

Dr. Marlene's

NATURAL HEALTH CONNECTIONS



VOLUME 5 | ISSUE 9

A PUBLICATION OF PRIMAL HEALTH

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Essential Steps for Aging Well: **Part 2**



Learn about the main underlying triggers of accelerated aging, the steps to reverse the process, and how to live a more vibrant and longer life.

The process of aging is a combination of natural changes that take place in the course of our lives and the results of damage from an unhealthy diet, toxins, lack of movement, stress, and other aspects of an unhealthy lifestyle. It's a big topic, which is why I've broken it down into two newsletter issues. If you haven't already, I encourage you to read *Essential Steps for Aging Well: Part 1* in last month's newsletter.

To recap, the steps I covered last month include not falling prey to false notions about aging, such as the ideas that chronic diseases are inevitable or that there's an age limit for learning new skills — neither is true. I also covered why it's important to have a purpose in life, and why and how to eat a low-carb diet that manages blood sugar, reduces internal damage, and helps to keep you young.

I view healthy aging as having four pillars. Managing blood sugar, covered in last month's issue, is the

first one. The others are correcting nutritional deficiencies, enhancing the health of your mitochondria, and managing stress.

In case you're wondering about mitochondria, these are tiny, energy-producing components of cells. If they're in good shape, your whole system is healthier. But ailing mitochondria accelerate aging.

There aren't any magic pills to slow aging. But if you know the right steps and you take them, you will be on the path to a vibrant life.

You may be wondering about exercise. Yes, it plays a vital role, especially in maintaining healthy mitochondria — I'll explain why in a moment. And exercise is vital for preventing frailty and maintaining the healthy function of your whole body.

IN THE NEXT ISSUE:
LEAKY GUT: Hidden Cause of Digestive Woes

A recent study tracked more than 340,000 people in the United Kingdom for 11 years. Researchers found that those with both the healthiest diets plus the highest levels of physical activity were least likely to suffer from chronic conditions such as heart disease, chronic pain, or cancer, or to die soon from any cause.¹

I'll talk more about exercise. But first, I want to address nutritional deficiencies. If these aren't corrected, you may well lack the energy to be physically active.

Why Nutritional Deficiencies Are So Harmful

The human body uses nutrients in a way that is similar to a hospital emergency room, where medical staff must decide who to treat first. If one patient is bleeding profusely from a gunshot wound while another has an injured toe — painful, but not life-threatening — medical personnel will attend to the gunshot victim first.

This is triage. It means assigning resources to those things that are most urgent. Nutritionally, this means that if you're short on a nutrient, whatever is available will be used for the most urgent functions first, such as keeping your heart beating. Meanwhile, if there isn't enough to go around, ongoing maintenance and repair in other parts of your body will suffer. Over time, this causes cumulative damage and leads to disease.²

How We Get Malnourished

Unhealthy choices, such as processed foods, are one major reason why we are malnourished. But there's another huge problem: The way food is produced today

makes it less nutritious than it used to be.

Plants are only as good as the soil they're grown in. And decades of industrial farming, using chemical fertilizers, herbicides, and pesticides, have depleted the nutrients in soils — and in the fruits and vegetables we eat.³

Our meat has also been depleted of nutrients and healthy fats because cattle are raised in feedlots, on corn, rather than grazing on grass as their bodies are designed to do. In addition, organ meats — the most nutritious parts of animals — have fallen out of fashion and are rarely eaten today.

The Top Nutrient-Dense Foods

These are top foods that are rich in nutrients and help to prevent deficiencies.

- Liver
- Fatty fish such as salmon, sardines, and herring
- Shellfish, including oysters
- Eggs
- Dark green, leafy vegetables



- Cruciferous vegetables, such as broccoli, cauliflower, cabbage, Brussels sprouts, and bok choy
- Seaweed
- Garlic, onions, and leeks
- Bone broth or soup stock, made the traditional way
- Blueberries and bilberries

Try to incorporate as many of these as possible into your diet.

How to Eat More Nutritious Food

Eating whole, fresh foods is a basic step. Yes, it takes a bit more effort, but consider the benefits: You can nourish your body and enhance your health and well-being each time you eat. As well as including the foods I've listed in *The Top Nutrient-Dense Foods*, there are a few other ways you can choose more nutritious options.

Organic produce has been shown to contain more nutrients without the same toxic chemicals as conventional produce.⁴ And grass-fed meat contains more nutrients and healthy fats than meat produced the conventional way.

There is also a movement to restore soil health and increase plant nutrients with regenerative agriculture — farming methods that replenish the soil. Research shows that this type of farming produces more nutritious food.⁵ You won't find food produced this way in major supermarkets, but you may in farmers markets and natural food stores.

It's also important to eat enough protein. For seniors, divide your weight in half and that's the total number of grams of protein to eat daily. For example, someone weighing 150 pounds would need 75 grams of protein.

If you're wondering about supplements, yes, they also help and I do recommend them. But before I talk about the most important ones, I want to discuss another pillar of healthy aging: mitochondria.

Mitochondria and Aging

Mitochondria are tiny components of cells that produce the energy needed for life. When mitochondria

are not healthy, cells can't function properly and are more likely to die — the aging process speeds up.

This manifests itself in many ways, including lack of energy, weak and shrinking muscles, an unhealthy metabolism that contributes to diabetes, poor posture, impaired brain function, and higher risk for heart problems, neurological diseases, and most other maladies we consider to be age-related.⁶

Fortunately, it's possible to restore health to mitochondria in two

ways: by avoiding the things that damage them and doing the things that nourish and enhance them.

Lack of nutrients, lack of exercise, stress, lack of sleep, toxins, and infections all contribute to the decline of mitochondria. Common infections, often ignored, include those of the urinary tract, gums and teeth, and sinuses. It's essential to get these treated.

Sources of Toxins

Medications are one source of toxins that are often overlooked. Among those that are widely used, some of the drugs in these categories are specifically known to be toxic to mitochondria: cholesterol-lowering statins, beta blockers for blood pressure, diabetes drugs, non-steroidal anti-inflammatory drugs for pain, antidepressants, antibiotics, and some cancer drugs.

Used correctly, drugs can save lives and are sometimes essential to treat a condition — antibiotics for an infection, for example. However, it's always imperative to weigh the risks and benefits and use drugs accordingly.

Lead, mercury, and arsenic are some other toxins we can be exposed to. Many people grew up in homes with lead paint, and some still live with it. Mercury can accumulate from eating high-mercury fish or from industrial exposures. Arsenic can come from tap water.

One other source of toxins is mold in water-damaged homes and other buildings. It's more common than you think, and some people are more sensitive to it than others.

Where toxins have accumulated, or there is ongoing exposure to them, this has to be remedied.

If you're wondering if this applies to you, I encourage you to take a look at two of my earlier newsletters — one about eliminating toxins and another about mold. These are listed in *Related to This Topic* on page 6. (There's also an earlier newsletter about how to get better sleep.)

Restoring Health to Mitochondria

There are two key parts to restoring health to mitochondria: exercise and nutrition. Nutrition, which I'll discuss in more detail in a moment, improves the function of all the mitochondria. Exercise increases the number of mitochondria in cells. This is quite remarkable.

To get a better sense of why exercise is so beneficial, imagine a cell being like a town. It needs power to light buildings and streets, to keep traffic lights working, to provide heat and air conditioning, and to support all the other conveniences we're used to. We all know what it's like when there's a blackout.

Imagine that town having one power station. When the weather is very hot or very cold, demand exceeds supply, and there's a high risk of blackouts. But what if there were more power stations? They could not only ensure a stable supply of energy but also have the capacity to support expansion of the town and its facilities — perhaps a new sports arena for local teams.

In your body, exercise produces more power plants in all the cells. This is the opposite of what happens in the so-called normal process of aging, in which the numbers of mitochondria decline.

Dr. Marlene's NATURAL HEALTH CONNECTIONS

Editorial Director Vera Tweed
Art Director Jody Levitan
Copy Editor James Naples

For subscriptions and customer service inquiries:
877-300-7849
support@primalhealthlp.com

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How to Exercise

All types of exercise are beneficial, but interval training is especially good for building more mitochondria.⁷ It's done by alternating the intensity of movement: doing spurts of higher intensity and lower intensity. You can apply this principle to different types of exercise.

For example, walk fast for one minute, then walk more slowly for one minute. Keep alternating speeds like this for a total of 10 to 20 minutes. You could follow the same pattern if you're riding a bike, running, swimming, or rowing.

Here's a tip if you're trying to lower your blood sugar: Doing a fast-slow walk for 10 minutes at a time, three times a day, is more effective than doing it once daily for 30 minutes or walking at a steady pace for 30 minutes.

If you prefer not to time yourself, you could walk fast for one block, or from one lamppost to the next, and then walk more slowly for the next block or to the next lamppost. The whole idea is to get your heart rate higher during the faster, more intense spurt, then give your body time to recover a bit, lowering the heart rate.

Exercise with a high heart rate is very beneficial, but it's hard to maintain, and doing it for too long can lead to injury or exhaustion. By alternating high and low intensity, you get the benefits without the downsides.

For optimal aging, you also need to do some exercise to maintain and build muscle.

Muscles and Aging

Without regular exercise, the amount of muscle in the human body — muscle mass — shrinks and is

replaced by fat. It's estimated that between the ages of 40 and 50, more than 8 percent of muscle can be lost. And after age 75, muscle mass can drop by 15 percent per decade.⁸

This loss of muscle leads to frailty and weakness, which discourages people from being more active and speeds up aging even more. Muscle loss increases risk for falls and contributes to high blood sugar and diabetes, high blood pressure, arthritis pain, heart disease, osteoporosis, and even dementia. And it's a major reason why seniors lose their ability to live independently.

The consequences of muscle loss can be so severe that the condition has its own medical term: sarcopenia. The name is derived from two Greek words: “sarx,” which means “flesh,” and “penia,” which means “loss.” But there's a bright side: It can be corrected with exercise.⁹

For people who are sedentary, a combination of adequate nutrition and a daily walk, progressively increasing the distance, has been shown to be effective in improving strength and function and adding some muscle.¹⁰ But weight training is the most effective way to strengthen weak muscles and build new muscle tissue.

Studies with older adults,¹¹ including men and women in their 90s,¹² have found that weight training dramatically improves strength and everyday function and increases healthy years of life.

3 Aging Tests to Do at Home

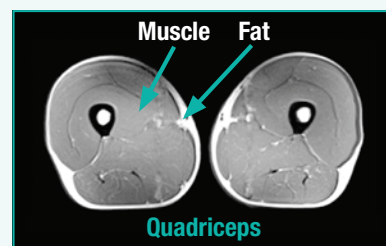
Over the years, researchers have found that some simple tests are a good indicator of our ability to function well and enjoy a long

life.¹³ Regardless of your score, you can do exercises to improve. You can try these at home.

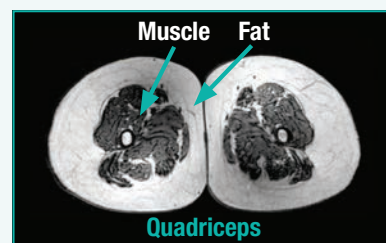
Chair Test: Start by sitting in a plain chair, the type you would have

Exercise, Aging, and Muscles

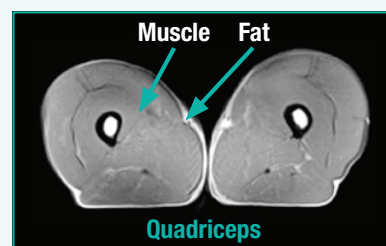
Muscle tissue declines with age, but exercise prevents muscle loss. These images, taken by researchers at the University of Pittsburgh, depict scans of thigh muscles, showing the difference in muscles of sedentary older adults and those who were triathletes.



40-year-old triathlete



70-year-old sedentary man



70-year-old triathlete

If you haven't been doing a significant amount of exercise throughout your life, don't get discouraged. It's never too late to strengthen and build some muscle, at any age.

at the table. Set a timer for one minute and count how many times you can stand up and sit down during the minute. For people in their 50s, standing and sitting 39 times for men, and 36 times for women, are healthy scores.

You can increase the strength of the muscles in your lower body, and improve your score, by doing the same exercise: standing up and sitting down in a chair. You don't need to time yourself; just do it as many times as you can, one or more times daily.

Balance Test: Set a timer for 10 seconds and see if you can stand on one leg, with your eyes closed, for that time period. If you know you aren't steady, try the test with your eyes open.

To improve your balance, do this daily: Stand on one leg for as long as you can, and then the other leg, with eyes open. Then, as you improve, do it with eyes closed.

Grip Test: Beyond helping you to open jars, a strong grip is an indicator of strength in your arms and shoulders, and it can help prevent falls by making it easier to grab on to a support when needed. Strong grip is also linked to lower risk of heart attacks and stroke.

If you know your grip is weak, exercises that include gripping and lifting weights can strengthen your grip and arm and shoulder muscles. You can hold cans, bottles, or milk cartons and do arm exercises, or use weights.

Grip strength can be measured with a dynamometer, a gadget that costs between \$20 and \$30. Some dynamometers can also be used to strengthen your hand and lower arm muscles. If you are motivated by

tracking numbers, a dynamometer may be a worthwhile investment.

Regardless of your current strength and balance, these tests can give you a baseline and serve as a marker for improvement as you progress. This can be motivating.

Stress and Aging

Stress can be physical, from an untreated infection or illness, an injury, or a poor diet, or it can stem from life situations. In today's culture, many people work long hours, never take a vacation, and don't manage stressful situations at home or at work.

Regardless of what triggers it, too much stress is harmful. It contributes to inflammation, disrupts hormones, and reduces our immune system's ability to resist illness.

Overall, stress speeds up aging.

Eating nutritious foods and getting some physical activity improve

your ability to deal with stress. It's also vital to manage work hours, take some vacations, and add some relaxing breaks to your schedule.

Each of us relaxes in a different way. Perhaps it's reading a novel, getting a massage or facial, going for a walk in a park, seeing friends, or just having a cup of tea. It's important to do what works for you.

Supplements for Aging Well

Supplements are not replacements for a healthy diet — which includes eating nourishing foods and managing carbs to achieve and maintain a healthy level of blood sugar — but we do need them. To fill nutrient gaps and nourish and protect your mitochondria and overall health, these are the most important ones I recommend:

- A multivitamin with up to 100 percent of the Daily Value (%DV in the Supplement Facts) of a

About Dr. Marlene

Dr. Marlene Merritt's passion for natural medicine is fueled by her drive to help others and by her own experience of overcoming a debilitating heart condition, diagnosed at the age of 20. A competitive cyclist at the time, she suddenly began experiencing severe chest pains. Forced to quit the sport, she suffered from fatigue and chest 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 degree and is board-certified in Nutrition, and is board-certified in Functional Medicine. She is certified in the Bredesen MEND Protocol™, a groundbreaking method of addressing Alzheimer's disease, and is a Proficiency Diplomate in the Shoemaker CIRS protocol for treatment of mold-related illness. She is the author of *Smart Blood Sugar* and *The Blood Pressure Solution*, and co-author of *The Perfect Sleep Solution*. After 31 years in private clinical practice, she now focuses on writing and educating health professionals and consumers to reach more people and positively impact their health.



variety of vitamins and minerals. A multi with higher doses of B vitamins can be beneficial.

- Extra magnesium, best taken as a powder added to a water bottle and sipped throughout the day, as large doses are not well absorbed. If you experience loose stools, you've taken more than your body can absorb; take a bit less.
- Fish oil, 1,000 to 3,000 mg daily.
- Vitamin D, best taken in a customized dose based on blood tests. Otherwise, take 5,000 IU daily. Vitamin D increases absorption of calcium. To make sure that calcium is used in bones, and doesn't become deposited in arteries, be sure to also take vitamin K2: 45 mg daily of an MK-4 form or 180 mcg of an MK-7 form.
- CoQ10, 100 mg to 200 mg daily, and up to 300 mg if you have heart disease or are at high risk for the condition. CoQ10 is an essential fuel for mitochondria. Statins

deplete CoQ10, so it's critical for anyone taking the drugs. However, CoQ10 is also vital for anyone who is over age 45.

A Special Nutritional Boost

Antioxidants are nutrients that mop up damage that occurs in the normal course of life — vitamins C and E are some well-known ones. Our body also makes antioxidants internally. Our chief internal antioxidant is glutathione, which is made in every cell.

Glutathione is essential for eliminating toxins and waste and protecting mitochondria against damage. Unfortunately, our natural production of glutathione drops with age, but it can be revitalized.

Two types of supplements, "liposomal glutathione," or "s-acetyl glutathione," can raise your glutathione levels. However, other glutathione supplements will not. You can also take 500 mg daily of a precursor of glutathione, NAC — short for N-acetyl L-cysteine — which has been proven to increase internal

glutathione production.¹⁴ Essential vitamins and minerals that I mentioned above and cruciferous vegetables are other key nutrients for our glutathione production.

A Final Word

If you take the steps I've described to age well in this and last month's newsletter issues, there are both short-term and long-term rewards. You can quite quickly feel more energized and vibrant. And consistently being well nourished and active will help you to enjoy a longer, more rewarding life.

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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
Aging Part 1	5	8	Essential Steps for Aging Well: Part 1
Healthy Blood Sugar	5	6	New Blood Sugar Dangers: What to Do
Multivitamins	2	8	Do You Really Need a Multivitamin?
Better Balance	5	5	How to Improve Balance and Prevent Falls
Sleeping Well	2	2	The 10-Minute Sleep Solution
Eliminating Toxins	1	7	The 21-Day Energy Restoration Plan
Mold Toxicity	2	11	Mold: The Hidden Trigger of More Than 40 Ailments

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



Say “Good Bye” to those Senior Moments

PREVENT, STOP, AND REVERSE MEMORY LOSS & DEMENTIA FOR LIFE!

“Within two weeks my memory came back, and the confusion I had experienced went away. It was a miracle.”

— Cathy D. Carson City, NV

Do you turn to jelly when you try to remember someone's name... someone you've known for a long time? Maybe it's suddenly asking yourself, 'WHERE AM I?' when you're at a store... or you have to take a few extra moments to add 100 to 75.

Perhaps you're suddenly feeling bored when you're the most excited person on the planet. Are you repeating yourself like a broken record? Maybe you don't seem like your normal super-focused self.

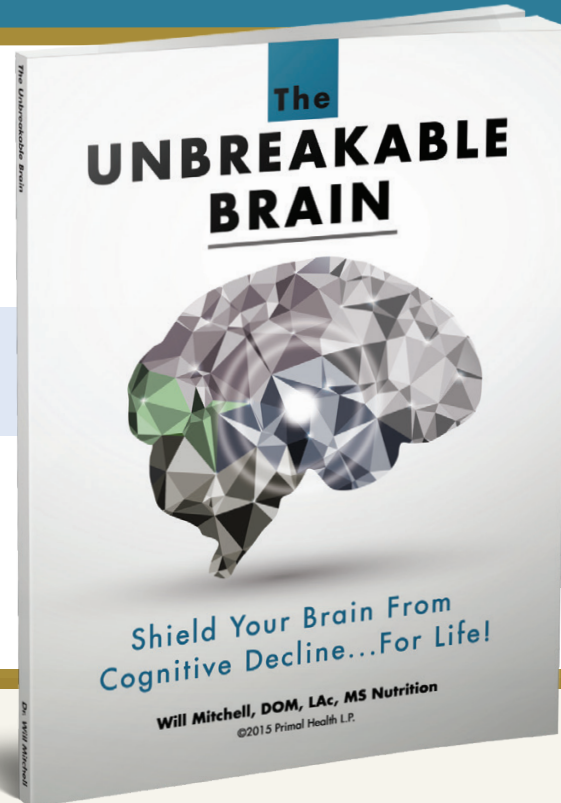
Yes—these are senior moments...and they are the first signs of dementia. The Alzheimer's Association recently admitted it, “Memory loss that disrupts daily life may be a symptom of dementia.”

How long will these “senior moments” continue? If you think memory loss will “go away” like a bad case of the flu... think again. They won't... unless you start taking some simple steps.

That is why world-renowned brain expert Dr. Will Mitchell has recently released his best-selling book, **The Unbreakable Brain**. This simple, but powerful 121-page book gives you a 28-day plan for brain health you can start right away. The plan gives you 7 powerful strategies you can easily adopt, and in the next 4 weeks, you'll be able to...

- Protect your brain
- Keep your mind razor-sharp for as long as you live
- And keep your independence by not spending your final days in a facility.

Here's what Cathy D. from Carson City, NV wrote to Dr. Mitchell after reading **The Unbreakable Brain**, “Within two weeks my memory came back, and the confusion I had experienced went away. It was a miracle.”



Yes—in just 2 week's Cathy's memory was back! Its results like this that have made **The Unbreakable Brain** a national best-seller. It's even popular in the medical community. Beverly C. from West



Renowned Health
Expert, Dr. Will Mitchell

Des Moines, IA wrote to say, “I took your book to my doctor's office, and he knew of it and said it was one of the best. My doctor is on board with this plan.”

Dr. Will Mitchell put everything you need to prevent and even fight dementia in this easy-to-read book. In addition to his 28-day plan to a sharper brain, you'll also find...

- 1 simple trick to finding the true cause of your memory loss—and how to fix it...
- 14 prescription drugs that kill your memory...
- 5 things your brain needs every day to super-boost memory...
- Complete list of inexpensive nutritional supplements that revive the brain...
- At-home test that reveals if you'll get full-blown dementia...

Over 180,000 copies **The Unbreakable Brain** have already been sold to folks like Dorothy from Shelton, WA. who said, “I am delighted with my results, and I would highly recommend this book to anyone struggling with memory problems as they age.”

Get your copy of The Unbreakable Brain today and protect your brain in just 28-days!

Get The Unbreakable Brain for Just \$27!
www.SimpleBrainFix.com/NHC2

Vitamin E: How to Get Enough

We think of vitamin E as a single vitamin, but in nature it's a family of eight nutrients. And we need nature's complete version for optimal health. I became aware of the power of the vitamin-E family years ago, when the right type of supplement literally gave me my life back.

You may know that at the age of 20, when I was a competitive cyclist, I suddenly started experiencing severe chest pains. I was diagnosed with a rare heart disorder and began taking the prescribed medications, but I continued to suffer from debilitating chest pains and fatigue — until I saw a physician trained in nutrition.

After a thorough examination, this doctor told me I was deficient in vitamin E. Surprised, I replied, "But I'm taking a vitamin E supplement." But my supplement contained only one form of vitamin E — alpha-tocopherol — and he recommended taking the complete family of vitamin E nutrients. I followed the advice, and a week later my symptoms disappeared.

Why Vitamin E Is Essential

Vitamin E is an antioxidant, meaning it protects our bodies against oxidation, a process much like rusting. This protection against oxidation leads to a variety of beneficial effects.

In arteries, oxidation can turn LDL cholesterol into a deadly form that leads to dangerous plaque. Vitamin E reduces this damage.

Vitamin E is essential for repair, healing, and good circulation. It enhances the delivery of oxygen

to your whole body and protects the membrane of every cell from damage. Our red blood cells, brain, and lungs need a lot of vitamin E. A deficiency of vitamin E leads to low fertility, slow healing, weakness, and muscle loss.

Our bodies can't make vitamin E, so we must get it from our diets.

Vitamin E Types

When vitamin E was discovered a century ago, only one form was identified: alpha tocopherol. This is the form that has been widely studied and measured in different foods, and it has been traditionally considered the only form that we need from our diets. Now, the rest of the vitamin E family is getting more recognition.

There are two groups of nutrients in vitamin E: tocopherols and tocotrienols. Each of these has four forms, named after Greek letters: alpha, beta, gamma, and delta. Eating foods that contain vitamin E is the best way to get these.

How to Get Enough Vitamin E

It's estimated that nearly 90 percent of Americans don't get an optimal amount of vitamin E, and those who don't take supplements are more likely to fall short.¹ I recommend eating a variety of foods that contain vitamin E to get the complete family of these nutrients. And for insurance, take a multivitamin with 100 percent of the Daily Value (% DV) of the vitamin, which is 15 mg. I don't recommend doses that are significantly

higher. The form of vitamin E in multivitamins is typically alpha-tocopherol, and food is the best way to get the additional forms.

Food Sources of Vitamin E

Top food sources of vitamin E include:

- Cold-pressed (not refined) seed oils such as wheatgerm, sunflower, safflower, and rice bran oils
- Sunflower seeds
- Nuts, including almonds, hazelnuts, pine nuts, and peanuts
- Nut butters
- Extra virgin olive oil



Good vegetable sources:

- Avocado
- Red sweet pepper
- Turnip, beet, and mustard greens
- Swiss chard
- Collards
- Spinach
- Broccoli
- Asparagus
- Tomato



Good meat and seafood sources:

- Abalone
- Goose meat
- Salmon
- Rainbow trout
- Shellfish



¹ McBurney, M.I., et al. "Suboptimal Serum α -Tocopherol Concentrations Observed among Younger Adults and Those Depending Exclusively upon Food Sources, NHANES 2003-20061-3." PLoS One. 2015 Aug 19;10(8):e0135510.

Fall Asleep Faster and Stay Asleep Longer!



Problems sleeping at night? Not anymore with Primal Labs' **SleepRefined®** and its unique "dual-release" technology.

SleepRefined® takes the proven better-sleep supplement melatonin to a whole new level of effectiveness.

Melatonin has been clinically shown to reduce the time it takes to fall asleep... improve sleep quality... reset your nighttime sleep cycle... and improve next-day alertness.

But typical melatonin clears out of your body quickly, so it may not work all night long.

Yet **SleepRefined®** provides two layers of melatonin to mimic "all night" melatonin production. The first 2.5 mg is released when you go to bed to activate your natural sleep cycle. Then, throughout the night, the remaining 1.5 mg is gradually released to help you sleep longer and deeper.

That's not all. **SleepRefined®** includes...

- **Suntheanine**, a proprietary form of the amino acid L-Theanine, found in green tea. Its "quick release" dose helps calm your mind and prepares it for sleep.
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Art Boosts Mental Wellbeing and Life Satisfaction

Being involved in the arts can enhance mood, overall mental wellbeing, and satisfaction with life, according to a study of more than 23,000 people in the United Kingdom. And you don't need any special talents or skills.¹



In fact, the study found, simply attending art and cultural events can reduce mental distress and boost life satisfaction. Such events can be art exhibits, performances, cultural festivals, or even a meeting of a book club where members discuss a novel they read. Participating in creating any type of art produced an additional benefit: better mental function.

The study that drew these conclusions surveyed people from all walks of life and ranging in

age from 16 to 101. The greatest benefits were seen among people who were involved in arts activities more than once a week. However, attending an art event even once or twice a year was linked to better mental wellbeing.

Online Art Benefits

In another study, European researchers found that viewing online art and cultural exhibits can also be therapeutic. Looking at images that are beautiful, even for a minute or two, can have an uplifting effect, reducing anxiety and loneliness and improving mood and wellbeing.

Many museums around the world offer free online art exhibits. One way to look at these is with Google Arts & Culture at <https://artsandculture.google.com>, which also lists exhibits in your area. Images of fine art aren't the only ones that can be uplifting. What matters is what appeals to you — what you find beautiful.

Viewing art online isn't a substitute for real-life activities that involve arts and crafts. But it's an option that can brighten your day.

Things to Do

Beneficial activities include:

- Reading books for pleasure
- Belonging to a book club
- Knitting
- Embroidery
- Singing in a choir
- Being part of a local theater or other amateur arts group
- Dancing
- Playing a musical instrument
- Taking part in a carnival or street arts event
- Painting
- Drawing
- Sculpting
- Photography
- Making videos
- Creating original art on a computer
- Woodworking, textile, and other crafts
- Writing stories, poetry, or plays

Events and exhibits to see include:

- Movies
- Arts and crafts fairs and exhibitions
- Art galleries and outdoor displays of art or sculpture
- Carnivals and cultural festivals
- Plays and musicals in local theaters
- Circuses
- Museums
- Musical performances of all types, from classical to rock and jazz
- Dance performances
- Events connected to books, authors, or writing

Sauna Enhances Exercise Benefits

Saunas have been popular for thousands of years. They increase circulation, reduce stress, ease pain, and improve sleep, immune function, and heart health. And a recent study found that exercise plus saunas can produce more benefits than exercise alone. People in the study did aerobic and resistance training for 50 minutes, three times per week. And some of them also spent 15 minutes in a sauna after each workout.

Health tests after eight weeks showed that those who added saunas after workouts had lower total cholesterol and blood pressure, and better heart and lung function.² Saunas are generally safe and therapeutic. But if you have heart disease, check with your doctor before starting a sauna program. And always make sure to drink plenty of water to replenish fluids lost from sweating in a sauna — stay hydrated.

1 Wang, S., et al. "Arts, mental distress, mental health functioning & life satisfaction: fixed-effects analyses of a nationally-representative panel study." *BMC Public Health*. 2020 Feb 11;20(1):208.
 2 Lee, E., et al. "The effects of regular sauna bathing in conjunction with exercise on cardiovascular function: A multi-arm randomized controlled trial." *Am J Physiol Regul Integr Comp Physiol*. 2022 Jul 4.

Doctors Are Time-Crunched

Primary care doctors today are typically too time-crunched to fully follow medical guidelines, according to a recent study by the University of Chicago. Doctors who are not working as part of a team would need to work nearly 27 hours per day to fulfill requirements of guidelines and paperwork. And those with a team would still need to work more than 9 hours per day.¹

Preventive care suffers the most from this time problem. So, it's no wonder that most doctors can't help their patients to make prac-

tical diet and lifestyle changes to improve their health. In addition, few are educated in nutrition.

If your doctor is an exception to our time-crunched healthcare system, be grateful. In any case, before seeing your doctor, be prepared with any questions or concerns you have so that you address what is important to you. Make sure that any advice or instructions you receive are clear and, if necessary, take notes.

Most important, recognize that it's mostly up to you to stay as healthy as possible. Medical tests



measure health markers, and you may get valuable guidance from your doctor when results arrive. But how you manage your lifestyle — in the direction of wellness or illness — is really in your hands.

3 More Reasons to Get a Vitamin D Test

If you've been reading this newsletter for a while, you know that I often mention vitamin D. The fact is, I've tested many patients' vitamin D levels and rarely found them to be optimal without adequate supplementation — even among people who live in climates that are sunny year-round. And the evidence supporting the benefits of vitamin D keeps growing.

I want to keep you informed. With that in mind, here are some findings of three recent studies:

- Compared to people with low vitamin-D levels, those with healthier levels have less chronic inflammation. Such inflammation underlies all of today's common chronic conditions, including diabetes, heart disease, joint problems, and neurological diseases.²
- Low levels of vitamin D are associated with smaller brain volume and higher risk for dementia.³
- In people with fibromyalgia, correcting low levels of vitamin D helps to reduce debilitating pain.⁴

In looking at these results, there's an important point to keep in mind. In these latest studies, as in many

earlier ones, researchers compared the effects of lower and higher blood levels of vitamin D. And higher levels are better — to a point.

There is an optimal level of vitamin D, around 50 ng/mL. However, the amount of vitamin D an individual needs to take to achieve and maintain that level will vary. It depends on your diet, sun exposure, and genes.

I've found that 5,000 IU daily works well for many people, but the best dose is one that is customized for you. And with high doses, you also need vitamin K2 and magnesium to enable your body to utilize vitamin D properly.

If you get tested and start taking vitamin D supplements, it's also essential to get retested in three to six months. Then adjust the dose if needed, and retest in another three to six months. Keep doing that until you reach a blood level around 50 ng/mL. And then, keep taking your vitamin D dose and get retested annually to make sure you maintain an optimal level.

This testing approach is the most reliable way to achieve a healthy blood level of vitamin D. Some doctors will include a vitamin D test in an annual physical, but you may need to request it.

¹ Porter, J., et al. "Revisiting the Time Needed to Provide Adult Primary Care." *J Gen Intern Med.* 2022 Jul 1. ² Zhou, A., et al. "Vitamin D deficiency and C-reactive protein: a bidirectional Mendelian randomization study." *Int J Epidemiol.* 2022 May 17;dyac087. ³ Navale, S.S., et al. "Vitamin D and brain health: an observational and Mendelian randomization study." *Am J Clin Nutr.* 2022 Aug 4;116(2):531-540. ⁴ Lombardo, M., et al. "The Efficacy of Vitamin D Supplementation in the Treatment of Fibromyalgia Syndrome and Chronic Musculoskeletal Pain." *Nutrients.* 2022 Jul 22;14(15):3010.

Q&A

Q: Can diet help with depression or feeling mentally foggy?— Jake P.

A: In a nutshell, yes. There is a connection between the digestive system and the brain. I've had patients who resolved their depression and/or mental fog by making the right dietary changes.

If your diet is causing inflammation in the gut, it can trigger inflammation in the brain and nervous system, which can lead to symptoms like those you describe. Reducing gut inflammation can reduce the brain inflammation and perhaps alleviate some symptoms.

Gluten intolerance causes gut inflammation and can trigger or contribute to brain fog, depression, attention problems, and neurological diseases. This isn't an allergy, where a food produces an immediate reaction, such as hives or anaphylactic shock. An intolerance, or sensitivity, is a more subtle reaction that can take place up to a few days after you eat the food. If you keep eating gluten — which is plentiful in our food supply — it perpetuates the reaction.

The best way to tell if gluten could be causing your symptoms is to stop eating gluten for at least four to six weeks. That may not be long enough to resolve symptoms, but if you feel a bit better while avoiding gluten, it's a sign that you should keep avoiding it.

The most obvious sources of gluten are wheat and most other grains in baked goods, including breads, pizza crusts, cakes, cookies,

pasta, pretzels, and other snack foods. But gluten is also added to many other foods, such as sauces, dips, and canned soups. It should be listed as an ingredient.

I cover gluten in more detail in an earlier issue of this newsletter, Volume 2, Issue 3, *How Gluten Can Cause More Than 30 Health Conditions*. I encourage you to take a look at it. While I can't say that gluten intolerance is definitely causing a problem for you, it's common enough that I do recommend you consider it.

Nutritional deficiencies can also underlie the symptoms you mention. Liver is an especially nutrient-rich food we should all eat. Liver pills are another option. Fatty fish, such as salmon and sardines, are another important source of helpful nutrients.

There's also a known association of gut bacteria and brain health. A healthy balance of microorganisms in the digestive system can improve function of the brain and nervous system. As well as providing many nutrients, leafy green and brightly colored vegetables contain fiber that is essential for healthy gut bacteria. In addition, I recommend eating some foods that are fermented with live cultures, which should be noted in the ingredients lists of pickles, other fermented vegetables, and yogurt.

Q: Is tapioca syrup a healthy sweetener? Do I need to count it in my daily carbs? — Roberta P.

A: Tapioca syrup is a type of sugar, and your body treats it like any other sugar. So, yes, you should

count tapioca syrup as part of your daily carbs.

Tapioca syrup is touted as a healthier alternative to sugar because it may have somewhat fewer calories and carbs than regular table sugar, depending on how it's processed. However, this is not true of all tapioca syrups, as some can be higher in carbs when compared to regular sugar.

Tapioca is made from cassava root, which contains only starch — no protein or fat. In South America, where the cassava plant natively grows, tapioca is a common source of carbohydrates in traditional diets. Tapioca syrup, on the other hand, is not a traditional food but is a processed sweetener used in processed foods.

By the way, coconut sugar is also incorrectly promoted as a healthy sugar alternative, but as with tapioca syrup, it's metabolized just like regular sugar. If you're looking for a natural sweetener without carbs, I recommend stevia, monk fruit, or xylitol.

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.