire or New Patient Questionnaire. Start with 50 mg at lunch. After a few days, try 100 mg at lunch and 50 mg with dinner. Keep increasing (as long as you don't have any problems) so that you take 300 mg (in divided doses) with food each day. If you take 5HTP with food, it won't make you sleepy. It will, however, start to build up your serotonin levels. Normal serotonin levels reduce pain, IBS symptoms, depression, and anxiety. Most importantly,

normal serotonin levels allow you to go into deep, restorative sleep each night.

6. Uncover any food allergies and avoid all suspect foods.
Please see chapter 10, Food Allergies.
7. Treat intestinal permeability.
Please see chapter 7, Digestion and GI Disorders.
8. Supplement with coenzyme Q10. CoQ10 is also known as ubiquinone because of its nature to exist in all living matter. It is most abundant in the organs requiring the most energy: the heart and liver. It is a vital catalyst for energy. Without it, the process of cellular energy ceases (which is spelled d-e-a-t-h). Co-Q10, along with ALA, gives the spark to the power plants of the cells, the mitochondria.

Co-Q10 plays a direct or indirect role in most systems of the body. Experiments have shown that supplementing the diet with Co-Q10 can extend the lifespan of mice by 50%. It acts as a powerful antioxidant, helps stimulate white blood cells, protects heart muscle from disease, reduces blood pressure, boosts the metabolism, helps prevent periodontal disease, and protects the liver. Studies have shown that Co-Q10 can raise the brain energy level by over 29%. Supplement with 100 mg daily.

Help Yourself

- Explore alternatives to long-term prescription drugs like non-steroidal anti-inflammatories (Celebrex, Mobic, Alleve, etc.),

benzodiazepines (Xanax, Klonopin, Ativan, etc.), anti-depressants, and statins (Crestor, Lipitor, Zocor, etc.).

- Severely reduce or eliminate alcohol, nicotine, allergic foods, and preservative rich foods. Try to eat live foods with no additives or preservatives.
- Enjoy foods from the Brassica family: broccoli, cabbage and Brussels sprouts. They contain phytochemicals that stimulate phase I and phase II detoxification pathways.

Recommended Reading

- *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome* by RH Murphree, DC, CNS; 2003
- *Total Wellness: Improve Your Health by Understanding the Body's Healing Systems* by Joseph E. Pizzorno, ND; 1996
- *Tired or Toxic* by Sherry A. Rogers; 1990
- *The E.I. Syndrome: An Rx for Environmental Illness* by Sherry A. Rogers; 1988

Resources

- Liver Detox Functional testing:
Liver detox test kits are available from my office by calling 1-888-884-9577 or by ordering online at www.DrRodger.com.
- Hair Tests for toxic chemicals including heavy metals:
Available from my office (1-888-884-9577) or online (www.DrRodger.com).
- American Academy of Environmental Medicine, www.aaem.com.
- American Environmental Health Foundation 1-800-428-2343, www.aehf.com. (Analysis of drinking water, air filters, water filters, and other products)
- Whole Foods Catalog: www.natural-lifestyle.com.

Chapter 15

First Days Instruction Sheet

The Jump Start Package

I usually put my patients on the Jump Start Package. This package includes the following **4** products:

- 1. The CFS/Fibro Formula** – is loaded with the high doses of the essential nutrients available, including all the vitamins, minerals, essential fatty acids, amino acids, malic acid, and extra magnesium (700mg). You would have to take 100 One-A-Day Multivitamins to equal one days serving of the CFS/Fibromyalgia Formula. Contains all of the needed Amino acids. Amino acids help restore normal brain function, increase mental clarity, and reduce depression, anxiety, and fatigue. Contains all the Essential Fatty Acids which reduce pain, IBS, Fibro Fog, depression, and anxiety.
- 2. 5HTP** – promotes deep, restorative sleep which in turn reduces pain, mental fatigue, depression, and anxiety. Normalizing serotonin levels with 5HTP usually stops IBS symptoms within two weeks.
- 3. Adrenal Cortex** – helps boost energy, mental clarity, and moods. It is essential for restoring normal stress coping

stamina and resistance. Helps reduce inflammation.
Adrenal Cortex increases drive, ambition, and stamina.
It helps prevent the classic crash associated with
“overdoing it.”

- 4. Digestive Enzymes** – helps stop bloating, gas, IBS, heartburn, and indigestion.

INSTRUCTION SHEET

The instructions below are outlined exactly as they are on my prescription sheet.

5HTP

Start taking 50 mg (one capsule) of 5HTP 30 minutes before bed on an empty stomach with four ounces of grape or apple juice. You must take exactly as recommended to get the best results.

If you don't fall asleep in 30 minutes, or if you wake up and can't go back to sleep at night, increase your dose by 1 capsule (50 mg) each night, up to a maximum of 6 capsules (300 mg).

Note: if you become more alert after taking 5HTP before bed, stop taking it at night. Instead, take 1 capsule with food in the a.m. for one day. If you then have no problems, then the next day increase to 1 capsule 3 times per day with food. After a few days, you can increase to 2 capsules 3 times a day with food.

CFS/Fibro Formula

Take one package twice a day with food. If you have any problems, stop taking the supplement pack for one day. The following day,

take one speckled tablet with food. Don't take any of the other pills. If you don't have any more problems, take three speckled tablets twice a day for two days. Keep adding one tablet or capsule each day until you uncover which one is causing a problem. Please call if you have any further difficulties taking the recommended nutritional supplements.

I put all new patients on the CFS/Fibro Formula.

The CFS/Fibromyalgia Formula

These supplements are perfectly safe but contain up to 500 times the amount of a One-A-Day multivitamin.

- 1. It has high doses of magnesium**, which acts as a natural muscle relaxant (like Milk of Magnesia, a colon relaxant), increases physical energy, and is needed for the production of serotonin and other brain chemicals.
- 2. It contains all the essential vitamins and minerals** in very high doses...which they need.
- 3. It contains all the amino acids** that make the brain chemicals, including the ones that help block pain, reduce depression, and increase physical and mental energy.
- 4. It contains all the essential fatty acids** that block pain and inflammation, increase mental clarity, boost the immune system, and help correct mood disorders.
- 5. It contains malic acid**, which helps reduce pain and increase cellular energy.

Water

The human body is 75% water. The brain is 85% water. Your body needs a minimum of 6–8 glasses of water. Headaches, asthma, high blood pressure, depression, fuzzy thinking, allergies, fatigue, and pain are all associated with being dehydrated.

“Every function of the body is monitored and pegged to the efficient flow of water. Water distribution is the only way of making sure that...elements, hormones, chemical messengers, and nutrients...reach the vital organs.”

— F. Batmanghelidj, M.D.
Your Body’s Many Cries for Water

I recommend that you drink half your weight in ounces of pure water daily (minimum 70 oz).

Bedtime Routine

If possible get to bed before 11:00 pm each night. This is the time of day when melatonin levels are peaking and cortisol levels are lowest.

For achy muscles, soak for 20 minutes 3–4 nights each week in warm Epsom salt baths. Epsom salts are available at most grocery and drug stores. Epsom salt (magnesium sulfate) is a natural muscle relaxant.

Thyroid Self Test

First thing in the morning, while still in bed, shake down and place the thermometer, preferably mercury or glass thermometer (digital thermometers are not as accurate) under your arm and

leave there for ten minutes. Record your temperature in a daily log. Women who are still having menstrual cycles should take their temperature after the third days of their period. Menopausal women can take their temperature on any day. A reading below the normal 98.0° strongly suggests hypothyroid). A reading above 98.6° may indicate hyperthyroidism (over active thyroid). Add one degree to your basal underarm temperature.

Low Blood Pressure

Low blood pressure will keep you feeling tired. If you have low blood pressure (100/70 or below), increase your salt intake. Salt your foods liberally.

Use licorice root, 450 mg twice a day, to increase blood pressure if needed.

Reduce Aspartame

Eliminate all products with aspartame (trade name NutraSweet). The three byproducts of aspartame are methanol, formaldehyde, and formate. Formaldehyde is grouped into the same class of drugs as cyanide and arsenic. It has been shown that methanol toxicity causes depression, brain fog, mood changes, insomnia, seizures, and similar symptoms associated with multiple sclerosis. There are over 92 unwanted symptoms documented from using aspartame. NutraSweet has had more complaints (by those suffering from adverse reactions) to the FDA than any other food product since the agency's creation.

For additional reading on Aspartame

- *Treating and Beating Fibromyalgia and Chronic Fatigue Syndrome* by RH Murphree, DC, CNS; 2003

- *Excitotoxins: The Taste That Kills* by Russell Blaylock, MD, Health Press, 1-800-643-2665.
- *Defense Against Alzheimer's* by Dr. H. J. Roberts, 1-800-814-9800.

Reduce Sugar

It's estimated that America's consumption of sugar in 1996 and 1997 will have risen to 9.8 million short tons, raw value, which is an increase of over 0.2 million tons from the previous year. Sugar depletes the body of B vitamins, calcium, and magnesium. Three ounces of sugar in any form (including sucrose, honey, or fruit juice) results in a 50% reduction in white blood cell activity for up to 5 hours. The average American consumes over 150 ounces of sugar a day. A can of Coke has 9–10 teaspoons of sugar. Diets high in refined sugar can promote obesity, kidney stones, osteoporosis, heart disease, dental cavities, depression, ADD, ADHD, hypoglycemia, anxiety, and criminal behavior.

Stress Management

Reread the chapter *Those Invaluable Adrenals* in *Treating and Beating*. Make time each day for 30 minutes to one hour of quiet time. Pray, meditate, or read uplifting material. No TV, radio, cell phone, beeper, or computer.

- **Digestive enzymes:** take 1 capsule with each meal for bloating, gas, and indigestion.

I find that the majority of FMS and CFS patients need digestive enzymes. Even if they don't complain of bloating, gas or indigestion, I will usually recommend they take a digestive enzyme with each meal. This ensures that they will be able to break down the

fish oil. I don't get a lot of complaints about taking the CFS/Fibro Formula. When I do get complaints, it is because the person tastes fish all day (not breaking down fish oil) or she is getting a loose bowel movement (from taking too much magnesium). To avoid potential problems I usually go ahead and recommend digestive enzymes.

Many of my patients are taking Zantac or other acid-blocking medication. Gastric-acid secretions are responsible for stimulating the release of pancreatic enzymes. A deficiency of hydrochloric stomach acid triggers a chain reaction of digestive disorders. Without enough stomach acid to stimulate pancreatic enzyme production, further digestion and absorption in the small intestine is compromised. This leads to malabsorption problems and intestinal permeability.

The stomach needs an acidic (high) pH to be able to absorb certain micronutrients (vitamins, minerals, amino acids, etc). Symptoms associated with low gastric acidity (achlorhydria) include bloating, gas, indigestion, heartburn, distention after eating, diarrhea, constipation, hair loss in women, parasitic infections, rectal itching, malaise, multiple food allergies, nausea, nausea after taking supplements, restless legs, sore or burning tongue, and dry mouth. Other signs associated with low gastric acidity include abnormal intestinal flora, chronic candidiasis, chronic intestinal parasites, dilated capillaries in the cheeks and nose (in non-alcoholics), iron deficiency, post-adolescent acne, undigested food in the stool, and weak, peeling, and cracked fingernails.

As you can see, these signs are similar to the very symptoms associated with FMS and CFS.

- **Adrenal Cortex:** take one capsule two times daily with food for increased energy. After five days, increase to two capsules two times daily with food.

Adrenal Cortex dosing: I start patients off on 500 mg of adrenal cortex glandular taken twice a day with food. Most patients will start to feel better in a matter of a few days once they begin taking the core supplements I recommend (known as the jump start package; CFS/Fibro Formula, Digestive Enzyme, Adrenal Cortex, and 5HTP). Once they start to feel better, though, they have a tendency to overdo their activity. If you don't build up your stress coping abilities, you'll crash again and again. To prevent this, I go ahead and start my patients on adrenal cortex on the first day.

Don't use whole adrenal or adrenal medulla glandular. They are designed to increase adrenaline levels. I used whole adrenal glandular early on but found that my FMS and CFS patients do much better taking adrenal cortex glandular. Whole adrenal glandular will raise epinephrine (adrenaline) levels and put more stress on the patient's already delicate stress-coping mechanisms. Whole adrenal glandular or adrenal medulla glandular can cause anxiety, rapid heart beat, and elevated blood pressure.

- ___ **GABA:** take one–two capsules two–three times daily on empty stomach for anxiety.

Remember, 5HTP will usually restore serotonin levels to normal. This usually takes care of anxiety. So even if you checked a lot of

the “G” statements on the Brain Function Questionnaire, start with 5HTP first. If you continue having problems with anxiety even though you’re taking 300mg of 5HTP, then add GABA.

- ___ **DL-phenylalanine:** take three–four capsules twice daily on an empty stomach.

DL is a good choice for pain when the Brain Function Questionnaire shows low opioid levels and you’re experiencing a great deal of pain. I don’t usually use this on the first visit. Instead, I wait until my patient has tried the most important things above: sleeping through the night or taking 300 mg of 5HTP for minimum of 2 weeks, taking CFS/Fibromyalgia Formula for a minimum of 2 weeks, and taking adrenal cortex for a minimum of 2 weeks. If they continue to suffer from pain then I’ll recommend DL-Phenylalanine if they’ve checked a lot of “O” statements on the Brain Function Questionnaire Test. If not, then I’ll usually try them on the Arthro Formula. If their energy is really low even after getting consistent sleep and taking the supplements above, I’ll try them on SAME. Of course, if their energy is real low, they might have a low thyroid and will need to be explored.

- ___ **L-glutamine:** take one capsule twice daily with DL-phenylalanine.

L-glutamine helps the DL and L-phenylalanine be more active.

- ___ **Achy Muscle Formula:** take one–three capsules daily for muscle aches and pain.

I don’t usually use this on first visit. I will make an exception if I have a really bad pain patient who needs extra attention.

- ___ **Inflammation Support:** 1 tablet 2 times a day for non-osteoarthritis (rheumatoid, Lupus, etc.), allergies, and general inflammatory problems.

I use this more for allergies. If I have a patient with severe allergies including asthma, I'll go ahead and put them on this formula and begin them on the elimination diet.

Chapter 16

Follow-up Procedures

I usually see patients again two weeks after their first visit. This allows them time to experiment with 5HTP and the other recommended supplements. I ask the patient to rate how she is doing on a scale of 0 (how bad she felt at first) to 10 (the best she could feel). I want to know how much she has improved overall since starting the supplements. Then I ask the same rating question about each category of her health—sleep, pain, bowel movements, digestion, energy, and mood. I record these numbers. If a patient is anything less than an “8,” then I want to investigate that category further.

Sleep

Let’s say the patient reports that she is a “4.” I want to know:

- *Are you falling asleep within 30 minutes?*
- *Are you sleeping through the night?*
- *How many hours of sleep are you getting?*
- *How much 5HTP are you taking and when?*

If she isn’t falling asleep within 30 minutes or sleeping through the night, I increase her 5HTP dose. So if she reports that she is

taking 100 mg at bedtime, I instruct her to keep increasing her dose by 50 mg each night until she is falling asleep within 30 minutes and sleeping through the night. If 5HTP at bedtime has been making her more alert, I instruct her to take it during the day instead.

You can increase your dose up to 300 mg daily, taken either at bedtime or with meals. Until you're taking 300 mg of 5HTP daily for several days, don't add melatonin (see sleep protocol).

Pain

If a patient continues to have a good deal of pain, I explain to her that she needs to increase her 5HTP, up to 300 mg daily. The higher her serotonin, the less pain she'll have.

If her bedtime 5HTP dose is already sufficient for her sleep, then I'll add additional 5HTP at mealtimes. If she is already taking 300 mg of 5HTP, then I'll consider trying her on 200–400 mg of SAME, especially if her energy is still low. If you have high blood pressure, good energy, anxiety, or another reason not to take SAME, then consider using Achy Muscle Formula or Arthro Formula. Also you may need to explore leaky gut and food allergies especially if you've been taking NSAIDs for more than 2 months.

Bowel Movements

If a patient continues to have problems with constipation (not having at least one bowel movement a day), then add an additional 140 mg of magnesium, which is a natural muscle relaxant. I have her increase her magnesium until she has a normal bowel movement each day.

If a patient continues to have loose stools, the problem is usually due to low serotonin. I make sure she increases up to 300 mg of 5HTP. If she's been on 300 mg of 5HTP for two weeks and continues to have loose stools, then I have her reduce her magnesium intake: remove the white magnesium tablet from each pack of her CFS/Fibro Formula. If loose bowel movements continue, I have her reduce to one pack per day.

If you continue to have loose bowel movements, then start taking Probiotics. If this provides no relief, then start an elimination diet and treat for leaky gut.

Digestion

If a patient continues to have a problem with digestion, I make sure she is taking digestive enzymes with each meal. If she is taking them and still having problems, then I start her on probiotics. This will usually remedy the problem. If not then see the chapter on digestion.

Energy

If a patient's energy is still low after 2–3 weeks, I'll make sure she is taking 500 mg of adrenal cortex twice daily. If a patient continues to suffer from orthostatic hypotension or a positive pupil test (see chapter on adrenal fatigue), I increase her adrenal cortex to 1000 mg twice daily.

If you have a low sitting blood pressure, make sure you're drinking your minimum of 70 oz of water daily. You should also be adding salt to your diet and taking licorice root.

If your blood pressure stays low after two weeks on this protocol and you're staying tired, add 400 mg (up to 800 mg) of SAME in the morning on an empty stomach.

I'll also suspect low thyroid. Make sure you do your homework and monitor your body temperatures as discussed in chapter 11. If your thyroid is low, you should begin thyroid medication or the over-the-counter GTA Forte glandular supplement I discuss in chapter 11.

Appendix

ABBREVIATED CHOLESTEROL LOWERING PROTOCOL

1. Start on red yeast rice (I use Thorne Research's Choleaste).
2. Start on policosanol one tablet twice a day.
3. Reduce all high glycemic foods. Reduce grains (except wild rice). No sugar.
4. Make sure liver is working optimally, consider taking alpha lipoic acid or Liver Formula.
5. Temperature test for low thyroid. Hypothyroid will cause elevated cholesterol.
6. Start on fish oil, 2,000–6,000 daily.
7. If you have high blood pressure then see protocol below.

ABBREVIATED HIGH BLOOD PRESSURE PROTOCOL

1. Make sure you're getting 7–8 hours of deep sleep each night.
2. Reduce or eliminate all sugar and caffeine.
3. Supplement niacin timed-release or no-flush niacin inositol-hexaniacinate 400–500 mg daily for three days. Then double the dose. After one week, increase to 1,200–1,500 mg daily. Wait another week and increase to 1,600–2,000 mg daily.
4. Increase fish oil to 3,000–6,000 mg daily.

PULSE TESTING

To use Dr. Coca's pulse test, you must first determine your resting pulse rate: count your pulse for a full minute while sitting still. (Sites commonly used to check the pulse are the underside of the wrist and the neck near the Adam's apple). It's best to check your pulse several times throughout the day and to notice if it changes at different times. Is it lower or higher in the morning? At night? Your resting pulse is the pulse consistently found before eating, or an average of the lowest pulses most commonly recorded.

To get the most accurate baseline reading:

1. Take your pulse in bed before rising, before breakfast, after breakfast, in the middle of the morning, before lunch, after lunch, in the middle of the afternoon, before dinner, after dinner, in the middle of the evening, and before bed.
2. Keep a food diary and record your pulse rates and any symptoms. Does a pattern emerge? If there is no consistent pattern, there may be too many interfering substances undermining the process.
3. Try the elimination diet for four–five days. Along with the obvious elimination foods, foods or chemicals in question should also be avoided during this time.

TESTING FOODS USING THE PULSE TEST

1. While sitting quietly, take your pulse.
2. Then challenge this pulse by chewing a small amount of food or food supplement (don't swallow) for a full minute. Liquids can be held and swished around in the mouth.
3. After one minute, take your pulse for a full minute.
4. At the end of this time, expel the substance, and rinse out your mouth with pure water, which should also be expelled.
5. Take your pulse again.
6. If it returns to the resting value, you can repeat the process with another substance.

A positive-reaction food or supplement will elevate the pulse above six points. Avoid all foods for two–three months that elevated the resting pulse rate above five points.

Note: If other symptoms occur after testing, such as headache, sore throat, or fuzzy thinking, this is also a positive test, and the food should be avoided for three–six months. Severe-reaction foods should be avoided for at least three months.

All reactive foods should be reintroduced on a 4 rotation diet. If you continue to have reactions to reintroduced allergic foods, avoid once again for 3 months.

BASAL TEMPERATURE TESTING

The test for low thyroid function, according to Dr. Barnes's protocol, starts first thing in the morning. While still in bed, shake down and place the thermometer (preferably mercury; digital thermometers are not as accurate) under your arm and leave it there for 10 minutes. Record your temperature in a daily log. Women who are still having menstrual cycles should take their temperature after the second and third days of their period.

Menopausal women can take their temperature on any day.

Add one degree to the body temperature reading (97.2 under arm reading becomes 98.2).

A reading below the normal 97.2 strongly suggests hypothyroid. A reading above 98.0 may indicate hyperthyroidism (overactive thyroid).

You'll need a mercury thermometer.

- 1.** First thing in the morning before getting out of bed.
Take your temperature by placing a mercury thermometer underneath your arm for 10 minutes.
- 2.** Record your temperature.
- 3.** Repeat these steps for 7 days.
- 4.** Return your daily recordings to your doctor.

Women who are still having menstrual cycles should take their temperature after the third day of their period.

Digital Thermometers

If you don't have a mercury thermometer and must use a digitalize thermometer:

Use a brand new digital thermometer or make sure the battery is new in your digital thermometer.

Take your temperature under the tongue 3 times a day beginning 2 hours after waking up, then mid afternoon and early evening. Remember to not eat or drink anything for 10 minutes prior to taking your temperature.

INTESTINAL PERMEABILITY ELIMINATION DIET

Avoid all known and suspected food allergens.

For 2 weeks, avoid all gluten containing foods; wheat, barley, oats, millet, spelt, sourdough, and rye. This includes wheat flour, breads, taco shell, muffins, cereals, pastries, cakes, pizza, crackers, pasta, oatmeal, pretzels, and flour based products.

Avoid all dairy products including milk, ice cream, cream, yogurt, and cheese. Butter is allowed.

Reduce all simple sugars including white potatoes, white rice, rice cakes, corn (corn meal), corn chips, ripe bananas, raisins, apricots, papaya, pineapple, mango, watermelon, maple, corn and other syrups, honey, table sugar.

No sodas including Coke, Diet Coke, Pepsi, or Diet Pepsi, Dr. Pepper, Sprite, etc.

Reduce all caffeine consumption including teas (Green tea is allowed), coffees, chocolate, and cocoa. The lower it is the better. To prevent caffeine withdrawal symptoms (headaches, mood disturbances, fatigue, etc.) slowly wean off caffeine all products. Start by eliminating one-quarter of your daily caffeine consumption.

An example: each cup of coffee, soda, diet soda, each glass of tea, and each chocolate bar equals 1 caffeine serving. If your patient

consumed 4 cups of coffee in the morning, 3 glasses of tea at lunch and a Diet Coke before dinner, they would have consumed a total of 8 servings of caffeine for that day. The next day they should reduce their caffeine servings to one quarter (2 servings). This would still allow 6 servings a day. After 7 days reduce your caffeine servings by another quarter (in this case 1.5 servings). Wait another 5 days and then reduce the daily caffeine servings by half and slowly discontinue all caffeine consumption over a manageable period of time.

Note: It is not necessary for every person to go off all caffeine; they help themselves by reducing their intake to no more than one or two caffeine servings a day.

Reintroduction of the eliminated food groups

After a period of one month, start to reintroduce one item from the eliminated food group at a time. The day of the challenge eat a few servings of the eliminated food group (Wheat- pasta, toast, crackers, bread, etc.), then wait 3 days and reintroduce another food group (Dairy: milk, cheese, ice cream, etc.) and again, eat a few servings. If after 3 days of challenging a food group there's no associated negative reaction (headaches, stomach pain, bloating, runny nose, congestion, muscle or joint pain, low moods, fatigue, heaviness, etc.), then start to slowly add back into the regular diet.

If you experience a negative reaction to any food within 3 days of challenging a specific group (Wheat: this includes wheat flour, breads, taco shell, muffins, wheat containing cereals, pastries, cakes, pizza, crackers, pasta, pretzels, and flour based products), discontinue that particular food group for another month.

After one month, repeat the process above.

After challenging all eliminated food groups, start to rotate all the food groups. This helps prevent food allergies.

FROM *TREATING AND BEATING FIBROMYALGIA AND CHRONIC FATIGUE SYNDROME* BY DR. RODGER H. MURPHREE
WWW.DRRODGER.COM

Eat Healthy, Lose Weight, and Feel Better

Americans are obsessed with losing weight. Unfortunately, ninety percent of all dieters fail in their quest to lose weight. Many dieters experience a yo-yo effect; losing weight, then gaining it all back, plus some. Starving the body on a low calorie diet doesn't work. Just ask Oprah Winfrey. A low calorie diet reduces the body's metabolism and its ability to burn fat. Some of these diets promise you'll lose ten pounds a week. Realistically, you can only lose a pound or two of fat a week. Anything else is just water or muscle loss. These starvation diets are extremely hard on the body. Some of these dieters look like the malnourished children we see in third world countries. They start to lose their hair, muscle tone, and their skin begins to sag. Starving the body is a sure way to cause unwanted health problems.

For the last two decades, nutritionists have been telling us to avoid fats and increase our carbohydrate consumption. Fat became a nasty three-letter word, something to be avoided at all costs. Low fat or no-fat foods are now common staples for many Americans. You know which foods I'm talking about. The ones that dominate the grocery store shelves under large colored signs saying "Fat-Free" and "eat all you want." Fat-free potato chips are really nothing but a man-made, simple carbohydrate (sugar). Many people think these fat-free products can be eaten with impunity. It is not unusual for a child or adult to consume a bag of 6 ounce chips in a single sitting. This could mean consuming

as much as 1,000 calories. I don't believe in counting calories, and if you eat properly, as I explain in the next couple of chapters, you won't need to count calories. However, eating junk calories to excess, regardless of whether they are fat-free, only causes unwanted weight gain.

There is a big difference in the nutrition received from eating man-made, preservative-rich, simple carbohydrates and natural complex carbohydrates. The increase in weight as experienced in this country is due to several factors, such as sedentary lifestyles, stress, poor eating habits, and the readiness of fast preservative enriched foods. Our great ancestors didn't eat 150 pounds of sugar a year as do today's average American. Nor did they eat processed breads and pastas that are designed to stay on store shelves for weeks at a time. A simple diet of lean meat killed that day, fruit, nuts, and berries gathered and eaten when possible, supported our ancient ancestors. Genetically, we are still pretty much designed as God intended. Our external environment has certainly changed, while our internal bodily regulatory systems haven't.

GLYCEMIC INDEX DEFINED

The glycemic index is a measurement of how much a carbohydrate elevates the circulating blood sugar. The lower the glycemic index, the slower the rate of absorption.

A list of foods and their glycemic index (how fast they break down into glucose) is shown below.

GLYCEMIC INDEX

HIGH

- Bleached breads, including French, sour dough, Italian, wheat, and millet
- White potato
- Rice cakes
- Corn flakes, and
- Cheese Pizza
- Muffins
- Croissant
- Waffles
- Simple sugars, glucose, and maltose
- White rice
- Whole-wheat
- Oats and oat
- Corn flakes
- Hamburger bun
- French bread
- Corn
- Rice cakes
- White bread

- Grape nuts
- Whole- wheat bread
- Rolled oats
- Oat bran
- Puffed rice
- Corn Chex
- Total
- Rice Krispies
- Croissant
- Taco shells
- Corn meal
- Corn chips
- Cheerios
- Cream of wheat
- Millet
- White rice
- Gnocchi
- Rice pasta
- Macaroni and cheese
- Couscous
- Stoned Wheat Thins
- Low fat ice cream
- Ice cream
- Maltose
- Glucose
- Lactose and sucrose (table sugar)
- Carrots
- Banana
- Raisins
- Apricots
- Papaya

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- Pineapple
- Mango
- Watermelon

MODERATE

- Spaghetti or pasta
- Sourdough Rye
- Wild rice
- Brown rice
- Non-instant oatmeal
- Special K
- Muesli, no sugar added
- Whole-grain pumpernickel
- Pita bread
- Oranges and orange juice
- Peas
- Pinto beans
- Garbanzo beans
- Baked beans
- Navy beans
- Lentils canned
- Lactose

LOW

- Slow cooking oatmeal
- Barley
- Rye grain
- Most fruits including apples, grapes, peaches, pears, cherries, grapefruit, plums, nectarines, tangerines, oranges, limes, dates, plums, lemons, berries, kiwis, and cantaloupe.
- Fruit sugar (fructose)

- Soy beans
- Lima beans
- Lentils
- Black beans
- Kidney beans
- Butter beans
- Pinto beans
- Black-eyed peas
- Chick-peas
- Tomato soup
- Regular ice cream
- Yogurt
- All meat products including chicken (no breading), beef, venison, lamb, quail, pheasant, turkey, pork, and duck.
- Shellfish
- Fish
- Butter
- Eggs
- Cream
- Cheese
- Nuts
- Seeds
- Most vegetables including squash, zucchini, mushrooms, asparagus, artichokes, okra (non breaded), lettuces, spinach, turnip greens, cabbage, celery, cucumber, dill pickles, radishes, bell peppers, cauliflower, broccoli, Brussels sprouts, eggplant, and onions.

LOSING WEIGHT THE HEALTHY WAY

To lose weight, you will need to avoid high glycemic foods and eat a diet that approximates 40 percent complex carbohydrates, 30 percent fat (see good fats), and 30 percent protein. I know this doesn't sit well with many of you who've based your diets around the notion that all fat is bad, but remember, we need the good fats and their essential fatty acids. Fat helps delay the release of insulin. This slows down the rate in which carbohydrates are released into the bloodstream. This is why it is best to eat a balanced meal consisting of 40% low to moderate carbohydrates, 30% fat, and 30% protein.

Fat also stimulates the hormone cholecystokinin. Cholecystokinin sends a message to the brain that you are full. This is why you can only eat so much fat before quickly becoming full. Think about it. Most people can eat a whole bag of fat free chips at one sitting. However, try eating a stick of butter. You won't get too far before you become full.

Avoid or severely reduce all high glycemic foods, and go easy on moderate carbohydrates. Avoid the obvious culprits like white and red potatoes, white rice, white bread, corn chips, corn bread, corn pudding, corn on the cob, popcorn, cooked carrots, beets, cookies, pastries, and anything with refined sugar. Remember, honey is a simple sugar as is maple syrup, corn syrup, sucrose, and fructose (fruit juice).

Instead, use a plant based sweetener like stevia or fructooligosaccharide (FOS). Both are available at health food stores. Saccharine is preferable to aspartame.

ARE YOU ALLERGIC TO CARBOHYDRATES?

Many people are carbohydrate intolerant. Their cells have become full of stored carbohydrates (turned into fat) and can't effectively metabolize large amounts of carbohydrates. Intolerance to carbohydrates may cause fatigue, mental lethargy, confusion, depression, headaches, bloating, indigestion, and weight gain. A two-week trial on a low carbohydrate diet is an easy way to see if you are carbohydrate intolerant.

Individuals with low serotonin levels should be careful not to reduce their carbohydrate intake too quickly. Carbohydrates stimulate the release of insulin. Insulin allows the amino acid Tryptophan to cross the blood-brain barrier where it then turns into serotonin.

HERXHEIMER REACTION

Sometimes, when a lot of Candida organisms are killed off during initial treatment, a sudden release of toxic substances results in an immune response and intensified symptoms, called the herxheimer reaction. The body becomes extremely acidic. This is known as a die-off reaction. It normally lasts no longer than a week and is frequently confused as an allergic or adverse reaction to the antifungal treatment.

Symptoms can be minimized by taking Alka-Seltzer Gold, or 2 tablespoons baking soda in 8 oz of water, as a buffering agent two to three times daily as needed.

If the reaction is severe, you might need to reduce your antifungal medications—or take them every other day—for several days. I usually recommend that patients half the dosage for a week and then return to the original dose. Patients should then continue their antifungal medications for a minimum of three months. If treatment is discontinued too early, symptoms will gradually return.

Once fungus overgrowth has subsided and the yeast have returned to a normal level (at least three–four months), medications and supplements can be gradually decreased over six–eight weeks, and the patient can gradually add previously forbidden foods to her diet. Be vigilant in monitoring your sugar and simple carbohydrate intake.

NASAL RINSE

- one teaspoon of Betadine
- one teaspoon of Baking Soda
- one teaspoon of Liquid Glycerin

Mix in 15 – 20 ounces of warm water. Draw up into baby bulb syringe, flush each nostril several times. Don't inhale, just let mixture rest in your nose for a few seconds and then blow nostril clean. Avoid forceful inhalation or blowing nose. **Note: Betadine will stain clothes so be sure to cover upper body with towel, etc.

YEAST OVERGROWTH 3 MONTH DIET

- Sugar is the chief nutrient for *Candida albicans*, so restricted sugar intake is absolutely necessary to effectively treat chronic Candidiasis.

Avoid refined sugar, honey, maple syrup, fruit juice, milk, white potatoes, corn, beans, processed or bleached (white) flour, bakery goods, muffins, cereals, and anything containing sugar. Ice cream, cake, cookies, and other sweets should be avoided for at least three months.

No potato or corn chips, pretzels, or crackers.

No dried fruits including raisins.

- Fruits should also be avoided along with fruit juice (except the fruit juice taken with 5HTP if that has been prescribed for you).

After the initial two weeks, try introducing apples and pears to see if you have any reactions. Reactions might include fatigue, depression, aches and pain, rectal itching, itching of the ears or nose, and digestive disturbances. If not, then try berries: strawberries, blueberries, blackberries, and raspberries. Avoid all other fruits.

- Alcoholic beverages should be avoided, as should malted-milk or other malted products.
- Mold- and yeast-containing foods are best avoided for two–three months. These include peanuts, dried fruits (including prunes,

raisins, and dates), vinegar, pickled vegetables, sauerkraut, relishes, green olives, vinegar-containing salad dressings, catsup, mayonnaise, and pickles.

- No milk or dairy products. All natural (unsweetened) yogurt is allowed.
- Most vitamin and mineral supplements purchased at a drug store are contaminated with yeast. Follow your doctors recommendations about which supplements are acceptable.

Candida Diet: What you Can Eat

All Vegetables

Artichokes

Asparagus

Beets

Brussels sprouts

Cabbage

Carrots

Cauliflower

Chicory

Collards

Egg Plant

Green Beans

Green Peas

Mustard Greens

Okra

String Beans

Turnip Greens

Lettuces

Vegetables

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Alfalfa Sprouts

Bamboo Shoots

Broccoli

Cabbage

Cauliflower

Celery

Chives

Dandelion

Endive

Fennel

Kale

Kelp

Leeks

Lettuce

Mung Bean Sprouts

Parsley

Peppers

Rhubarb

Spinach

Squash

Swiss Chard

Water Cress

Fresh tomatoes and onions are also allowed along with summer squash and zucchini -- all types of squash.

Meats and Proteins (All Lean Cuts)

Beef

Chicken

Clams

Crab

Eggs

Ham

Lobster
Salmon
Shrimp
Tuna
Turkey
Veal

Also, all game birds and animals such as squirrel, rabbit, quail, duck, goose and venison are allowed.

Nuts and Seeds

In limited amounts (one ounce) -- Walnuts, cashews, almonds, sunflower seeds and pumpkin Seeds.

Use cold pressed, non-hydrogenated oils

Use only cold pressed or expeller pressed or non-hydrogenated oils. Also, you should take one tablespoon of virgin olive oil each day on your salads or vegetables. You can add lemon juice to this if you so desire. The best salad dressing is virgin olive oil in lemon juice.

Other Items

Butter is fine, avoid margarine.

You may have one cup of oatmeal (the old fashioned kind) per day. Sweet and Low is alright.

Natural plant based sweeteners like stevia or FOS is best.

Fructo-oligosaccharide (FOS) is a short-chain polysaccharide used in Japan for dozens of years. It isn't digested by humans but does stimulate the growth of good bacteria within the intestinal tract. It

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also helps with liver detoxification, lowers cholesterol, and eliminates various toxins. It can be used as a natural sweetener.

Dosage for powder is 2,000–3,000 mg daily.

Stevia is a remarkable (no calories, no carbs) herb native to Paraguay. It has been used as a sweetener and flavor enhancer for centuries.

THE ESSENTIAL THERAPEUTICS CFS/FIBRO FORMULA

60 packs, (300 tablets and 180 capsules)

Recommended dose- 1 pack, twice a day with food

Each pack contains

- **Vitamin A** (33% [3,750 I.U.] from fish liver oil and 67% [7,500 I.U.] as natural carotenes). (alpha, beta, cryptoxanthin, zeaxanthin, and lutein) from D. Salina. 11,250 I.U.

Vitamin A – is a potent immune booster. It helps repair “Leaky Gut” (associated with inflammation and allergic reactions).

- **Vitamin C** (as calcium ascorbate and magnesium ascorbate buffered complex). 600 mg

Vitamin C – increases superoxide dismutase (SOD), an enzyme that scavenges free radicals and prevents cell damage. Vitamin C is typically decreased in inflammatory diseases, including arthritis and asthma. Vitamin C reduces histamine levels. Histamine causes increased inflammation; asthma, allergic reactions, etc.

- **Vitamin D3** – 200 I.U. – helps prevent osteoporosis.
- **Vitamin E** (d-alpha tocopheryl succinate, plus mixed tocopherols d-gamma, delta,-beta) 201 I.U.

Vitamin E – is a major antioxidant. It helps increase the circulation to the legs and reduce the symptoms of restless-leg syndrome.

- **Vitamin K1** – 30 mcg.

- **Thiamine B1** – 50 mg – a deficiency can lead to fatigue, mental confusion (“Fibro fog”), depression, nausea, and tingling in the arms and legs.
- **Riboflavin B2** – 25 mg – is involved in producing the neurotransmitters (brain chemicals), serotonin, epinephrine, and dopamine. These are the brain chemicals that regulate sleep, pain, energy, stamina, drive, and ambition.
- **Niacin B3** (75% as Niacinamide) – 100 mg – is needed to make serotonin. A deficiency can lead to weakness, anxiety, depression, and insomnia.
- **Vitamin B6** (Pyridoxine hydrochloride) – 25 mg – helps make brain chemicals: serotonin, epinephrine, and dopamine. A deficiency can lead to depression, insomnia, carpal tunnel syndrome (pain or tingling in hands or feet).
- **Folic Acid** – 400 mcg – is considered brain food. It is involved in the production of and regulation of cellular energy. A deficiency can cause depression, fatigue, mood swings, headaches, sore tongue, and other unwanted symptoms.
- **Vitamin B12** (methylcobalamin)–50 mcg – A deficiency can cause mental fatigue, depression, and poor memory.
- **Biotin** – 150 mcg – helps maintain healthy looking hair and nails. A deficiency can lead to seborrheic dermatitis (dry, scaly skin), hair loss, muscle pain, fatigue, and liver inflammation.
- **Pantothenic acid B5** – 200 mg – “The anti-stress vitamin.” A

deficiency can cause low adrenal function, fatigue, anxiety, poor immunity, depression, irritability, digestive disorders, muscle cramps, upper-respiratory infections, and poor memory.

- **Calcium** (76% as calcium citrate–malate and 24% as calcium ascorbate) – 250 mg – A deficiency can cause insomnia, high blood pressure, bone loss, muscle spasm, and digestive disorders.
- **Iodine** (from kelp)– 75 mcg – is important for the production of thyroid hormones.
- **Magnesium** (54% as magnesium aspartate–ascorbate complex, 28% magnesium aspartate, and 18% as magnesium amino acid chelate). – 350 mg – Magnesium is a natural muscle relaxer. This mineral is involved in over 300 body processes. It can be very helpful in relieving tight, achy muscle pain, leg cramps, restless leg syndrome, and chronic headaches. Individuals with fibromyalgia and chronic fatigue are notoriously low in magnesium. Blood tests are a poor indicator of magnesium levels and often miss sub-clinical deficiencies. One study of fibromyalgia sufferers, found that supplementing with 600 mg a day of magnesium and 1200–1400 mg of malic acid greatly reduced pain. It usually took weeks, and even months, before patients noticed the full benefit of supplementing these nutrients.
- **Zinc** (as amino acid chelate) – 10 mg – is essential for proper immune function and is involved in over 90 different enzymatic pathways.
- **Selenium** (as amino acid chelate) – 100 mcg – is an important

nutrient for the immune system.

- **Copper** (as amino acid chelate) – 1 mg – it plays a vital role in regulating the brain chemicals.
- **Manganese** (as amino acid chelate) – 5 mg – is involved in cellular energy.
- **Chromium** (as chromium polynicotinate) – 100 mcg – involved in metabolism of blood sugar.
- **Molybdenum** (as amino acid chelate) – 75 mcg – helps reduce symptoms associated with sulfite allergy.
- **Potassium** (as potassium aspartate–citrate) – 148 mg – helps regulate nervous system.
- **Boron** (as aspartate–citrate) – 1 mg– needed for the absorption of calcium.
- **Vanadium** (as bis–glycnato oxovanadium) – 50 mcg – potent blood sugar regulator.
- **Choline** – 75 mg – important nutrient for nerve cells and brain function.
- **Inositol** – 25 mg – helps regulate nervous system and is natural sedative.

- **PABA** – 25 mg – has antiviral properties and protects us from sun damage.
- **Citrus Bioflavonoids** – 50 mg – potent antioxidants, help increase circulation.
- **Malic Acid** – 500 mg – Malic Acid is found in a variety of foods. It is a vital nutrient needed for the production of cellular energy (Krebs cycle). Malic acid helps boost cellular energy and reduce achy muscles. It removes unwanted waste material from muscle cells including lactic acid, a byproduct of oxygen deficiency. Lactic acid has been implicated as one reason for achy muscles. Lactic acid may accumulate in muscles after periods of anaerobic and aerobic exercise. It may also be involved in the trigger point pains associated with fibromyalgia (9). “Malic acid gave subjective improvement within 48 hours in one study.”
Sherry Rodgers M.D., *Pain Free in Six Weeks*.
- **Free Form Amino Acid Blend** – 1,000 mg of free-form amino acids: helps block pain, boost immune function, regulate sleep, energy, brain chemicals, and much more.

L-Alanine, L-Arginine, L-Aspartic acid, L-Cysteine, L-Glutamic acid, L-Glycine, L-Histadine, L-Isoleucine, L-Leucine, L-Lysine, L-Methionine, L-Phenylalanine, L-Proline, L-Serine, L-Threonine, L-Tryptophan, L-Tyrosine, L-Valine.

- **Essential Omega-3 Fatty Acid** – helps reduce inflammation, boost the immune system, regulate brain function, reverse depression, and ADHD.

- **Marine Lipid Concentrate** – 550 mg (1,100 mg total)

Supplying approximately:

Eicosapentaenoic acid (EPA) – 165 mg

Docosahexaenic acid (DHA) – 110 mg

- **Organic Hi-Lignin Flax Seed Oil**

Supplying approximately:

Alpha Linolenic acid – 67 mg

Linoleic acid – 22 mg

Oleic acid – 50 mg

- **Borage Seed Oil** – 50 mg

Supplying approximately:

Gamma Linoleic acid (GLA) – 10 mg

Linoleic acid – 22 mg

Conjugated Linoleic Acid (CLA) (from safflower) – 250 mg

The CFS/Fibromyalgia Formula contains no sugar, yeast, wheat, gluten, artificial colors, preservatives, or additives.

**PATIENT QUESTIONNAIRE
INITIAL PATIENT HISTORY AND PROFILE**

Name _____ Date _____

Please briefly describe your health problems: _____

When was the last time you really felt good (date)? _____

Were you healthy as a child? _____ Yes _____ No

If not please list health problems you had as a child: _____

SIGNIFICANT EVENT AT ONSET

What caused your *present* illness?

Health Problem, Family Problem, Job Stressors, Surgery, Accident,
not sure? Please briefly explain: _____

Have you been diagnosed with any of the following?

_____ Fibromyalgia _____ Chronic Fatigue Syndrome? _____ Both

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Date of Diagnosis_____ Who Diagnosed you?_____

Which type of doctor made the diagnosis (family doctor, rheumatologist, OB/GYN, orthopedic doctor, etc.)? _____

What makes your health problems worse? Stress, weather changes, poor sleep, exertion, etc.:

Sleep

Do you have trouble falling asleep? ___Yes ___No

Do you have trouble Staying Asleep? ___Yes ___No

When did you first start having trouble sleeping (months, years)?

Neurotransmitters

What over the counter or prescription medications have you taken for sleep?

- | | | | |
|------------------------------------|--------------|---------------|-------------|
| ___ Ambien | ___ Zanaflex | ___ Trazadone | ___ Sonata |
| ___ Tylenol P.M. | ___ Elavil | ___ Neurontin | ___ Doxepin |
| ___ Flexeril | ___ Xanax | ___ Klonopin | ___ Ativan |
| ___ Mealtinin | ___ 5HTP | ___ Benadryl | |
| ___ Others? Please list here _____ | | | |

Are you taking anti-depressants? ___Yes ___No Which ones?

Have you taken any anti-depressants in the past? ___Yes___ No

Which ones?

Prozac Paxil Celexa Lexapro
 Wellbutrin Effexor Zoloft

Were they helpful? Please describe (didn't help, had side-effects, stopped working, etc.):

Do you crave carbohydrates or sugar? Yes No

Do you have normal, daily bowel movements (at least one bowel movement a day)? Yes No

If no, do you have loose bowels (diarrhea), constipation, or both?

Have you been diagnosed with Irritable Bowel Syndrome (IBS)?
 Yes No

What other medications are you taking? Please list here:

Immune Function

DO YOU HAVE PROBLEMS WITH: Please those that apply.

- Chronic Sinus Congestion
- Chronic Sinus Infections (2 or more a year)
- Chronic Sore Throats
- Chronic Colds or Flu infections each year
- Chronic Upper Respiratory Infections (Bronchitis, Pneumonia)

Liver Function

Have you ever had elevated or high liver enzymes on laboratory blood work? Yes No Not Sure

Do you have any funny reactions if you drink alcohol (little goes a long way, can't drink red wine, etc.)? _____

If so please describe:

Do you have any problems eating raw onions? Yes No

The day after eating asparagus, do you get a very strong odor when urinating (the next day)? _____

Do you have hepatitis? Yes No

Do you have a fatty liver? Yes No

Do you have funny reactions to medications? Yes No

Do strong odors (gasoline, smoke, cleaning supplies, perfume, etc.) bother you? Yes No

Adrenal Function

If you skip a meal do you feel bad (have headaches, become irritable, get jittery, tired, etc.)? Yes No

Do you have low blood pressure? Yes No Don't Know

Do you crave salty foods? ___Yes ___No

Does increased stress or stressful situations make your symptoms worse? ___Yes ___No

How's your energy level? Choose 1 to 5, with 5 being the best.

How is your concentration and memory on a scale of 1-5, with 5 being best? _____

How do you feel in the morning?

___ Refreshed

___ Hung over

___ Exhausted

___ Nauseated

___ Achy All Over

Are you hungry in the morning? ___Yes ___No

Digestion

How is your digestion?

Bloating ___Yes ___No

Gas ___Yes ___No

Indigestion ___Yes ___No

Are there certain foods that give you problems (sugar, spicy foods, fruits, meats, fats, dairy, etc.)? Please list:

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Diet

What do you eat for breakfast? Please (honestly) describe here:

What do you eat for Lunch?

What do you eat for dinner?

What are your usually snack foods (popcorn, ice cream, cookies, potato chips, candies)? Please be honest and specific:

Do you drink coffee? If so, how many cups a day and when?

Do you drink sodas? If so, how many and when?

Do you drink tea? If so how many glasses and when?

Pain

Where do you have pain?

_____ Joint	_____ Muscle		
_____ Shoulder	_____ Mid Back	_____ Low Back	_____ Chest
_____ Hips	_____ Arms	_____ Back of Legs	_____ Knees
_____ Feet	_____ Ankles	_____ Hands	_____ Fingers
_____ Head	_____ Neck	_____ Front of legs	

History

Please place a check by any that apply.

HEENT:

- Headaches
- Vision Problems
- Frequent Colds/Sore Throats
- Dizziness
- Hearing Problems
- Chemical Sensitivities/Allergies:

CVS:

- Chest Pain
- Palpitations
- High Cholesterol
- High Blood Pressure

LUNGS:

- Coughing
- Wheezing
- Breathing Problems
- Frequent Respiratory Infections

GI:

- Swallowing Problems
- Stomach Pains
- Nausea
- Vomiting
- Diarrhea
- Constipation

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___ Digestive Difficulties

___ Food allergies

GU:

___ Urinary Frequency

___ Urinary Hesitancy

___ Irregular Periods

___ Decreased Sex Drive

SKIN:

___ Rashes

___ Dry Skin

___ Fungus Infections

___ Eczema

___ Psoriasis

Social History: Do You Smoke? ___Yes ___No

Family History:

___ Cancer

___ Diverticulitis

___ Thyroid

___ Heart Disease

___ Stroke

___ Diabetes

___ High Cholesterol

Intestinal Dysbiosis

Have you ever been on long term (more than 2 weeks) antibiotic therapy? Yes No

Have you ever had vaginal yeast infections? Yes No

If yes, when was last infection? _____

Do you have chronic vaginal yeast infections (more than 2 a year)?
 Yes No

Are you bothered by memory or concentration problems? Do you sometimes feel spaced-out?

Do you feel “sick all over”, yet in spite of visits to different physicians, the causes haven’t been found? _____

Have you been pregnant TWO or more times? _____

Have you taken birth control pills?

_____ for more than 2 years?

_____ for more than 1 year?

_____ 6 months to 1 year?

Are your symptoms worse on damp, muggy days or in moldy places? _____

Do you ever have itchy ears? Yes No

Itchy nose? Yes No

Rectal Itching? Yes No

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Do you crave Sugar? ___ Yes ___No

Does eating sugar make your symptoms worse? __Yes __No

Do you have rectal itching after eating sugar, fruit, or a lot of starches? ___Yes ___No

Have you EVER been on long term (weeks) steroid therapy (prednisone, cortisone)? ____Yes ___No

Have you EVER been on long term (month or more) non-steroidal anti-inflammatory medications (Vioxx, Celebrex, Naprosyn, Advil, Bextra, Mobic, etc.)? __Yes __No

Yeast Questionnaire

Please mark your symptoms as follows: MI: mild, M: moderate, S: severe.

- ___Feeling of being “drained”
- ___Abdominal pain
- ___Constipation and/or diarrhea
- ___Bloating, belching or intestinal gas
- ___Indigestion or heartburn
- ___Prostatitis
- ___Endometriosis or infertility
- ___Cramps and/or menstrual irregularities
- ___Premenstrual tension (PMS)
- ___Sore throat
- ___Recurrent sinus infections
- ___Chronic hives
- ___Cough or recurrent bronchitis

- Nasal congestion or postnasal drip
- Nasal itching
- Eczema
- Psoriasis
- Cystitis or interstitial cystitis
- Pressure in the ears
- Troublesome vaginal burning, itching or discharge
- Rectal itching
- Dry mouth or Throat
- Mouth rashes, Including “ white” tongue
- Bad breath
- Foot, hair or body odor not relieved by washing
- Wheezing or shortness of breath
- Urinary frequency or urgency
- Burning on urination
- Burning or tearing eyes

Thyroid

Symptom Checklist

- | | |
|--|--|
| <input type="checkbox"/> Fatigue | <input type="checkbox"/> High Cholesterol |
| <input type="checkbox"/> Headaches | <input type="checkbox"/> Cold hands/feet |
| <input type="checkbox"/> Migraines | <input type="checkbox"/> Changes in skin pigmentation |
| <input type="checkbox"/> PMS | <input type="checkbox"/> Changes in skin pigmentation |
| <input type="checkbox"/> Irritability | <input type="checkbox"/> Irregular periods |
| <input type="checkbox"/> Fluid retention | <input type="checkbox"/> Severe menstrual cramps |
| <input type="checkbox"/> Dry hair | <input type="checkbox"/> Low blood pressure |
| <input type="checkbox"/> Dry skin | <input type="checkbox"/> Frequent colds and sore throats |
| <input type="checkbox"/> Hair loss | <input type="checkbox"/> Heat and/or cold intolerance |
| <input type="checkbox"/> Depression | <input type="checkbox"/> Lightheadedness |
| <input type="checkbox"/> Decreased memory | <input type="checkbox"/> Ringing in the ears |
| <input type="checkbox"/> Decreased concentration | <input type="checkbox"/> Infertility |

- Decreased sex drive
- Unhealthy nails
- Constipation
- Irritable Bowel Syndrome
- Inappropriate weight gain
- Falling asleep during the day
- Asthma
- Low motivation
- Frequent infections
- Allergies
- Hypoglycemia

Parasite Check List

- Have you traveled outside the United States?
- Do you have foul smelling stools?
- Do you experience any stomach bloating, gas, or pain?
- Any rectal itching?
- Unexpected weight loss with increased appetite?
- Food allergies that continue to get worse despite treatment.
- Do you feel hungry all the time?
- Have you been diagnosed with irritable bowel syndrome?
- What about inflammatory bowel disease?
- Do you have sore mouth and gums?
- Do you experience chronic low back pain that's unresponsive to treatment?
- Do you have digestive disturbances?
- Do you grind your teeth at night?
- Do you own a dog, cat or other pet? Or are frequently around animals?

BRAIN FUNCTION QUESTIONNAIRE

Do ANY of these apply to your present feelings?

The "O" Group

Your life seems incomplete.

You feel shy with all but your close friends.

You have feelings of insecurity.

You often feel unequal to others.

When things go right you sometimes feel undeserving.

You feel something is missing in your life.

You occasionally feel a low self worth or esteem.

You feel inadequate as a person.

You frequently feel fearful when there is nothing to fear.

The "G" Group

Please note the items which apply to your present feelings.

You often feel anxious for no reason.

You sometimes feel "free floating" anxiety.

You frequently feel "edgy" and it's difficult to relax.

You often feel a "knot" in your stomach.

Falling asleep is sometimes difficult.

It's hard to turn your mind off when you want to relax.

You occasionally experience feelings of panic for no reason.

You often use alcohol or other sedatives to calm down.

The "D" Group

Please note the items which apply to your present feelings.

You lack pleasure in life.

You feel there are no real rewards in life.

You have unexplained lack of concern for others, even loved ones.

You experience decreased parental feelings.
Life seems less "colorful" or "flavorful".
Things that used to be "fun" aren't any longer enjoyable.
You have become a less spiritual or socially concerned person.

The "N" Group

Please note the items which apply to your present feelings.
You suffer from a lack of energy.
You often find it difficult to "get going".
You Suffer From Decreased Drive.
You Often Start Projects and Then Don't Finish Them.
You Frequently Feel A Need To Sleep Or "Hibernate".
You Feel Depressed A Good Deal Of The Time.
You Occasionally Feel Paranoid.
Your Survival Seems Threatened.
You Are Bored A Great Deal Of The Time.

The "S" Group

Please note the items which apply to your present feelings.
It's hard for you to go to sleep.
You Can't Stay Asleep.
You Often Find Yourself Irritable.
You're Emotions Often Lack Rationality.
You Occasionally Experience Unexplained Tears.
Noise bothers you more than it used to. It seems louder than normal.
You "Flare Up" At Others More Easily Than You Used To.
You Experience Unprovoked Anger.
You Feel Depressed Much Of The Time.
You Find You Are More Susceptible To Pain.
You Prefer To Be Left Alone.