Dr. Marlene's NATURAL HEALTH CONNECTIONS



VOLUME 4 | ISSUE 4

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How to Calm Harmful Inflammation

Taming hidden inflammation in your body can relieve aches, enhance energy, help restore healthy levels of blood sugar and blood pressure, and keep you in good health.

Inflammation isn't well understood and doesn't get a lot of media attention, yet it plays a major role in the state of our health. Inflammation is a necessary part of survival because it is essential to help you heal from an injury or infection — it's part of your body's natural defense system.

If you cut your finger and it turns red, you know it's inflamed, which isn't a bad thing in this situation. The redness is a sign that your body is working to heal the cut, and it subsides as the injury heals.

Inflammation is harmful when it persists and becomes chronic. You could think of it this way: If your home has a burglar alarm and someone breaks in, you want the alarm siren to go off. But you don't want it continually going off, day and night, when your home is safe.

When inflammation goes awry and becomes chronic, it's like a hidden siren that never stops inside your body. And it's a driver of all the major diseases that debilitate us, make us seem older than we really are, and can kill us.

Chronic inflammation leads or contributes to high blood pressure, high insulin, high blood sugar, diabetes, heart disease, strokes, chronic obstructive pulmonary disease, cancer, depression, allergies, asthma, chronic kidney disease, non-alcoholic fatty liver disease, autoimmune disorders, neurological diseases, osteoporosis, arthritis, and age-related muscle loss.

Inflammation as a root cause of diseases was known over 100 years ago, but this fact was forgotten by modern medicine. Now, the identification of chronic inflammation as an underlying trigger of various mental and physical disorders is being viewed as a breakthrough. In a recent scientific article, a group of 30

IN THE NEXT ISSUE: Collagen: How It Helps You Look and Feel Younger

scientists from leading universities called it "One of the most important medical discoveries of the past two decades."1

Debilitating as it is, chronic inflammation is not visible to the naked eye, although you might feel its effects. If you're in pain, for example, there's inflammation in your body. But in other situations, the manifestations are not as obvious. You may feel tired, moody, or have trouble focusing (see Signs of Chronic Inflammation below).

Dr. Marlene's NATURAL HEALTH CONNECTIONS

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Even in situations where there's chronic pain, inflammation is not what generally comes to mind as the problem. Some of my patients tell me that their joints hurt but none say, "I'm constantly inflamed." Yet, that's what is really happening. And sometimes, simply switching to a diet that reduces inflammation can stop such pain.

A Surprised Patient

One of my patients came to see me for help with his blood sugar, which was almost high enough to be diagnosed as diabetes. When I asked about his diet, it was obvious that it needed some changes.

Fast-food burgers with fries and a soda, plus a small milkshake for dessert, were everyday meals for this gentleman. These are all inflammatory foods.

He followed my recommendations to switch to a healthy, lowcarb diet that is anti-inflammatory, after we worked out some practical ways to do so. For example, he switched to burgers wrapped in lettuce, without the bun and fries, ate some non-starchy vegetables,

and replaced the soda with water or green tea.

At our next visit three weeks later, he was amazed by an unexpected benefit that both he and his wife were experiencing: Their joints didn't hurt anymore. (And his blood sugar had significantly improved.)

Although the wife was not my patient, she had adopted the dietary changes I had recommended for her husband — and was glad she did. For this couple, achy joints had become a "normal" part of life, so much so that he hadn't even mentioned this as a problem on his first visit. But as those aches disappeared with a healthy diet, it gave my patient and his wife a whole new lease on life.

Inflammation Triggers

Levels of inflammation generally rise with age, but this isn't inevitable. Rather, it's a reaction to years of a poor diet and other lifestyle habits that provoke inflammation. Studies have concluded that smoking, drinking, being obese especially carrying belly fat are inflammation drivers.

Signs of Chronic Inflammation

When chronic inflammation is present, these are some ways that it can manifest:

- Joint pain or achiness
- Joint swelling
- Muscle pain
- Headaches
- Feeling tired all the time
- Inability to fall asleep at night
- Waking during the night
- Moodiness
- Depression
- Anxiety
- Constipation
- · Weight gain
- Frequent infections

- Stubborn belly fat
- Loss of sex drive
- Trouble concentrating
- Sugar cravings
- Skin rashes
- Allergies

Additional signs for women approaching menopause:

- Breast tenderness
- Hot flashes
- Other discomforts seemingly caused by hormonal changes

In my practice, I've found that the two most common inflammation triggers are a high-carb diet and infections. If these two things are addressed and inflammation is still elevated, there may be a harmful overload of stored iron or nutritional deficiencies

Other contributing factors can be some type of exposure to toxins, sleep apnea, or exercise that is too intense or done too often without enough recovery time.

An Inflammatory Diet

Most Americans have eaten more than their fair share of carbs for years. By "fair share," I mean the amount their bodies can tolerate well and efficiently utilize. Our food needs to not only produce energy but also support the continual maintenance and repair processes that keep us alive and in good shape.

Government surveys of American diets show that the quality of most food we choose is poor. One such survey looked at diets of more than 9,000 Americans of all ages. It found that nearly 60 percent of their diets consisted of highly processed foods. In addition to often being rich in carbs, these contain many additives that you would never dream of having in your kitchen, such as artificial flavoring and coloring, refined oils, and various substances to mask unpleasant tastes, improve texture, and hide the poor nutritional quality of the foods.²

Consider most fast-food burgers, chicken or fish sandwiches, and pizzas. They all contain an abundance of refined carbs in the buns or crusts, and fries and sodas add more. Plus, they contain unhealthy

fats. And then there are all the snacks: chips, pretzels, and such. All these are inflammatory.

How Carbs Drive Inflammation

You may be familiar with this if you've been reading my newsletters: Carb overload is the most common trigger of inflammation, diabetes, and other modern ills. Here's a snapshot of the process that makes a high-carb diet inflammatory:

- When you eat carbs, they are converted to blood sugar.
- In response, the pancreas releases insulin, the hormone that enables blood sugar to be absorbed by muscles and other tissues to produce energy.
- A high-carb diet triggers production of extra insulin.
- Eventually, levels of insulin stay elevated.

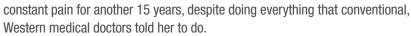
Unfortunately, elevated levels of insulin increase inflammation. This is an early, harmful side effect of habitually eating too many carbs. But insulin isn't tested in routine check-ups, so the problem isn't recognized.

Eventually, even high levels of insulin aren't enough to control blood sugar, and levels rise. And that's the first point where a routine medical check-up may detect a problem, as increased risk for diabetes or the actual disease. But by then, inflammation from elevated insulin has been occurring for some time.

One study looked at more than 4.000 older Americans with normal levels of fasting blood sugar. At the start of the study, researchers tested their levels of C-reactive protein (CRP), a marker of inflammation. They ran the same tests 3 to 4 years later and found that those who initially had elevated CRP were more than twice as likely to develop diabetes.³

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,[™]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.

How to Eat an Anti-Inflammatory Diet

My most basic advice is this: Don't eat foods that come in packages or restaurant wrappers. Instead, choose whole, fresh foods and find recipes you like to make delicious meals at home.

I realize that not everyone likes to cook or even prepare simple food. But if you care about your health and don't have a personal chef, there's no way of getting around it.

The top anti-inflammatory foods include all types of vegetables that are not starchy (not potatoes), fatty fish such as salmon, organ meats, and cheap cuts of meat with the gristly parts (see why below). Herbs and spices — such as oregano, rosemary, ginger, garlic, black pepper, and cardamom — add flavor and help to reduce inflammation.

The Best Meats

The meat and poultry we eat today consists mostly of lean cuts of muscle meat. These cuts look attractive in the supermarket, and "lean" sounds healthy. But appearances can be deceiving.

Organ meats, such as liver, contain the most concentrated nutrients. And gristly cuts of meat around the joints of animals contain collagen, a type of protein that is sadly missing from our diets but is essential for good health, especially as we get older.

Collagen is the most abundant protein in the human body, and it acts as the "glue" that holds our tissues together and gives them structure. Adequate collagen prevents skin from losing its suppleness and becoming thin as we age. Collagen is a building

block for tendons and ligaments and helps to keep joints flexible and pain-free. It strengthens bones. And it helps to prevent arteries from becoming fragile.

Unfortunately, the muscle meats that we habitually eat don't contain collagen. Bone broth, made the traditional way by simmering parts of animals that we don't typically eat, is a source of collagen. And so are the cheap, gristly cuts of meat. When they are slowly cooked in a liquid such as a broth, the collagen becomes gelatinous and develops a deliciously rich, meaty taste.

Collagen helps to reduce inflammation. While our usual lean muscle meat contains protein, it doesn't contain collagen and

is not anti-inflammatory. Eating too much lean muscle meat, or processed meats such as cold cuts, can contribute to inflammation.

Anti-inflammatory Fats

Omega-3 fats in fatty fish and olive oil are two prominent anti-inflammatory sources of fat. In addition to being therapeutic, they can enhance the flavor of your diet.

Studies show that eating fish in place of red meat may reduce inflammation, improve the functioning of insulin to lower levels of blood sugar, and help with weight loss. These benefits seem to come from a combination of ingredients in fish, including healthy fat and other essential nutrients.⁴

Best and Worst Foods for Inflammation

An overload of carbohydrates is a major driver of inflammation. For example, an occasional small serving of whole grains can be nutritious, but too much can drive up blood sugar and inflammation. In addition, eating foods that you don't tolerate well can be a trigger.

Foods that Promote Inflammation

These should be avoided or limited:

- Sugar in all forms, including added sugars in processed foods and natural sugars in fruit
- Artificial sugar substitutes
- Refined oils
- Grains (including all forms of corn, even popcorn)
- Gluten, if you're sensitive to it
- Dairy, if you don't tolerate it well or consume too much
- Caffeine, if you're sensitive to it or consume too much
- Processed meats such as cold cuts
- The wrong types of meat
- Processed foods in general

Anti-inflammatory Foods

Get creative with these and enjoy them:

- Fatty fish that are low in mercury, such as wild salmon, herring, mackerel, and sardines
- Skipjack or "light" tuna (lower in mercury than albacore) in moderation
- · Extra virgin olive oil
- All types of non-starchy vegetables
- Green tea
- Berries
- Avocado
- Mushrooms
- · Dark chocolate and cocoa

Anti-inflammatory Herbs and **Spices**

These add flavor while reducing inflammation:

- Garlic
- Rosemary
- Ginger
- Turmeric
- Cardamom
- Black pepper
- Cinnamon

One word of caution: Don't batter or deep-fry the fish. Ideally, poach it, and eat it with a variety of vegetables. If you don't eat fish two or three times a week, take 1,000 mg daily of a fish oil supplement.

Extra virgin olive oil is well known for its anti-inflammatory characteristics. It also protects the heart. To get the full benefit, use it in place of other oils. Olives deliver similar benefits and make a good snack.5

Infections and Inflammation

Next to an inflammatory diet, some type of persistent infection is the other major promoter of chronic inflammation that I see among patients. It may seem strange that an infected tooth, for example, could be triggering painful joints or chronic fatigue and lethargy, but it can.6

There's a mistaken notion that an infection in one part of the body, such as a urinary tract infection, is localized — that it doesn't affect the rest of the body — but it does. Chronic or recurring sinus infections are another type of infection that I see a lot when chronic inflammation is elevated.

In such cases, the inflammation is part of the body's attempt to deal with the infection. And the chronic inflammation will persist until the infection is treated.

I've had patients who knew they had one or more problematic teeth and were reluctant to see a dentist. Perhaps they had been told a tooth needed to be extracted, and they were trying to hold onto it for as long as possible. But once they faced the dentist's chair and got the necessary treatment, their lives significantly improved.

Harmful Stored Iron

Routine check-ups may include tests of iron levels in the blood: serum iron. But there's another type of iron test — ferritin — that measures the amount of iron that is stored in the body. High ferritin is an indicator of inflammation that is rarely looked for or addressed.

When ferritin is high, it means your body is not using all the iron vou get from food or supplements. Instead, it's storing an excess of iron in a harmful way.7

Excessive iron storage can occur because there is an infection, or most often because of high insulin and blood sugar. In case you're wondering, ferritin doesn't become elevated because you've been cooking in cast-iron pots.

High ferritin is harmful because it has an effect much like rusting inside your body, and it damages arteries. An optimum range is between 50 and 80 nanograms per milliliter of blood (ng/mL). If your ferritin level is 200 or higher, I recommend donating blood to reduce it. If ferritin is around 150, I recommend checking it again in a while. If it continues in that range, donate blood.

If you have an unhealthy diet, an infection, and high ferritin, all three need to be addressed. Correcting the diet and treating the infection should resolve the cause of the high ferritin in the longer term. But to immediately start reducing inflammation, I recommend donating blood to lower the ferritin level while you work on correcting the other two triggers.

One caution: It's possible to have high ferritin and low serum iron — the usable form. If this is the case, don't donate blood. Just follow the other steps to reduce chronic inflammation

Antioxidant Deficiencies

Taking a multivitamin to remedy a lack of certain antioxidants helps to reduce inflammation. A study of more than 8,000 Americans found that low levels of vitamins A, C, and E correlate with elevated inflammation.8

Coenzyme Q10 (CoQ10) is another antioxidant that can help to reduce inflammation,9 and we're likely to fall short because we don't eat organ meats, its chief food source. I recommend taking 100mg daily of CoQ10.

Homocysteine: An **Inflammatory Substance**

Homocysteine is an amino acid, a building block of protein, and it contributes to inflammation and damages arteries when levels are elevated. Homocysteine is measured in micromoles per liter (µmol/L). Although a range of 5 to 15 is considered "normal," under 7 is ideal.

Elevated homocysteine is both a trigger and a marker of inflammation, and it indicates increased risk for heart disease, stroke, and kidney disease.10

Vitamins B6, B12, and folate are necessary for homocysteine to be broken down, and a shortfall can cause it to rise. Taking these vitamins can lower homocysteine. The amount in a multivitamin may not be enough, so I recommend a B complex supplement that contains between 400 mcg and 800 mcg of folate.

Sometimes, simply taking extra B vitamins may not be enough to lower homocysteine without also

improving your diet. One of my patients was very overweight and had high blood sugar, high blood pressure, and high homocysteine. By following my low-carb diet, he lost 60 pounds, and all these markers dramatically dropped.

Anti-Inflammatory Herbs

Before I discuss herbs that can reduce inflammation. I want to emphasize that they don't replace the need to eat a healthy low-carb diet, to handle infections, and to donate blood if you have high ferritin levels. You can take these in addition to the supplements I mentioned earlier.

Turmeric, the herb that gives curry its bright yellow color, is one of the most powerful antiinflammatories in nature. Look for a product that is designed to be well absorbed. Dosages vary, depending on the exact formulation, so follow product directions.

Boswellia is another powerful natural anti-inflammatory, and as with turmeric, I suggest following product directions because formulations vary. You can buy boswellia as an individual supplement, but it's also found in anti-inflammatory formulas, combined with other herbs and nutrients.

Although both turmeric and boswellia are anti-inflammatory, they are different plants and they work in somewhat different ways. Consequently, they are compatible if combined in a formula, or if you decide to take both as individual supplements.

A Final Word

While chronic inflammation can manifest in different ways in everyday life, the signs can easily be mistaken for inevitable parts of the aging process. Eating an antiinflammatory diet and making sure NATURAL HEALTH CONNECTIONS

The Guide to Healthy Eating

that you don't have any lingering infections are essential steps I recommend for everyone.

If you're healthy, this approach will help you stay that way. If you have diabetes or are at high risk for the disease, if you're overweight, or if you have any of the signs of chronic inflammation that I've listed on page 2, the steps I've described can help you regain good health.

The solution to inflammation has two sides: One is eliminating its drivers such as inflammatory foods and infections, and the other is adding anti-inflammatory foods and supplements to your diet. By addressing both sides, you can develop a healthier, more vibrant way of living.

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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
Blood Tests	1	3	The Preventive Health Scam Making Millions Sick
Dental Health	3	10	The 5 Simple Steps to Healthy Teeth and Gums
Gluten	2	3	How Gluten Can Cause More Than 30 Health Conditions
A Healthy Low- Carb Diet	1	8	The Guide to Healthy Eating
Healthy Carbs	3	6	The Diabetic's Guide to Eating Carbs
Healthy Meat	3	2	The Diabetic's Guide to Eating Meat
Weight Loss	2	1	10 Reasons Why You Gain Weight and Can't Lose It
Multivitamins	2	8	Do You Really Need a Multivitamin?

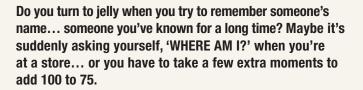
Access these online by logging in to www.NaturalHealthConnections.com.

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



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 superfocused self.

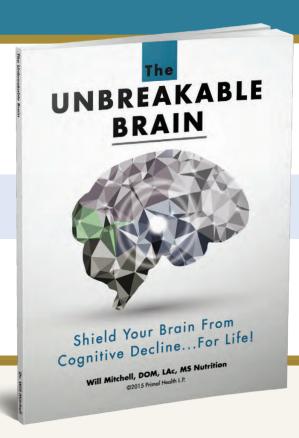
Yes—these are senior moments...and they are the first signs of dementia. The Alzheimer's Association recently admitted it, "Memory loss that disrupts daily life may be a symptom of dementia."

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!

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Diabetic Neuropathy Prevention and Relief

Diabetic neuropathy, also called peripheral neuropathy, is the result of damage to nerves in the periphery of the body — especially in the hands, feet, and legs. It causes numbness, tingling, loss of sensation, inability to feel temperature changes, and pain. It is the most common complication of diabetes, but it isn't inevitable

How to Stop Diabetic Neuropathy

In diabetes, elevated levels of blood sugar damage the peripheral nerves, so controlling blood sugar is the key to prevention and healing. The most important step is to follow a healthy low-carb diet and get sufficient amounts of vital nutrients.

The Essential Role of Vitamin B12

Vitamin B12 is necessary for healthy nerves, and even without diabetes a deficiency can produce symptoms of neuropathy. For anyone taking metformin, the most prescribed diabetes drug, vitamin B12 levels need to be monitored because the drug inhibits absorption of the vitamin and eventually leads to a deficiency.

Vitamin B12 can be stored in the liver. If someone has a lot of stored B12 when they start to take metformin, it could take months, or even years, for a deficiency to develop.

Because of this storage factor, vitamin B12 levels could be normal at one point and depleted later. On the other hand, it can take many months of supplementation to correct a severe depletion. Vitamin B12 injections, from a health professional, can remedy a deficiency more rapidly.

Vitamin B12 Studies

Numerous studies have found that either high-dose B12 supplements or B12 shots can correct a metformin-induced deficiency, improve the health of nerves, and relieve or improve neuropathy symptoms.¹

One recent study compared the effects of vitamin B12 supplements and a placebo, taken daily, by type 2 diabetics for one year. All the participants had been taking metformin for at least four years, suffered from diabetic neuropathy, and had depleted levels of vitamin B12 at the start.

By the end of the study year, those taking the supplements (1,000 mcg per day of methylcobalamin) had healthy levels of the vitamin and significantly fewer symptoms. Medical tests showed that their nerve structure and function had improved. Among those taking a placebo, the deficiency, symptoms, and nerve damage worsened.2

There is also evidence that heartburn drugs inhibit absorption of vitamin B12 and can lead to a deficiency if taken long-term.3

Restoring Circulation

Enhancing circulation helps to nourish nerves and prevent and relieve neuropathy. Exercise engages nerves to move muscles, causing more blood to flow to peripheral nerves.

Saunas are another effective way to improve circulation. I suggest warming up your body on a treadmill or with some aerobic exercise, and then spending about 20 minutes in a sauna — long enough to break a sweat. And then take a cool shower to close pores.

Nutrition to Enhance Peripheral Nerves

Circulation in the small blood vessels that feed peripheral nerves can be improved by consuming these daily:

1 clove of raw garlic $\frac{1}{3}$ of a chocolate bar containing 85 percent or more cacao 2 to 3 ounces of berries, ideally blueberries 3 to 4 cups of green tea 3 to 4 large stalks of celery

Supplements

Vitamin B12: There are two types of supplements: cyanocobalamin, a synthetic form, and methylcobalamin, a naturally occurring form found in food. Studies have found 750 mcg to 1,500 mcg of the methylcobalamin form of B12 relieved diabetic neuropathy.

Co010: Studies of mice have found that CoQ10 prevents and reverses diabetic neuropathy.4 CoQ10 is essential for mitochondria, the components of nerve cells (as well as all other cells) that produce energy. My patients have found that taking 100 mg daily helps to prevent and relieve diabetic neuropathy.

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Avoid This Calcium Mistake

A recent study caught my eye because it highlights a common calcium problem that can be avoided with the right nutrients. The study analyzed data on more than 500,000 veterans with kidney stones and found this: Nearly one-quarter of these patients also had osteoporosis or had suffered a fracture.1

What's the connection? Calcium in their bodies was going to the wrong place, to form kidney stones instead of strong bones. And this type of situation isn't limited to people with kidney stones.

After age 50, up to one in two women and one in four men will break a bone due to osteoporosis, according to the National Osteoporosis Foundation. These are staggering statistics. And they're mindboggling when you consider that doctors have been recommending calcium supplements to older people for years.

The Calcium Problem

Calcium has been promoted in isolation as the essential nutrient for healthy bones. But in the human body, it doesn't work alone. And if you consume a lot of calcium without the other harmonizing nutrients your body needs, it can be deposited in the wrong places, such as the kidneys or arteries — increasing risk for kidney stones or hardened arteries.

Keep in mind that in addition to calcium supplement pills being widely promoted, calcium is added to many foods, such as cereals, plant milks, and some brands of orange juice. The calcium in such "fortified" foods is the same type of calcium as in supplement pills.

In other words, whether you get extra calcium from pills or fortified foods, you're getting isolated calcium. But in nature, nutrients never exist in isolation.

Promotion of vitamin D also in isolation — is a related problem. You need vitamin D to enhance absorption of calcium and overall health (for details, see Volume 3, Issue 8



of this newsletter: Vitamin D: Fight Diabetes, Osteoporosis, Infections, and More). But vitamin D doesn't tell your body where to deposit calcium.

Other Vital Nutrients for Healthy Bones

The "traffic cop" that directs calcium to be used by your bones and helps keep it out of arteries and kidneys is vitamin K2. It's likely to be in short supply in today's diets because its most concentrated sources are natto, a type of fermented soy that is popular in Asia, and organ meats — which most people don't eat.

I generally don't recommend taking extra calcium supplements. But I do recommend taking extra magnesium, which needs to be balanced with calcium. In addition, take 5,000 IU (125 mcg) of vitamin D and make sure to take vitamin K2.

Research shows that taking vitamin K2 supplements can improve bone health and reduce the incidence of fractures.² This is especially important for postmenopausal women, who face the highest risk of osteoporosis and resulting fractures.

Vitamin K2 comes in two forms: MK-4 and MK-7. Studies have generally tested either one or the other and have found that these dosages are effective in preventing osteoporosis: 45 mg of MK-4 or 180 mcg of MK-7. Some products contain a combination of the two forms; follow product directions in those cases

TV Food Shows Make You Eat More

At the University of Surrey in the United Kingdom, researchers tested the effect of watching a TV cooking show. And they found that it increased the desire to eat, even

when viewers weren't hungry. It's something to be aware of; if you know that food shows make you want to eat, have some veggies close at hand for a snack.³



¹ Ganesan, C., et al. "Osteoporosis, Fractures, and Bone Mineral Density Screening in Veterans With Kidney Stone Disease." J Bone Miner Res. 2021 Mar 3. doi: 10.1002/jbmr.4260. Online ahead of print. 2 Iwamoto, J. "Vitamin K therapy for postmenopausal osteoporosis." Nutrients. 2014 May 16;6(5):1971-80. 3 Ogden, J., et al. "The impact of active or passive food preparation versus distraction on eating behaviour: An experimental study." Appetite. 2021 May 1;160:105072. doi: 10.1016/j.appet.2020.105072.

Trees Prevent Pollution Damage to Arteries

Air pollution causes arteries to stiffen, increasing risk for heart disease, but trees can reduce this harmful effect. That's the conclusion of a study at the University of Louisville in Kentucky.

At different times, researchers measured arterial stiffness in a group of people who had high blood pressure, diabetes, or other conditions that put them at moderate to severe risk for heart disease. They correlated this data with various levels of air pollution in their local area.

They found that arteries became stiffer when air pollution levels were higher. However, people who lived in neighborhoods with a lot of trees had less arterial stiffness during times of elevated pollution. After ruling out other possible influences on participants' health, they concluded that the presence

of trees offset the harmful effect of pollution on blood vessels, reducing health risks.¹

If you aren't fortunate enough to live in a neighborhood with lots of trees, identify some nearby places with trees where you can go for walks, have picnics, or enjoy sitting and reading a book, visiting with friends, or simply admiring nature.

Do Masks Interfere with Breathing?

Cloth or surgical masks (which I hope you've been wearing when you're out and about) are a vital tool to prevent the spread of COVID-19, but they can be a bit uncomfortable or feel stuffy. In case you've been wondering whether masks can cause low levels of oxygen or high levels of the carbon dioxide we exhale, there's good news. Two recent studies show that they don't affect normal breathing.

One study at a hospital in Cleveland tested the effect of masks in a group of 50 people. Among these, 32 percent had a chronic health condition such as asthma.

Researchers measured various markers of healthy breathing and heart rate when participants wore no mask, a cloth mask, or a surgical mask — both while sitting quietly and while walking briskly. And they found that the potential effect of masks on normal breathing was near zero — not detrimental.²

Another study, at the University of Saskatchewan in Canada, tested the effect of masks on healthy people doing vigorous exercise. It found no difference in oxygen levels or the ability to exercise at an individual's peak intensity when masks were worn.³

Misconceptions About Drug Side Effects

A study of people aged 50 and older has found that patients often incorrectly assume that prescribed drugs have no side effects. More specifically, here's what a study at the University of California, Los Angeles, found:⁴

- When doctors didn't discuss potential side effects, patients incorrectly assumed that about 55 percent of their prescribed medications had none.
- When doctors did discuss possible side effects, their patients incorrectly assumed there were no side effects for 22 percent of their medications.

These misconceptions existed even though about half the people in the study were well educated and had a good understanding of their health condition. However, study participants did have a good grasp of the number of pills to take and how often.

Researchers concluded that doctors need to spend more time explaining the potential side effects of drugs. Meanwhile, it's prudent to fully inform yourself about possible side effects of any drug you may take.

If you think of questions after a doctor visit and can't easily reach your doctor, your pharmacist should be able to answer questions and provide more information. In addition, this is a valuable resource for researching medications: www.choosingwisely.org.

¹ Riggs, D.W., et al. "Residential proximity to greenness mitigates the hemodynamic effects of ambient air pollution." Am J Physiol Heart Circ Physiol. 2021 Mar 1;320(3):H1102-H1111. doi: 10.1152/ajpheart.00689.2020. 2 Shein, S.L., et al. "The effects of wearing facemasks on oxygenation and ventilation at rest and during physical activity." PLoS One. 2021 Feb 24;16(2):e0247414. 3 Shaw, K., et al. "Wearing of Cloth or Disposable Surgical Face Masks has no Effect on Vigorous Exercise Performance in Healthy Individuals." Int J Environ Res Public Health. 2020 Nov 3;17(21):8110. 4 Ho, T., et al. "Post-Visit Patient Understanding About Newly Prescribed Medications." J Gen Intern Med. 2021 Feb 5. doi: 10.1007/s11606-020-06540-4.

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



Q: I have type 2 diabetes and am confused about fruit. I know that fruit is healthy, but it also contains sugar. Which fruits are best for me to eat? — Jay W.

A: I'm glad you asked, because eating too much fruit can drive up levels of blood sugar. And there are some mistaken notions about the role of fruit in our diets.

First, to answer your question about the best fruit: Berries, any type, top the list. They are the most nutrient-dense fruits and the most blood-sugar-friendly because they are also rich in fiber, which tempers the effect of the sugar.

The worst types of fruit, in terms of raising blood sugar, would be grapes and citrus fruits. These contain concentrated sugar and little fiber. Fruits that are richer in fiber, such as apples and pears, rank in the middle, below berries but above grapes and citrus fruits.

That said, here's the most important thing to know about fruit: It tends to be equated with vegetables as a healthy food, and this is a false equivalency. There are no essential nutrients that are exclusively found in fruit. We equate vitamin C with oranges, but you can get plenty of vitamin C by eating broccoli and a variety of peppers of all colors, with both mild and spicy flavors. And the vegetables will help to get your blood sugar into a healthier range.

Fructose, the type of sugar found in fruit, turns into fat faster than

any other type of sugar. Therefore, it isn't a good idea to eat too much fruit. To keep things balanced, here's my basic advice: Eat twice as many vegetables as fruits.

Q: I enjoy avocados and am wondering how they affect digestion. I often add half an avocado to a salad, but then I get gas. Could avocado be the problem?

— Annie K.

A: Avocados are a good source of healthy fat and nutrients, but it's possible that they could be triggering or contributing to the dilemma. Perhaps your serving size is larger than your system can easily digest.

Sorbitol, a type of carbohydrate in avocados, is a likely trigger of problems. Sorbitol is a type of sugar molecule — a "sugar alcohol" — which is a biochemical term and does NOT mean "sugar" or "alcohol" as we normally think about them. It occurs naturally in avocados and some other fruits (avocado is technically a fruit), and it is also manufactured as a sugarfree sweetener that is added to some processed foods.

Sugar alcohols add sweetness, but the sugar in these molecules is bound in a way that your digestive system can't break it down — that's why they're used as a sugar alternative. Instead of being metabolized like regular sugar, sugar alcohols work internally much like fiber. And for some people, they can cause gas, diarrhea, or other digestive upset.

This doesn't mean that you can't eat any avocado. I suggest trying one-eighth of a medium avocado at a meal and seeing how you feel. If

there's no problem, try a bit more at another meal and discover your personal tolerance level.

There is evidence that avocados can enhance the beneficial microorganisms in the gut that improve digestive health. However, it's a matter of balance: A small amount of avocado may be beneficial, while a larger quantity may cause problems. And the right quantity differs from one individual to another.

In addition to healthy fat that helps you absorb nutrients in the vegetables in your salad, avocados contain fiber and a variety of vitamins and minerals, including potassium, magnesium, copper, and lutein and zeaxanthin, two nutrients that are good for your eyes.

We often focus on a healthy food and think that more is better. In fact, the best way to eat a healthy diet is to include smaller quantities of a greater variety of foods.

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.