Dr. Marlene's NATURAL HEALTH CONNECTIONS



VOLUME 3 | ISSUE 9

CONTENTS

Lack of Essential Nutrients2
Inflammation and Immune Function3
Diet Basics for Healthy Immune Function6
Diabetes and the Immune System7
Energy and Immune Function
Lungs and Immune Function8
Supplement Snapshot8
Why Dancing Beats Other Types of Exercise 11
Can Insulin-Producing Cells Regenerate?12
Do You Really Need to Eat Saturated Fat? 12



The Guide to a Healthy Immune System for Life

How to shore up your defenses against colds, flu, and other contagious illnesses — and if you're already resilient, how to maintain good health.

Some people get sick more easily than others, and at any age symptoms vary a great deal from one person to another. A cold, while not usually deadly, can be debilitating. Flu can turn into life-threatening pneumonia, and even more deadly viruses, such as COVID-19, can strike.

Fortunately, there are steps you can take to reduce your odds of falling prey to harmful bacteria and viruses, and should you become infected, to lower your risk of serious complications. If you're currently healthy and resilient, the same steps will help you stay that way.

You probably know that the immune system is your guardian against infectious bugs, but that same system does a lot more than most people give it credit for. In addition to acting as a soldier to defend against pathogens, it's also a highly skilled janitor, performing continuous maintenance functions around the clock.

If your diet, lifestyle, and medical conditions require the immune system

to do extra maintenance work, this depletes the system's resources to fight pathogens. And then, you're more likely to get infections and suffer worse symptoms.

Understanding what helps or harms your immune system is the first step to improving its performance and boosting your own resistance to harmful bacteria and viruses. And the same actions will enhance your overall health and vitality.

Top Detractors

Health conditions that put more stress on your system reduce the immune system's ability to protect you. These include high blood sugar, high blood pressure, diabetes, excess weight, heart disease, chronic fatigue, arthritis, poor sleep, lack of

IN THE NEXT ISSUE: The Painless Protocol for Healthy Teeth and Gums

exercise, anxiety, and any type of autoimmune disease.

Each of these is a stressor on your immune system. The overall impact depends upon the combination of stressors. In some cases, there's a major one such as type 2 diabetes. In other cases, there can be a mix of more subtle stressors, such as poor nutrition, lack of sleep, lack of exercise, low energy levels, and blood sugar that's elevated but not high enough to be classified as diabetes.

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Addressing all these can be a complicated process. To simplify, start by addressing three underlying triggers of virtually all nonoptimal health conditions and poor immune function: lack of essential nutrients, inflammation, and low energy production.

The good news is that correcting these underlying issues produces multiple benefits. While improving your resistance to infectious diseases, you will also enhance your ability to prevent or get relief from other health problems.

Lack of Essential Nutrients

Most of us are not starving, but there is a common condition that's technically called "subclinical malnutrition." It basically means that levels of essential nutrients are below the level that would give you optimal health.

Keep in mind that "optimal" is a much better state than "not sick." You may not have any diagnosable condition, but that doesn't mean your body is performing at its best. And this difference can be the dividing line between catching or avoiding a contagious disease.

If you have a minor shortfall of essential nutrients, here's what happens: Your body uses the available nutrients for its most important immediate needs short-term survival.1

Why a Virus Can Be Highly **Contagious and Deadly**

The immune system has two basic parts. These work together, but each has some unique characteristics.

Innate Immunity

This part of the immune system begins to develop in the womb and provides general defense against pathogens. It includes the physical barriers of the skin and mucous membranes in the nose, mouth, and other body openings, and immune cells in the blood and other bodily fluids.

The innate immune system provides the first level of defense. Although it stops many pathogens, it doesn't stop all of them.

Adaptive Immunity

The adaptive immune system is the second level of defense that kicks in if the innate immune system fails. It turns on more slowly and targets pathogens more precisely, producing antibodies to destroy specific viruses. And it has a memory.

The adaptive immune system

is the reason that some viruses, such as measles, can infect you only once. Once this part of the immune system identifies the specific virus, it can build antibodies that provide lasting protection. But this doesn't happen with all viruses.

Some viruses mutate or exist in many variations, and it's impossible for the adaptive immune system to build a targeted defense. The common cold, for example, can be caused by hundreds of different viruses, which is why we repeatedly catch colds.

The Danger of New Viruses

When a dangerous virus appears in our environment for the first time, the immune system isn't equipped to deal with it. This is why the Spanish flu was highly contagious and deadly a century ago, and why COVID-19 is now a major health threat.

For example, your blood contains red cells and white cells. Red cells help to transport oxygen from the lungs to the rest of your body and then bring carbon dioxide back to the lungs so that it can be exhaled. If this doesn't happen, you'll quickly die, so it's a top short-term priority.

White blood cells fight pathogens, but if they aren't nourished at this moment, you aren't likely to die right away — at least not as quickly as you would without oxygen. So, when nutrients are in short supply the white blood cells get short-changed.

This assignment of priorities inside your body is a workable survival strategy. But if you routinely lack essential nutrients, your white blood cells will never get enough and will not be able to respond effectively when you encounter pathogens. Consequently, you're more likely to catch a contagious disease.

Important Nutrients

One example of a nutrient that is essential for immune function is zinc. Many people reach for zinc lozenges when they catch a cold, and the supplements do help. But what matters for protection is the level of zinc in your system before pathogens attack. If you routinely get enough zinc, you are less prone to catch a cold or other infectious disease in the first place.

This doesn't mean that you need mega doses of zinc, but it does mean you need to get enough. And we're more likely to fall short as we get older.

In addition to zinc, vitamins and minerals that are necessary for proper immune function include

B vitamins; vitamins A, C, D, and E; and selenium and copper. You might be thinking that a multivitamin would provide most of these, and you're right.²

I recommend taking a multivitamin with between 400 and 800 micrograms (mcg) of folic acid and a combination of vitamins and minerals. In addition, get a daily total of 5,000 international units (IU) of vitamin D. You will need a separate vitamin D supplement, as a multivitamin will not contain enough.

Inflammation and **Immune Function**

I've mentioned chronic inflammation many times in this newsletter and in my books. And you've probably heard other health experts talk about it as an underlying cause of many ills, from heart disease and diabetes to arthritis and Alzheimer's.

How does this relate to your immune system? Your immune system regulates inflammation.

Think about that for a moment. The common thread that underlies our most prevalent modern-day chronic diseases is inflammation. And the immune system controls that inflammation.

Inflammation is easy to see when you cut your finger and the area around the cut turns red. You know it's a reaction to the injury. In fact, the inflammation is a sign that your immune system turned on healing processes and your body is working well in that area to heal the cut.

Chronic inflammation isn't visible in the same way because it's happening inside your body, so it may be difficult to connect with specific symptoms. And it may not seem obviously related to actions vou take or don't take in your life — but it is.

Patient Experiences

One of my new patients came to see me because her blood sugar was elevated and was getting close to the diabetic level. Her doctor had warned that if her

External Protection Against Infectious Diseases

Building up your internal defenses is the best protection against all types of pathogens, but when there's an outbreak of a contagious disease, it also makes sense to limit your exposure to the virus.

Think of it this way: A human being can be exceptionally strong and able to lift hundreds of pounds of weight or even pull a car along for some distance. But if that person was standing at a crosswalk and a truck was coming their way, they wouldn't step out in front of the truck to stop it. Rather, they would wait until the truck passed before crossing the road.

In the case of COVID-19, experience has shown that social distancing and wearing a mask significantly reduce spread of the disease. When venturing outside your home, it's safest to avoid large groups, to stay at least 6 feet from others, and to wear a mask when that isn't possible or when you're indoors with people who are not part of your household — in stores, for example.

blood sugar rose a bit more, she would need medication for the rest of her life, and she wanted to explore other options.

When I asked about her diet, I discovered a common error. After the doctor's warning, she decided to cut back on fat and increase whole grains —cereal with nonfat milk for breakfast instead of eggs, for example.

A new test of her blood sugar showed that it had risen even higher. This didn't surprise me, as the well-intentioned effort to eat a "healthy" diet had misfired. The low-fat approach had increased carbs and sugar, and that's what drives up blood sugar.

Delving into this patient's earlier diet — before the low-fat version — I learned that she had been eating more fat but also a lot of starchy carbs such as pizza, bread, and pasta, plus cookies and sugary sodas. She needed to change to a low-carb way of eating.

After following my low-carb dietary recommendations (which I'll describe in a moment), the patient's blood sugar dropped significantly and there was another effect: reduced chronic inflammation. "My hands don't hurt anymore," she told me, quite surprised.

This patient had come for help with blood sugar because she didn't want to depend on medication for the rest of her life. Arthritis in her hands had been there for such a long time that she didn't expect it to resolve — until it was gone.

I've had other patients who adopted my low-carb dietary recommendations because they wanted to lose weight or lower their blood pressure, and they attained those goals. And later, they suddenly realized that an entire cold and flu season had gone by and they hadn't been sick, although they used to catch at least one cold every year.

The Worst Diet for Your Immune System

A diet high in starchy carbs and sugar — the most popular type of diet in this country — is the most basic trigger of inflammation. It's like a switch that turns on inflammatory processes and reduces your resistance to infectious diseases.

We know that carbs raise blood sugar. To impair your immune system, the level of blood sugar doesn't need to be high enough to be classified as diabetes, although the higher levels in diabetes make things even worse.

Why is this bad for your immune system? High sugar

levels damage proteins that are part of the structure of your body. It's a process called "glycation" (pronounced "gly-KAY-shun"), in which sugar molecules attach themselves to proteins and injure those proteins.

The immune system reacts in the same way as when you cut your finger. It turns on inflammation to help heal the injury. But in this case

- and here's the most harmful part
- the injury doesn't stop.

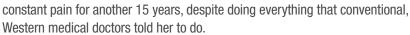
A habitual high-carb diet keeps blood sugar elevated. The excess sugar in the blood keeps the glycation process going, and proteins in your body keep getting injured. Consequently, the immune system keeps generating inflammation to heal the damage.

The ongoing task of repairing proteins injured by high blood sugar keeps the immune system continuously occupied — perpetually dealing with damage from what you're eating. As a

(Continued on page 6)

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



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, $^{\text{M}}$ 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*.



Get Back Out There..

STOP LETTING FATIGUE AND LOW-ENERGY ROB YOU OF THE ACTIVITIES YOU ENJOY!



Do you feel drained all the time, unable to do the things you love because you have no energy and no motivation?

Do you feel tired and run down... like you're running on empty, even when you get plenty of sleep?

If you're not living the active, fun-filled life, you were meant to live, please pay close attention: You can now get your energy back, boost your mental clarity, calm your nerves and enjoy all-day endurance that will make your life fun again!

That's why I'm excited to introduce the safe and natural energy booster designed for people just like you...

It's called, ActivAdapt Energy Drink Mix.

There's truly nothing else quite like it on the market today because one of its ingredients has been proven in a double-blind study to increase energy by 107% within 60 minutes. And even better, this caffeine-free boost of energy lasted 5 hours WITHOUT increasing heart rate or blood pressure!

ActivAdapt is an easy to use drink mix that contains 6 powerful nutrients to help you regain your energy, strength, and stamina:

EnXtra is a brand-new, patent-pending extract from Alpinia Galanga, a plant in the ginger family. It's a safe, natural energy-boosting compound that boosts energy levels by 107% and lasts 5 hours!

Rhodiola Root Extract boosts energy levels by increasing ATP, the "energy molecule" inside your cells. Rhodiola has been used by astronauts and military personnel to increase energy levels, boost alertness and sharpen mental focus during long missions.

Schizandra Berry increases endurance and working capacity under stress. Researchers have also found it enhances your reflexes and mental sharpness while calming you down if you're feeling anxious.

Ginseng is well studied for boosting brain function and short-term memory while promoting calmness. A new analysis published last year confirms it also reduces fatigue after exercise and physical activities.

Matcha extract is from a special form of green tea loaded with EGCG, a potent antioxidant that helps flush dangerous toxins from the body—while its amino acids promote a state of relaxation and well-being.

Palatinose is unique because it provides your body with a slow, steady release of energy with no spike in blood sugar—which helps keep insulin levels low. It delivers more energy and increases fat burning.

Here's how **ActivAdapt** works...

Simply add one scoop to water, stir, and it dissolves quickly and easily.

It's caffeine-free and only contains 20 calories. You'll notice a substantial change in your physical and mental energy almost immediately after you drink it... with no jitters, no increased heart rate, no blood sugar spikes, and absolutely no crash.

ActivAdapt is ideal if you want to regain your energy and feel more vibrant and alive than you have in years...

- · More physical energy, strength, and stamina
- · Increased mental energy and focus
- · Greater concentration and better moods
- · Deeper, more restorative sleep
- · Lower levels of the stress hormone cortisol
- Enhanced weight control, and fewer sugar and carb cravings

It's time to get back out there and start enjoying the activities you've always loved—and with the help of **ActivAdapt**, it's never been easier. Boost your energy levels, bust stress, banish brain fog, and stop fatigue, while increasing your concentration, attention, and mood.

Get Your Bottle of ActivAdapt Today and Start Living the Life You Were Meant to Live!



Get ActivAdapt Today! www.GetActivAdapt.com/NHC2 result, that immune system has fewer resources to protect you from harmful bacteria and viruses.

Insulin Resistance and Infections

Before blood sugar begins to rise, there is an earlier malfunction that is typically not looked for in routine health checks: insulin resistance. It's a precursor to elevated blood sugar.

After you eat carbs, and blood sugar naturally rises, insulin is the hormone that is secreted to turn the blood sugar into usable fuel in vour body. An overabundance of carbs makes cells less sensitive to insulin, or insulin resistant.

The normal amount of insulin can't get the blood sugar absorbed by the cells that need it as fuel. To compensate, extra insulin is secreted to try to overcome the resistance. This leads to elevated levels of insulin.

Testing insulin levels is something I do, and there are progressive integrative medical doctors that test it. But insulin testing is rare, despite the fact that it can identify the diabetespromoting process at an earlier and more reversible stage than traditional blood-sugar tests.

After a while, even higher levels of insulin can't control blood sugar, and levels rise. Insulin resistance and elevated blood sugar reduce the effectiveness of the immune system.

A study at Stanford University proved this in a group of 106 people. Some were healthy, while others had insulin resistance and elevated blood sugar but were not classified as diabetic. They were monitored for four years,

Diet Basics for Healthy Immune Function

The diet I recommend for a healthy immune system and overall good health is low in carbs but practical, and it can be followed as a routine way of eating. It isn't extreme and it doesn't exclude entire categories of food, but it does call for limiting the major sources of excess carbs and sugars, such as grains, corn and its byproducts (including syrup), potatoes, and foods and drinks with added sugar.

I cover the details in earlier issues of this newsletter (see *Related to This Topic* on page 9 and start with *The Guide to Healthy Eating*), but I'll give you some key points to get you started.

Most important, aim to eat food prepared from scratch instead of from packages, and avoid fast food. At the same time, focus on eating plenty of fresh vegetables, healthy fats, and some protein.

Instead of this:	Eat this:
Cold cereal and low-fat milk	Eggs and spinach sautéed with coconut oil
A sandwich of cold cuts	A salad or roasted vegetables with some grilled salmon
Mac and cheese	Slow-cooked meat in a broth with a variety of brightly colored vegetables
Pretzels, chips, or popcorn as a snack	A handful of nuts or a tablespoon of nut butter with a piece of celery or a couple slices of an apple
Cookies after dinner	An ounce of chocolate made with cocoa butter and at least 70% cocoa

Here are some substitutions for individual ingredients and cooking methods:

Instead of:	Eat or cook with:		
Deep frying with vegetable oil	Sauté with pasture-raised butter, extra virgin olive oil, or coconut oil, or steam		
Potatoes or corn	Non-starchy vegetables, such as:		
	Spinach Broccoli Swiss chard Beet greens Collard greens Asparagus Kale	Red, orange, or yellow bell peppers Carrots White, orange, or purple cauliflower White, yellow, or red onions Brussels sprouts	
Bottled salad dressing with vegetable oil and added sugar	Extra virgin olive oil and vinegar mixed with crushed or chopped fresh garlic		

and blood samples were taken at various stages, including times when they caught a cold or flu.

Researchers found that the immune systems of healthy people responded normally to fight a viral respiratory infection. However, the immune systems of people with insulin resistance were deficient; there was only a low level of activation of the body's defense system.³

Diabetes and the Immune System

Diabetes is known to slow the healing of wounds and increase risk for infections of all types. Infections range from viral and bacterial respiratory illnesses to bacterial infections at the sites of injuries, such as minor abrasions and foot ulcers. In addition, some infectious bugs are more virulent in the presence of high levels of blood sugar.⁴

Studies have found that inflammation, which drives type 2 diabetes, is generated by the immune system in response to high blood sugar, and by fat cells.⁵ Excess body weight accompanies most cases of type 2 diabetes.

Research also shows that the glycation I mentioned earlier
— sugar harming proteins and triggering chronic inflammation
— sets off various harmful internal processes. These alter the immune system and suppress its protective functions.⁶

More Ways to Tame Inflammation

Exercise and sleep are vital to control inflammation, and they help your immune system to work more efficiently. With exercise,

some degree of inflammation is beneficial, as it triggers repair and rebuilding processes that lead to stronger bones and muscles. However, when there's too much exercise or the activity is too intense, inflammation levels become harmful.

I recommend a variety of activities, including walking or other aerobic exercise, weight training, and yoga or tai chi. You should feel revitalized. If you feel exhausted instead, you're probably overdoing it.

Adequate sleep allows all the systems in your body to regenerate. One side effect of insufficient sleep is elevated cortisol, the stress hormone, which raises inflammation levels.

Energy and Immune Function

Energy is used not only to power conscious actions — from getting out of bed in the morning to running a marathon — but also to carry on all the internal processes that keep you alive and to maintain and repair your body.

When your lifestyle and medical conditions require continuous repair, those repair processes consume too much energy, and there isn't enough left over to power all the functions of your immune system. And then, the immune system can't function as it should to protect you, leaving you in a vulnerable state.

How Energy Is Produced

Your body does a lot of work to produce energy in every cell. It's easy to underestimate just how much work goes on, around the clock. To give you a sense, I'm going to describe some of the continuous activity in a cell.

After you eat and the food is broken down, it goes through a series of processes to be converted into energy. In most cells, energy is produced by mitochondria, parts of a cell whose main job it is to produce energy to keep that cell alive and functioning well.

Once the energy is generated by the mitochondria, it's instantly captured in a molecule called adenosine triphosphate — ATP for short. And then, the ATP acts as a shuttle that delivers the energy to other parts of that cell, wherever fuel is needed at that moment.

This process happens very quickly. Each ATP molecule lasts only a few minutes between the time the energy is produced and

CAUTION

Food Sensitivities Impair Immunity

I've had patients who knew that they couldn't tolerate certain foods, such as dairy or gluten, but they continued to eat these foods and suffer. This is not a good idea because the adverse reaction triggers inflammation and stresses the immune system.

An offending food is sometimes a staple, such as bread or cheese. Changing longstanding habits can be difficult, but it's worth the effort.

The trick is to forego the reactive food for long enough to allow your system to calm down. You'll know this has happened because you will feel better. Once the benefit is obvious, I've found that my patients are glad to be rid of their old habit.

the time that it is used. This means that the mitochondria need to be performing at their best, as they must continuously produce new energy in the form of ATP.

Mitochondria Work Hard

To give you a sense of how much ATP is produced, it's estimated that if you were to add up all the molecules of ATP generated in a day, the total would weigh about as much as your whole body. Keep in mind that ATP is continuously being used up almost as quickly as it is produced, so you don't carry that extra weight around with you.

The main point I'm making is that your body continuously needs a lot of energy. If mitochondria are not working optimally, the supply of ATP falls short, and this inhibits the normal function of the cell.

Low energy production means your white blood cells — your defenders — don't have enough energy to do their job of identifying and defeating pathogens. In other words, your immune system is performing below par.

How to Enhance Mitochondria

As we get older, the performance of the mitochondria gradually declines. This is a major reason why we become more prone to infections and chronic diseases.7 But this decline can be slowed and the performance of the mitochondria can be improved by consuming the right nutrients and eliminating damaging toxins.

Key nutrients for mitochondria include CoQ10, short for coenzyme Q10. It's a vitamin-like substance that your body makes,

but levels decline as you get older. Organ meats are the only rich food source of CoQ10; since most people don't eat these, supplements of CoO10 are the most practical source. I recommend taking 100 to 200 mg daily.8

CoQ10 is also an antioxidant. This is important because oxidation is another type of damage that occurs with chronic inflammation. Oxidation prompts a chain reaction of structural damage to cells and the mitochondria within them. As an antioxidant. CoQ10 helps to stop that reaction and restore cellular structure.

It's a well-known fact that statin drugs deplete CoQ10, and this depletion may contribute to the common statin side effect of muscle weakness. Anyone taking statins should definitely supplement with CoQ10.

Other Nutrients

Other essential nutrients for healthy mitochondria, energy production, and immune function include B vitamins and other essential vitamins and minerals in a multivitamin. (See the Supplement Snapshot on the right.)

Toxins Harm Mitochondria

Toxins are a major reason why mitochondria may be unable to generate enough energy. A major toxin is mold in homes and work environments. See Related to This *Topic* on page 9 for an earlier newsletter issue that explains different ways mold can affect you and what to do about it

When to Get Help

If you experience chronic fatigue or have been diagnosed with

fibromyalgia, these are signs that your mitochondria are not functioning optimally. If you follow my suggestions and don't get relief, there are other issues that need to be addressed, based on your individual situation and history. In such a case, I would recommend working with a practitioner who addresses underlying causes.

Lungs and **Immune Function**

If you routinely or often have a problem with mucus in your respiratory system, this is another detractor from good overall immune function. Try skipping dairy products, which are a common trigger.

There are also a few other

Supplement Snapshot •

Along with a whole-food, low-carb diet, these supplements can help your immune system to function well.

To prevent nutritional deficiencies: A multivitamin with 400 to 800 mcg of folate and a variety of vitamins and minerals. In addition, take extra vitamin D for a daily total of 5,000 IU.

To enhance energy production: 100 to 200 mg daily of CoQ10

For healthy lungs: 500 mg daily of n-acetyl cysteine (NAC)

For mucus or other respiratory **problems:** Take the above plus 0.5 to 3 mg of melatonin before bedtime.

For respiratory infections: Take the above and 500 to 1,000 mg of liposomal glutathione daily.

remedies. You can clear sinuses with a Neilmed nasal spray or irrigation system. Or put some eucalyptus in boiling water and inhale the steam, with a towel over your head.

A few supplements can also help. Melatonin, taken before bedtime, not only helps you sleep but also decreases lung inflammation. And 500 mg daily of n-acetyl cysteine (NAC) is good for the respiratory system, especially since we are all exposed to air pollution. NAC is a precursor to glutathione, the master antioxidant in our bodies.9

If you get a respiratory infection, I suggest also taking 500 to 1,000 mg of liposomal glutathione daily.¹⁰ This is an absorbable form of glutathione in a supplement that will help your body heal.

Toxins can be a trigger of respiratory discomfort. Common ones include fragrances and other chemicals in skincare and household products, and mold in your environment. Air pollution is another irritant

Autoimmune Conditions

Any autoimmune condition, such as rheumatoid arthritis or psoriasis, means your immune system is mistakenly identifying and attacking something in your own body as though it were an invader. When such a condition exists, I always see low white blood cell counts on blood tests, which indicate a poor ability to fight actual pathogens.

An autoimmune condition is triggered by some type of ongoing insult. It could

NATURAL HEALTI-CONNECTIONS

be a reaction to a specific food, such as gluten or dairy, or a reaction to the high-carb Western diet that's rich in unhealthy fats.

If following the type of diet and lifestyle I recommend doesn't help you, I suggest working with a practitioner who takes a holistic approach to identify and correct the underlying trigger.

A Final Word

An individual's ability to resist infectious diseases depends upon how many different nonoptimum conditions are present at a given time. By getting essential nutrients, taking the steps that keep inflammation at an optimum level, and enhancing your body's ability to produce energy, you can improve your immune function and other health conditions.

It's really a win-win result, because it protects you against the two biggest health threats: infectious diseases and chronic illnesses such as diabetes and arthritis.

Related to This Topic

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

Related Topic	Volume	Issue	Title
Multivitamins	2	8	Do You Really Need a Multivitamin?
A Healthy Low-Carb Diet	1	8	The Guide to Healthy Eating
Healthy Carbs	3	6	The Diabetic's Guide to Eating Carbs
Diabetes	3	2	The Diabetic's Guide to Eating Meat
Energy	1	7	The 21-Day Energy Restoration Plan
Blood Pressure	2	9	4 Steps to Healthy Blood Pressure
Gluten	2	3	How Gluten Can Cause More Than 30 Health Conditions
Arthritis	2	5	The 90-Day Program to Relieve Arthritis
Mold	2	11	Mold: The Hidden Trigger of More Than 40 Ailments
Viral Infection	3	5	How to Protect Yourself During a Pandemic
Colds and Flu	2	10	Real Flu Prevention: With or Without a Flu Shot

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

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Is your memory getting worse?

If you're over 50, chances are your brain isn't functioning like it did in your younger years.

This isn't surprising. In fact, the Centers for Disease Control warns that over 16 million Americans now live with cognitive impairment. This includes not only memory problems, but also difficulty in learning new things, concentrating, and making important decisions.

Unfortunately, age is the greatest risk factor for cognitive impairment. By age 65, 40% of folks in the U.S. have age-associated memory issues. So as the years go by, it wouldn't be unusual for you to forget things. Or notice how difficult it is to stay focused during a conversation or TV program.

But I have good news. It doesn't have to be that way...

Primal Labs is proud to introduce **CogniForce**, a ground-breaking nutritional supplement for optimal brain support.

CogniForce is an easy-to-swallow gel cap containing 10 powerful nutrients to help you improve cognitive function, memory, and brain health:

- Ginkgo: Improves blood flow to the brain. This supports memory, mood, and focus — and exerts a positive effect on the brain's processing speed to help avoid "senior moments."
- L-theanine: This amino acid stimulates brain neurotransmitters to boost concentration and mood — and promote relaxation.
- Acetyl-L-carnitine: Research shows this amino acid can significantly improve memory and focus — and lift you out of those occasional "blue moods."
- ▼ The B vitamins riboflavin, vitamin B6, folate, and B12: Studies show these crucial vitamins help prevent the brain shrinkage many people experience as they grow older.
- ✓ **Sensoril®:** This patented extract of the ancient Ayurvedic herb ashwagandha helps lower cortisol the stress hormone.

- L-tyrosine: Another amino acid crucial for production of brain neurotransmitters involved in memory and cognition.
- ✓ Bioperine®: Patented extract of black pepper fruit helps improve absorption of nutrients.

Today, people from all walks of life are protecting their brains with **CogniForce**. Here's what a few of them had to say:

"I have been taking **CogniForce** for about 5 weeks now. I noticed a positive result fairly early. I am feeling more alert and better able to handle tedious work that used to overwhelm me."

Lee Miller from Austin, TX

"I started taking **CogniForce** fifty-two days ago, and my own forgetfulness has slowed down."

- Hayley Burns from Richmond, VA

"I've been taking **CogniForce** just a little over a month now, and it has helped me improve my thinking and mood swings."

- Barbara Sherwood from Leesburg, FL

If you want to maintain your memory and protect your brain into your 60s, 70s, 80s and beyond... the time to do it is NOW. Join thousands of satisfied users experiencing the brain-boosting effects of **CogniForce**.

We're so confident in the brain and memory-supporting power of **CogniForce**; we offer a 60-day **RISK-FREE** 100% money-back guarantee. You have nothing to lose.

Don't lose your precious memories... get your own bottle of **CogniForce** today — experience life with a sharper, quicker, and more focused brain!

Order Your Bottle Today! GetCogniForce.com/NHC3

For Faster Service, call 1-888-309-0629

Monday-Friday 7 a.m. to 6 p.m. CST • Saturday-Sunday 8 a.m. to 5 p.m. CST



Why Dancing Beats Other Types of Exercise

Humans have danced for thousands of years for a variety of reasons: to celebrate, to express themselves, to give thanks, to attract mates, to entertain, and to heal. You may not give dancing much thought, especially in the era of social distancing, but it's the best type of activity to boost both your physical and mental health. And you can do it at home.

In addition to improving overall fitness, balance, and agility, dance stands out as the best exercise for reducing risk for dementia, because it involves a lot of different mental tasks. Dance demands concentration, decision making, coordinating movement with music, and learning steps.

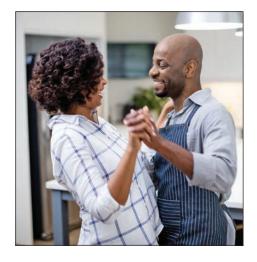
Research Highlights

One major study, led by the Albert Einstein College of Medicine

in New York City, tracked over 400 older people for up to 21 years and looked at how different leisure activities affected risk for dementia. This is how much dementia risk was reduced by different physical activities:¹

- Frequent dancing: 76 percent
- Regular walking: 33 percent.
- Regular swimming: 29 percent.
- Playing team games, group exercise, and bicycling: no reduction in dementia risk.

While going out dancing is not a safe option during the COVID-19 pandemic, you can turn on some music and dance in your house or yard. And you can learn how to do different types of dance with online videos.



Where to Learn New Dance Steps from Home

I looked around and found a good website that offers many free short videos, including different ballroom styles such as the waltz, foxtrot, tango, cha cha, merengue, swing, and others. It also teaches line dancing, salsa, ballet, club dancing, Irish step, tap, and other dance styles. There's plenty here for couples and singles. Additional paid videos are also available.

Website: www.learntodance.com.

A Good Reason to Choose Organic Hummus

Hummus is a good dip for fresh vegetables. It's tasty, filling, and nutritious. But if it isn't organic, it could contain unhealthy levels of glyphosate (the brand name is Roundup), a widely used weed killer that has been linked to cancer.

Lab tests commissioned by the nonprofit Environmental Working Group tested glyphosate levels in 33 conventional (not organic) hummus products and found that more than a third contained unhealthy levels of glyphosate.²

I don't think you should always avoid conventional hummus. But if you can, buy organic, especially if you eat it often.

Use Social Media Wisely

More than half of Americans have changed their social media habits this year, for better or worse, according to a survey of 2,000 people by The Ohio State University Wexner Medical Center in Columbus.³

Social media can be positive if it helps you to stay in touch with those you care about, or it can be negative if contentious or alarming postings make you feel depressed, anxious, or angry.

If you spend time on social media, ask yourself: Does it make me feel better or worse? If you feel worse, either change the way you use it or step away. You can always pick up the phone and talk to someone you care about. You can't change what's going on in the world, but you can control how much it permeates your daily life.

¹ Verghese, J., et al. "Leisure Activities and the Risk of Dementia in the Elderly." N Engl J Med 2003; 348:2508-2516. 2 Environmental Working Group. https://www.ewg.org/research/glyphosate-hummus/3 The Ohio State University. Wexler Medical Center. https://wexnermedical.osu.edu/mediaroom/pressreleaselisting/survey-finds-americans-social-media-habits-changing-as-national-tensions-rise

Q: I was diagnosed with type 2 diabetes, but my blood sugar levels have been coming down with changes to my diet. My doctor says that the beta cells in my pancreas can't produce enough insulin and that I will need medications for the rest of my life. Is this true? — Jay S.

A: The standard way of thinking about type 2 diabetes is that when someone gets the diagnosis, a certain percentage of their beta cells — typically 50 percent or more are dead and cannot be revived.

However, there is some research regarding beta-cell regeneration. The thought is that maybe they're not dead, but in what I call a "coma."

The reasoning is that if the pressure of high blood sugar is removed with a low-carb or keto diet, then maybe — just maybe, given enough time — some of those beta cells could come back to life and produce some insulin.

There isn't a lot of evidence, but we have had a couple of cases in our clinic where beta cells were definitely regenerated. Mice studies have also shown this is possible.

This takes some doing, though. It requires tight glucose control by conscientiously following a low-carb diet, at the very least, or a stricter keto diet. You can't do what many people do, which is

seesaw between eating well and not well. And it takes time.

Some people don't have the patience, discipline, or time.

If you rigorously follow a low-carb or keto diet for several months, you can ask for a C-peptide test to see if the insulin production by your beta cells is improving. It's a blood test and it isn't expensive.

C-peptide is a byproduct of insulin production. Measuring C-peptide levels in the blood gives you an indication of how much insulin is being produced by your beta cells. Higher C-peptide levels indicate higher insulin production, and vice versa.

If you get the test before changing your diet, I would wait for several months before getting tested again, as insulin production won't increase quickly.

When it comes to your need for medications, it depends upon your individual history and current situation, including the type of diet that you can realistically follow and the way your body responds to it. The answer is unique to each individual.

Q: I've been reading that saturated fat isn't as bad as we've been told, but do we really need it? Doesn't it raise bad **cholesterol?** — Jorge S.

A: The short answer to your first question is that yes, we do need some saturated fat. Our cell membranes are made of fatty substances and need to maintain a certain amount of stiffness. Saturated fat and cholesterol help to give the membranes stiffness.

If cell membranes are too fluid,

they become leaky and prone to injury; as a protective mechanism, your body will make more cholesterol to stiffen them up. In other words, there needs to be an optimum balance between stiffness and fluidity.

The "bad" LDL cholesterol isn't all bad. It's a building block for cell membranes, hormones, and tissue repair. LDL is made up of different types of particles: small, dense ones that can trigger inflammation and plaque and large, fluffy ones that are beneficial.

Saturated fat can contribute to the larger, beneficial LDL particles and higher levels of "good" HDL cholesterol. However, your overall health also depends upon what else you eat. Trans fats ("partially hydrogenated" oils) are the most harmful fats that will turn your LDL into the dangerous kind. Too many carbs and sugars will do the same.

Do you have a question for Dr. Marlene?

Send your health-related questions to drmarlene@naturalhealthcon nections.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.