

Dr. Marlene's NATURAL HEALTH CONNECTIONS

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CONTENTS

Where to Start	2
The Difference Between Supplements and Drugs	3
How to Take Supplements With Diabetes Drugs.....	3
3 Herbs That Lower Blood Sugar	4
Other Helpful Supplements	5
What to Expect	6
Joint Replacement: Who Needs One?.....	8
The Latest on Healthy Fats	9
How Exercise Prevents Dementia.....	9
Weighted Blankets Improve Sleep.....	10
Can Acupuncture Help Essential Tremors?	12



How to Use Supplements to Prevent and Reverse Type 2 Diabetes



Which supplements are effective and how best to use them — even if you're taking medications for type 2 diabetes or injecting insulin.

Are you concerned about your blood sugar? Should you be even if you haven't been diagnosed with diabetes? Unless you've been eating the perfect diet for most of your life, the answer is a definite "Yes!"

The fact is that blood-sugar problems are rampant today, and they exist FOR YEARS before diabetes develops. And they are widely overlooked.

Many of my new patients are struggling with elevated blood sugar or have been diagnosed with type 2 diabetes and want to reverse it without drugs. Others aren't thinking about blood sugar when they first come to see me but have a hidden blood-sugar problem that's triggering or contributing to the health issues they want to resolve.

Food cravings, weight problems, joint problems, memory lapses, brain fog, poor sleep, and energy sags are some of the common side effects of

unhealthy blood sugar. And whether these or type 2 diabetes are the issue, lifestyle changes and supplements can usually set things right.

Although supplements don't replace the need for a healthy, low-carb diet, they can speed up results. And faster results are motivating, making it easier to stick with the right diet and other changes that work to get and keep you healthy.

I'm often asked whether you can take supplements if you're taking pills to manage diabetes or you're injecting insulin. You can if you use the supplements correctly. However, you do need to work with your doctor to adjust prescriptions as needed.

IN THE NEXT ISSUE:
Myths and Facts About Weight Loss

I find that some people are concerned that their doctor won't want to lower prescription doses or eliminate drugs if their health improves. This is a false notion. Doctors would be happy if all their patients made lifestyle changes to lower their blood sugar naturally, but most people don't do that.

In a moment, I'll describe in more detail how to address the issue of adjusting drug doses. But rest assured that it can be done.

Dr. Marlene's NATURAL HEALTH CONNECTIONS

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Where to Start

The starting point with supplements depends on whether you are currently taking oral diabetes drugs and/or injecting insulin. If you are, routinely monitoring your blood sugar is an essential step. You should be doing this anyway if you have diabetes, but not everyone does.

If you have been diagnosed with prediabetes — blood sugar that is high but not high enough to be called diabetes — you may have been prescribed metformin. Prediabetes sharply increases risk for diabetes, and metformin is prescribed when lifestyle changes are not lowering blood sugar.

In such cases, the problem may be that patients have not made any lifestyle changes. And often, they haven't been guided to make the right changes in diet and other lifestyle habits. In these situations, I recommend monitoring blood sugar while changing diet and taking supplements. When you do, you will quite likely eliminate the need for metformin.

If you are not taking any medications to lower blood sugar, just start eating a healthy, low-carb diet and taking supplements. Once you're used to that regimen, start adding exercise. By doing these things, you can normalize blood sugar and enjoy better health.

Continuous Glucose Monitors

If you are taking any diabetes drugs or injecting insulin, you should know what's happening with your blood sugar throughout the day. Track what happens after you eat different meals and snacks and have various drinks, and if you go for a

walk or do any other type of exercise. This way, you can see how your food and activity affect you.

It's easy to get discouraged or annoyed if you have to prick your finger for a blood sample multiple times during the day. So, I recommend using a continuous glucose monitor. It's a sensor just under your skin, usually on the arm or belly, which measures blood sugar every few minutes without causing any discomfort. And you can check your blood-sugar readings at any time on your phone. You can also see a history of your blood-sugar patterns on your computer.

Continuous glucose monitoring is really efficient and can make all the difference between success and failure. And by the way, diabetics aren't the only ones who use it.

Athletes who are in perfect health sometimes use a continuous glucose monitor because they want to perform at their peak. Seeing the effects of different foods and types of physical activity helps them to enhance their diets, workouts, and performance.

I encourage people to adopt a similar perspective: Learn how your body reacts to different foods and take steps to make it function in the most efficient way. Even if you don't take any medications to control blood sugar, seeing what's happening inside your body can be motivating.

Individual Differences Are Important

Each of us is unique, and reactions to the same food or supplement can differ widely from one person to another. A study of 800 people in Israel proved this point.¹

Each person in the study wore

a continuous glucose monitor for a week. During that week, they all ate the same meals, and their blood sugar responses were closely monitored.

We know that eating more carbs, including starchy and sugary foods and drinks, will raise blood sugar. However, the study found that individual reactions to identical meals vary widely.

As an example, one person’s blood sugar may rise more when they eat rice, compared to ice cream, even when the carb content of both servings is the same. Yet, rice seems healthier than ice cream.

I’m not saying that anyone should eat ice cream instead of rice. Rather, I just want to emphasize how important it is to

closely track blood sugar if you have type 2 diabetes.

Other aspects of life also affect each person’s blood sugar in unique ways. Such things include sleep or lack of it, stress, the combination of things eaten in a meal or snack, types of beverages, and physical activity.

The Difference Between Supplements and Drugs

Supplements work to lower blood sugar in a gentler way than drugs. While drugs or insulin may cause hypoglycemia — blood sugar that drops too low and can be dangerous — supplements are not likely to do this. Rather, they help to bring blood sugar to normal levels.

Furthermore, supplements don’t have the side effects of drugs. For example, the popular diabetes drug metformin depletes vitamin B12, which is essential for healthy nerve cells. A shortfall of vitamin B12 over a long period of time can cause nerve damage with symptoms just like diabetic neuropathy.

In addition, one drug can lead to another. Heartburn is a known side effect of diabetes drugs, and heartburn drugs may be prescribed to treat it. Unfortunately, the heartburn drugs also deplete vitamin B12, increasing the odds of nerve damage and diabetic neuropathy. Heartburn drugs also deplete magnesium, which is necessary for healthy blood sugar.

The supplements I recommend help your body’s natural processes to work as they should. Herbs don’t deplete nutrients, and vitamins and minerals fill nutrient shortfalls and prevent depletion.

How to Take Supplements With Diabetes Drugs

When prescriptions are written, the dosages are based on the premise that a patient’s lifestyle is not keeping blood sugar in a healthy range. But if you start taking supplements that lower blood sugar, or you improve your diet, the situation changes. This is also true if you start doing regular exercise. The original prescription doesn’t fit any more and can cause blood sugar to drop too low.

Symptoms of Low Blood Sugar

If you already take diabetes drugs or inject insulin to lower blood sugar and decide to start taking supplements, be sure to monitor your blood sugar. And work with your doctor to adjust prescription doses so that your blood sugar doesn’t drop too low.

Symptoms of low blood sugar can include:

• Hunger	• Nervousness
• Dizziness	• Shaking
• Confusion	• Sweating
• Anxiety	• Rapid heartbeat
• Irritability	

If you take diabetes drugs and start a regimen of supplements, blood-sugar tests in a doctor’s office can’t be done often enough to identify when a prescription needs to be adjusted. It’s up to you to monitor and track what’s happening. And when you see changes, take the information to your doctor and ask for an adjustment of your prescriptions.

If you use a continuous glucose monitor, it can give you a history

Metformin Side Effects

Metformin is the most widely prescribed drug for type 2 diabetes, and it’s sometimes prescribed for prediabetes. The most common side effects affect the digestive system, including:

• Bloating	• Heartburn
• Nausea	• Vomiting
• Diarrhea	

Metformin is not recommended for people over the age of 65 and for anyone with certain medical conditions, including kidney, liver, or lung diseases, or anyone with heart failure.

Nutrient Depletions

Taking metformin depletes levels of vitamin B12, which can lead to nerve damage much like diabetic neuropathy. Metformin also lowers levels of other B vitamins, magnesium, and vitamin D.

of readings on your phone and computer. You can show your new and improved blood-sugar levels to your doctor. And you should also tell your doctor what supplements you've been taking and how you've changed your diet or other habits. This information will help to establish the best use of medications at that point.

Many of my patients come to see me because they want to lower their blood sugar without drugs or insulin. The right diet, supplements, and exercise can help to achieve that goal, and for reducing or eliminating prescriptions, continuous glucose monitoring is a valuable tool.

How to Maximize Supplement Benefits

Supplements work best when they are taken along with a healthy, low-carb diet. It's counterproductive to eat a diet that is overloaded with carbs and continually drives blood sugar up, and then expect supplements to work magic. It would be like trying to put out a fire while throwing wood on it.

The best way to start is by making one change at a time in the food you eat on most days. I encourage you to read last month's newsletter for the specific steps to take (this and other related newsletter issues are listed in *Related to This Topic* on page 6). At the same time, start taking supplements.

Consistency is key with any supplements. Taking a vitamin, mineral, or herb once, or once in a while, is not the way to do it and won't work. Take supplements daily. Familiarize yourself with

how many supplement pills are in a serving along with the product directions and decide when you're going to take them each day. And then follow your schedule.

3 Herbs That Lower Blood Sugar

The three herbs I cover below each work in a different way. They complement each other well when used together to get and keep blood sugar in a healthy range. You can take each one separately or — to keep things simple — you can take them together in a formula.

In traditional herbal medicine, herbs are often used in combinations. This way, there is a mix of natural substances that gently help the human body to heal and thrive.

Herb #1: *Gymnema Sylvestre*

Gymnema has been used for thousands of years in Eastern medicine to treat diabetes. In recent decades, clinical evidence shows that it does, indeed, lower blood sugar in diabetics and in people whose blood sugar is somewhat elevated but not to diabetic levels.

To give you an idea of how long this herb has been researched for its blood-sugar benefits, studies more than 30 years ago found that 400mg daily of an extract called GS4, for 10 to 12 months, was effective for diabetics who were using insulin and for those who were taking oral diabetes drugs.

In the study of patients using insulin, those who added the GS4 *gymnema* extract to their treatment regimen gradually reduced the need for insulin and brought blood-sugar levels down to near normal. And

the supplement revitalized some of their natural production of insulin.²

In diabetic patients who were taking only oral diabetes drugs, researchers also tested a dose of 400 mg daily of the GS4 *gymnema* extract. After being taken daily for 18 to 20 months, the supplement eliminated the need for the diabetes drugs for some patients; for others, drug dosages were significantly reduced.³

Many other studies since then have shown that *gymnema* supplements not only lower blood sugar that's elevated without unpleasant side effects, but they also help to lower harmful triglycerides and cholesterol.⁴

Gymnema contains ingredients that look like sugar to your body. You could think of them as fake sugar molecules, and these block absorption of actual sugar in the intestines. The herb also enhances natural production of insulin in the pancreas and may help insulin to work better to normalize blood-sugar levels.

Herb #2: *Banaba Leaf Extract (Lagerstroemia speciosa)*

Banaba leaf extract works in a variety of ways to prevent or help reverse diabetes. It lowers blood sugar and a combination of other key risk factors collectively known as "metabolic syndrome."

Metabolic syndrome is basically having insulin resistance along with other health issues, like high cholesterol, high triglycerides, high blood pressure, inflammation, weight gain, and such. It's not a disease per se, but it seriously elevates risk not only for diabetes but for heart disease as well. However, people with metabolic

syndrome often don't even know they have it.

One study found that a generic banaba leaf extract, taken daily with breakfast and dinner, for 12 weeks, significantly reduced or eliminated metabolic syndrome.⁵ A more concentrated, patented extract called GlucoHelp (it's listed by name in the Supplement Facts on product labels) lowered blood sugar even faster — in as little as one week.⁶

A specific substance in banaba leaf — corosolic acid — naturally suppresses enzymes that break down sugar, so that some of the sugar you eat is not absorbed.⁷ And banaba leaf extract makes cells more sensitive to insulin, which means that blood sugar is better absorbed and doesn't stay in the blood as long. The net effect is lower levels of blood sugar.

Herb #3: White Mulberry Leaf Extract

One of the ways that you can keep your blood sugar in a healthy range and prevent or reverse diabetes is by taming dramatic spikes in blood sugar after you eat. If you feel good after you eat, but an hour or two later your energy sags or brain fog or irritability sets in, blood-sugar spikes are most probably what's setting off those symptoms.

Eating an overload of carbs, or drinking too much sugar, causes blood sugar to rise too high and then crash too low, making you crave a sugary or starchy pick-me-up. This begins *long before* blood sugar becomes chronically high and continues into diabetes.

White mulberry leaf extract has a very specific effect that reduces

spikes in blood sugar. It does this by blocking enzymes that break down starches and sugars. It works in a somewhat different way than the other two herbs I described and is especially valuable to keep blood sugar more stable when you eat carbs or drink something sugary.

If you take 400 mg of the extract right before you eat, or with your meal, some of the carbs and sugar you eat are not digested and are excreted instead. It's as though you didn't eat some of those carbs.⁸

Over time, preventing sharp spikes and crashes in blood sugar leads to lower chronic levels of blood sugar. Studies found these results when the extract was taken both by people with slightly elevated blood sugar⁹ and by diabetics who were taking medications.¹⁰

If you find that you feel bloated after taking the supplement, eat fewer carbs per meal. An overload of undigested carbs can cause discomfort.

Alpha-Lipoic Acid Prevents Damage

Alpha-lipoic acid is an antioxidant found chiefly in organ meats, which we rarely eat. It helps to prevent diabetes and its complications, and it can reduce nerve pain if you suffer from diabetic neuropathy.¹¹

The supplement improves cells' ability to absorb blood sugar, so that the blood sugar doesn't stay in the blood for too long. And it guards against damage to insulin-producing cells in the pancreas and to other healthy tissues. For anyone with diabetes, alpha-lipoic acid is a good supplement for prevention of complications.

Other Helpful Supplements

Basic vitamins and minerals are necessary for blood sugar, insulin, and all other aspects of your internal processes to work properly. These include the B vitamins and

About Dr. Marlene

Dr. Marlene Merritt's passion for natural medicine is fueled by her drive to help others, and her own experience of overcoming a debilitating heart condition, diagnosed at the age of 20. A competitive cross-country cyclist at the time, she suddenly began experiencing severe chest pains. Forced to quit the sport, she suffered from extreme fatigue and constant pain for another 15 years, despite doing everything that conventional, Western medical doctors told her to do.

And then, the tide turned. A physician trained in naturopathic healing recommended a whole-food vitamin E supplement. A week after starting the supplement regimen, her energy began to return, and the pain began to disappear.

Dr. Marlene is a Doctor of Oriental Medicine, has a Master's in Nutrition, and is an Applied Clinical Nutritionist. She is Board Certified in Bariatric Counseling, and certified in the Bredesen MEND Protocol,[™] a groundbreaking method of reversing Alzheimer's disease. She sees patients at the Merritt Wellness Centers in Austin, Texas, and Santa Fe, New Mexico, trains health practitioners nationwide, and is the author of *Smart Blood Sugar* and *The Blood Pressure Solution*.



other nutrients you find in a multivitamin. I recommend products with no more than 100 percent of the daily value of each nutrient. Plus, I recommend taking these:

Magnesium: Whether you have diabetes or simply want to prevent it, magnesium is essential. It improves the metabolism of carbs and sugar,¹² but most people don't get enough. I recommend adding a magnesium powder to your water bottle and sipping it throughout the day. If you get loose stools, you took too much; just take a bit less.

CoQ10: Short for coenzyme Q10, this is a vitamin-like substance that is essential for every cell in your body to efficiently produce energy. If that energy production is below par, your metabolism of carbs can't work efficiently. Studies show that CoQ10 helps to normalize blood sugar.¹³

Fish Oil: It reduces inflammation, which rises with high blood sugar. Take 1 to 3 grams daily and avoid

inflammatory refined oils. See page 9 for how to eat healthy fats.

What to Expect

When you start taking supplements to lower blood sugar, you're basically doing your own clinical trial of one, because you really are unique. This is true with any dietary or lifestyle changes but is especially important to keep in mind if you are taking diabetes drugs or insulin.

Herbs, vitamins, and minerals aren't likely to drive your blood sugar to levels that are too low. But drugs can. This is why it's critical for you to be tracking blood sugar — ideally with a continuous glucose monitor — and to work with your doctor to adjust prescriptions.

How soon will you see changes? It really varies. I had a patient who called me after two weeks complaining that nothing was happening. And the next day, she saw a sudden drop in her blood sugar.

If you do what I've suggested and your blood sugar doesn't budge after a month or so, your progress could be blocked by low thyroid, major stress, sleep apnea, an inflammatory condition, hormone imbalances, or another underlying health condition. And then it's time to work with a health professional.

But most of the time, supplements and diet changes will produce results. Be patient. When you start to take supplements, make one improvement in your diet at a time. Get used to it, and then make another change, and another, and keep going.


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Related to This Topic

These are some earlier issues of this newsletter that address related topics:

Related Topic	Volume	Issue	Title
Low-Carb Diet Basics	1	8	The Guide to Healthy Eating
Low-Carb Diet Tips	5	1	How to Stick With a Healthy Diet This Year
Healthy Carbs	3	6	The Diabetic's Guide to Eating Carbs
Healthy Meat	3	2	The Diabetic's Guide to Eating Meat
Healthy Fats	4	11	Healthy Fats: Deadly Myths and Life-Saving Facts
Inflammation	4	4	How to Calm Harmful Inflammation
Food Sensitivities	4	12	Food Sensitivities: Hidden Triggers of Many Health Conditions

Access these online by logging in to www.NaturalHealthConnections.com.

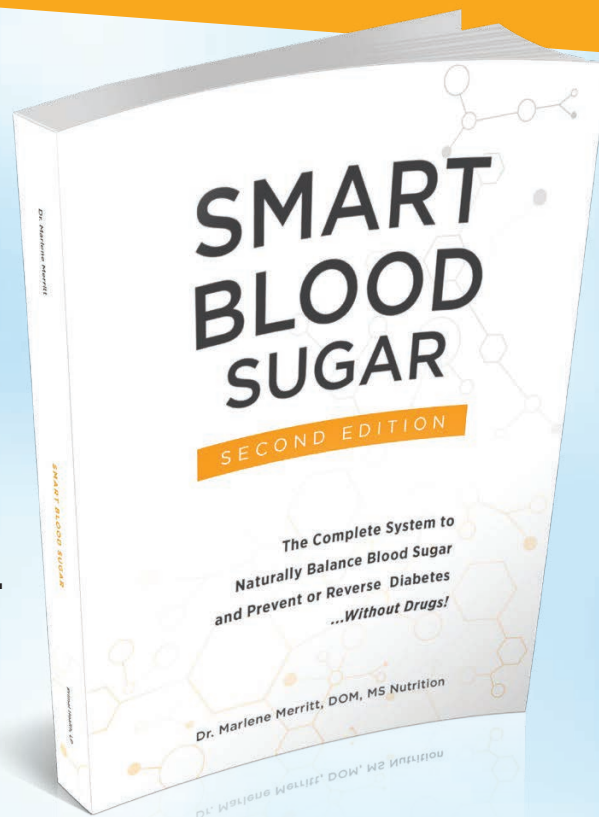


Dr. Marlene Discovers “Insulin Switch” That Stops Blood Sugar Spikes



This blood sugar “switch” is built into every cell of the body and, when it is flipped “ON”...

- Blood sugar returns to the healthy range
- Weight is shed from belly, neck, arms, and thighs
- Energy levels return to normal
- Sleep becomes easy again



Dr. Marlene has been helping people repair their blood sugar for the last 15 years.

Just like Arthur Mabee, who was suffering from high blood sugar. His insulin levels were so high, the blood vessels in his eyes began bursting. He was severely overweight and suffering from heart problems. Arthur's doctor wanted to put him on Metformin...

That's when Arthur discovered Dr. Marlene's best-selling book, **Smart Blood Sugar**. “I said, ‘Well, I’m going to order this book because this doctor knows exactly what she’s talking about,’” Arthur explained.

In just three days of using Dr. Marlene's **Smart Blood Sugar** program, Arthur began to feel changes in his body. He gained more energy, his memory improved, he began sleeping 8 to 12 hours per night—and best of all—he lost 118 pounds since reading the book.

“I’ve improved my health 190%... I no longer have diabetes. I no longer have a pre-diabetic condition,” shared Arthur. “My eyes have even cleared up. This has definitely helped me more than anything I’ve ever done in my life.”



Did you see that? Arthur no longer has diabetes. And so can you! Yes—it is possible to reverse type 2 diabetes and maintain blood sugar in the normal range.

Dr. Marlene's **Smart Blood Sugar** is working for people all across America. And she believes it can work for you, too. Here's how...

This simple plan works by doing a few simple things that bring blood sugar down while stopping a few things that have been pushing blood sugar up. It's a combination of these two actions that make the protocol work so well.

Dr. Marlene's **Smart Blood Sugar** has become a best-selling book because it cuts through all the confusing and contradictory information and zeros in on the exact steps to take right now to heal your blood sugar.

In this easy-to-read, 100-page book, you will find step-by-step guidance, easy tools, and dozens of tips on how to maintain healthy blood sugar levels and repair insulin resistance without wasting a lot of time or money.

“Get this book, sit down, and do the same thing I did. Read it word for word,” Arthur shares with others. “**Smart Blood Sugar** will help you greatly.”

It's time to bring your blood sugar back in the healthy range. Get your copy of Dr. Marlene's best-selling book, **Smart Blood Sugar**, today for only \$27!

Order Your Copy Today!
www.SmartBloodSugar.com/Book



Joint Replacement: Who Needs One?

Do you occasionally get an achy knee or hip? Does it always hurt?

Achy joints are one of those things that we often take for granted as inescapable side effects of aging. But this is a flawed notion.

When the *Guinness Book of World Records* recognized Johanna Quaas from Germany as the world's oldest gymnast, she was 86. And she kept competing and performing gymnastic routines in front of crowds into her 90s, until the pandemic shut things down.

Our joints don't wear out if we're healthy. When a joint hurts, the wrong thing to do is to dismiss it — there's a joke that the five most dangerous words are "Maybe it will go away!" — or to develop a habit of popping ibuprofen. Even if pain relievers bring some comfort, damage will continue to be done if the underlying cause is not identified and addressed.

A joint becomes damaged gradually, as its cushioning deteriorates. When damage is severe enough, joint replacement becomes the only solution. Along the way, the pain gets worse and worse, limiting your ability to move. Then the stress and inactivity cause other aspects of your health to suffer, such as your mood, heart and lung health, and risk for or progression of diabetes.

Understandably, many people are reluctant to go under the knife. Recovery takes time, and any surgery comes with risks of complications. But when necessary, joint replacement is better than ever-worsening pain and deteriorating health.

Saving a Joint Without Surgery

When the damage is not too severe, joints can usually heal without surgery. Losing excess weight, reducing inflammation with a healthy low-carb diet, and addressing other inflammation triggers may bring relief. Physical therapy, injections of hyaluronic acid, or stem cell therapy may help. You may need to explore multiple options to find the right treatment.

My Personal Experience

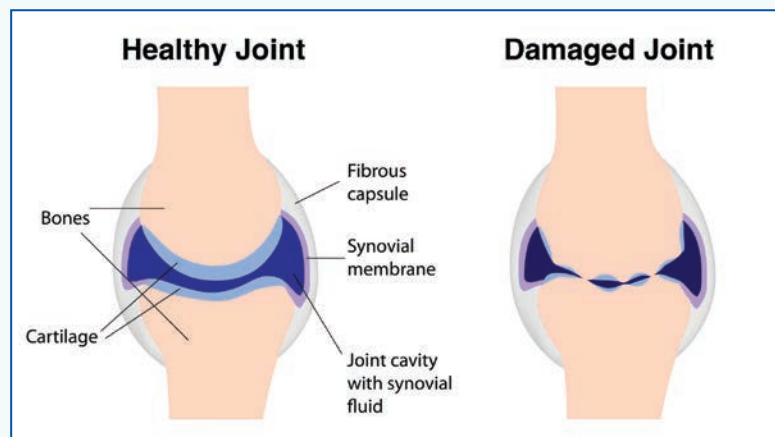
A couple of years ago, I broke my ankle and had it set with a pin. During the first three months, I used crutches and then a cane. I could walk on my own after that, but my ankle hurt when I climbed stairs and my hip hurt when I stood or sat for a while.

I knew something was wrong, even though medically, my ankle had healed. So, I sought help from different health professionals. All told, I saw seven different practitioners. The last one — a fitness trainer — finally helped me solve the problem with a technique called "muscle activation."

While I was on crutches and using a cane, I wasn't moving in the usual way, and some of my supporting muscles had "turned off," creating imbalances that were hurting my ankle and hip. Reactivating the turned-off muscles with customized exercises restored balance, and my ankle and hip pain disappeared!

The moral of my story: Don't give up! If you can't resolve joint pain by yourself, look for help until you find the treatment that works for you.

What Happens in a Damaged Joint



In a healthy joint (left), there is a space between the bones. The ends of the bones are cushioned by cartilage and synovial fluid, which is made by the synovial membrane. As the cushioning and fluid become depleted, pain sets in and gets progressively worse. Eventually, there may be no cushion left. Then the bones rub against each other and begin to break down.

The Latest on Healthy Fats

I was recently reading that low-fat diets have been losing popularity, and it got me thinking about advice I see online to “eat healthy fats.” It’s usually misleading.

Although fat is being recognized as an essential part of a good diet, there’s still a phobia about saturated fat. On the one hand, there are respected cardiologists who point out that recommendations to avoid saturated fat are based on flawed data.¹ On the other hand, there are those who keep repeating faulty data that saturated fat is bad.

What Is Healthy Fat, Really?

Healthy fats are a variety of fats found in nature. Eaten throughout history, they have stood the test of time — humans are still here.

Saturated fat in meat, full-fat milk, yogurt, butter, and cheese is actually good, as are fats from fish and plants such as avocado and olive oil, made thousands of years ago by soaking olives in saltwater and then pressing them to squeeze out the oil.

Note that all these could be made on a small farm without any modern machinery. Now, I’m not suggesting that you trade your car for a horse and buggy. But be aware that *all* types of fats that occur in nature are healthy fats.

Variety Is Essential

Oils are liquid at room temperature, and saturated fats — like butter and lard — are solid. Your body needs both types. For example, saturated fats are building blocks of cell membranes; they create a stable structure, and without them your cells would be like a house with unstable walls. People who say “just eat olive oil” don’t mention this.

Yes, extra virgin olive oil is good, but it shouldn’t be your only fat. The same goes for avocado oil, coconut oil, and other natural fats. Each contains different nutrients, and you need them all.

The Modern Way to Get Traditional Fats

Factory farms and processed foods have altered natural fats so



much that it takes a bit of effort to select the good ones and steer clear of the bad ones. And by bad, I mean refined oils that provoke inflammation and disease. Corn, soybean, and cottonseed oils are some common ones to avoid.

“Hydrogenated” or “partially hydrogenated” fats are liquid oils that are chemically turned into a solid state. They’re “trans fats.” Found in refrigerated dough, other processed foods, salad dressings, and restaurant fried foods, these are the most harmful fats and should be avoided — always!

In addition, because animals on factory farms are given toxic feed and, in some cases, hormones, it’s best to buy grass-fed or organic meat and dairy products when you can.

Variety is the spice of life, the saying goes, and variety is also the key to a healthy diet.

How Exercise Prevents Dementia

Research at the University of California San Francisco has discovered that exercise, late in life, makes a big difference in the health of the brain and nervous system and reduces the odds of dementia. It turns out that exercise improves synapses — connections between cells in the brain and nervous system — and this protects against mental deterioration.²

It works like this: Imagine walking down the stairs. Your brain has to coordinate your foot, ankle, knee, back, hand on the banister, where your head is, what

your eyes are looking at, and a million other things. That’s why exercise is so important for brain health — you do all those things without “thinking,” but your brain is doing a ton of work.

Interestingly, the study found that even when people had the brain plaques that develop with Alzheimer’s, they didn’t have symptoms of dementia if they exercised during their later years. Basically, they functioned as though the plaques weren’t there. So, when you hear that it’s never too late to start exercising, believe it!

1 Astrup, A., et al. “Saturated Fats and Health: A Reassessment and Proposal for Food-Based Recommendations: JACC State-of-the-Art Review.” *J Am Coll Cardiol*. 2020 Aug 18;76(7):844-857.
2 Casaletto, K., et al. “Late-life physical activity relates to brain tissue synaptic integrity markers in older adults.” *Alzheimers Dement*. 2022 Jan 7. doi: 10.1002/alz.12530. Online ahead of print.

Warm Up with a Cup of Tea

Winter is a good time to drink your tea hot, rather than iced, and it can do more than warm you up. It's good for the heart, blood sugar, the immune system, and maintaining a healthy weight. And recent research is learning more about how it works.

Reviews of many human, animal, and lab studies are showing that tea enhances the balance of microorganisms in the gut. I'm talking about green, black, and oolong teas.¹

All these teas come from the same tea plant: *Camelia sinensis* in Latin. The color depends on how much the leaves are fermented after being picked. Green tea is least fermented and lightest in color, oolong is more fermented and darker, and black tea is most fermented and darkest.

All these teas have similar benefits, but green tea contains the highest levels of beneficial antioxidants and is the most widely studied for health benefits. Green tea also seems to have the most therapeutic impact on the gut, although oolong and black teas are good as well.

Ways to Enjoy Tea

As you know if you've been reading this newsletter for a while, I'm a big fan of green tea. But I add a warning when I recommend it to my patients: Watch the sugar! If

you like sweet tea, use xylitol or liquid stevia in a flavor of your choice. That's how I enjoy my green tea.

There are other ways to add flavor as well. For example, you can add one or more of these to your cup, as soon as you start to steep the tea:

- A slice of fresh ginger
- A cinnamon stick
- A few fresh mint leaves



For more intense flavor, you can simmer any or all of the above in a pot of water for a few minutes, and then use that water to brew your tea. The aroma alone is worth the effort. Some people like to add lemon zest, lemon juice, or vanilla, and for a quick fix, dried spices can work. Experiment to find your own favorites.

Black tea can be flavored with the same ingredients. And if you're sensitive to dairy, drink your tea black or with an unsweetened plant milk.

Tea contains less caffeine than coffee, and green tea has the least. And unlike coffee, tea also contains theanine, which has a calming effect without making you drowsy. And you can reap benefits with decaf tea if you're sensitive to caffeine.

Water Exercise Relieves Back Pain

Back pain can be debilitating and make it impossible to exercise or move around much, which leads to even more health problems. But water exercise is an effective way to get relief, according to a recent study.

For three months, 113 people with chronic low back pain followed one of two regimens: supervised water exercise or a physical therapy program of electrical stimulation and heat therapy. Both treatments were done for an hour, twice a week. By the end of the study, water exercisers experienced significantly more relief, and it lasted for up to 12 more months.²



Weighted Blankets Improve Sleep



Sleep is more important than ever today, and studies are showing that weighted blankets can help people with insomnia, depression, anxiety, or attention problems to get a better night's rest. The research shows that sleeping with a weighted blanket can help you relax more quickly, sleep more restfully, and feel more energetic during the day.³

Weighted blankets typically contain tiny glass or plastic beads and range in weight from 5 to 30 pounds. The Sleep Foundation recommends choosing one that weighs about 10 percent of your body weight — a 15-pound blanket for a 150-pound person, for example.

1 Liu, Y.C., et al. "Modulation effect of tea consumption on gut microbiota." *Appl Microbiol Biotechnol*. 2020 Feb;104(3):981-987. 2 Peng, M.S., et al. "Efficacy of Therapeutic Aquatic Exercise vs Physical Therapy Modalities for Patients With Chronic Low Back Pain: A Randomized Clinical Trial." *JAMA Netw Open*. 2022 Jan 4;5(1):e2142069. 3 Ekholm, B., et al. "A randomized controlled study of weighted chain blankets for insomnia in psychiatric disorders." *J Clin Sleep Med*. 2020 Sep 15; 16(9): 1567-1577.

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Q&A

Q: When I turned seventy-five, I developed essential tremors in my hands. It has affected my handwriting and, at times, eating or drinking. In addition to reducing stress and caffeine consumption, could acupuncture be a possible remedy? — Richard H.

A: It could help. I don't know how long you've had the tremors — the longer a neurological problem exists, the harder it is to change — but I would still try acupuncture.

In Traditional Chinese Medicine, acupuncture is one tool, and it is customarily used in conjunction with customized herbal formulas. I suggest finding a practitioner who is well trained in this school of healing and can customize both herbal and acupuncture treatment.

I'm sure you know this, but to clarify for other readers: Essential tremors are not the same as Parkinson's disease. Although essential tremors can make life difficult, they are not life-threatening.

One thing I highly recommend is resistance exercise. Studies have shown that weight training reduces essential tremors and improves dexterity.

Challenging your muscles unleashes the potential of nerve fibers to fire. In essence, the brain uses more nerve cells and improves its control of muscles. This improvement in nerve function is the first thing that happens when you start training with weights, before muscles increase in strength

or size. It's very beneficial for your nervous system.

In studies, the type of resistance exercise that decreased tremors and improved dexterity worked all the major muscle groups and used relatively heavy weights. However, gripping exercises that trained only hands and arms did not improve dexterity or reduce tremors.

Although heavier weights in studies have produced better results than light ones, it's important to start at the right level of resistance for you. That's what will fire up your nerve fibers and enhance control of muscles. Then, increase resistance gradually.

If you don't have recent experience with weights or resistance bands, it's a good idea to get started with a fitness trainer who works with people in your age group.

Q: I'm in good health, received two shots of the Pfizer vaccine last summer, and haven't been sick. Do I really need a booster shot?

— May F.

A: I'm very glad you're healthy. To have the best odds of staying that way, I would recommend that you do get a booster shot.

As I'm sure you know, the omicron variant of the virus that causes COVID-19 is much more contagious than earlier strains, so the chances of infection have increased. Although reports so far indicate that omicron infections *tend* to be milder, some people still get very sick and die.

Studies show that immunity from the first two vaccine shots does wane over time. And it's well documented that the booster strongly increases immunity

against all variants of the virus.

I know we all have "pandemic fatigue," but this isn't the time to let our guard down. If we use all the tools available for our protection, including masks and the vaccines with boosters, we'll all be better off.

Even in cases where a COVID infection produces mild or no symptoms, some people develop long COVID — lingering symptoms such as brain fog, fatigue, or others. And among those who have died, autopsies have found damaging virus particles in different organs, such as the heart or brain, months after an acute infection.

Other people's welfare is another thing to consider. If your family or circle includes toddlers who can't get vaccinated, or adults who are immunocompromised, you can more effectively help them to stay healthy if you are fully vaccinated and have had your booster.

Do you have a question for Dr. Marlene?

Send your health-related questions to drmarlene@naturalhealthconnections.com. Please include your first name and the initial of your last name. Although she cannot answer each question directly, Dr. Marlene will select a few in each newsletter and will address other questions and concerns in articles in future issues. Answers are intended for educational purposes only and should not be viewed as medical advice. If you need help with your subscription or have questions about Primal Health supplements, email support@primalhealthlp.com or call 877-300-7849.