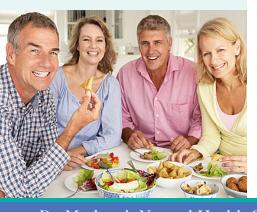
Dr. Marlene's NATURAL HEALTH CONNECTIONS



VOLUME 1 | ISSUE 5

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Is Your Brain on Fire?

Brain inflammation is a root cause of many neurological problems, from minor forgetfulness and brain fog to full-blown diseases.

Alzheimer's, Parkinson's, and other neurological diseases are terrifying. As well as being debilitating, they're unpredictable and mysterious. It seems as though there's no known way to protect yourself and those you love, and there are no cures.

Even among people who are considered healthy, some loss of mental faculties can be debilitating in more subtle ways. Minor but worrisome lapses in memory, slower thinking, or a feeling that life is moving too fast, getting more complicated, and becoming harder to handle are not uncommon experiences.

On their first visit, many of my patients are concerned about brain fog. Their doctor says there's nothing wrong, but they just can't seem to think as clearly and quickly as they used to. They're feeling older, and they assume that's just the way it goes.

Fortunately, this isn't the case. Although no one can guarantee a complete absence of disease in your future, there are two key things you can do to protect yourself. First, gain a better understanding of what leads to mental decline, and second, take

steps to improve your own ability to stay on top of your mental game. As it happens, you'll also function better physically.

Brain inflammation underlies all manner of neurological problems, and it can be controlled—without lifelong medication. But it doesn't get the attention it deserves, and it isn't well understood.

When you cut your finger and it becomes red and sore, it's inflamed. In this situation, inflammation isn't a bad thing, but a sign that your body is fighting to heal the injury. Such acute inflammation is a healthy response, and it soon goes away.

Now, imagine that it doesn't go away, and your finger stays red and sore, or keeps getting redder and more uncomfortable. That's chronic inflammation. What if that was going on in your brain? It happens more than you think, but unlike your finger, brain tissue doesn't have pain receptors, so you can't feel it. (If you're wondering why you can get a headache, the pain is felt in adjoining tissue, not in the brain itself.)

How to Recognize Brain Inflammation

I don't have to tell you that your brain is connected to the rest of your body. When there's chronic inflammation in your brain, that inflammation permeates your whole body, and it can manifest in different ways. Fatigue is a very common sign, but neither it nor any other symptom is present in every case, and that isn't the only challenge.

Human beings adapt quite easily to fluctuations in the way they feel and function, sometimes to a fault. Many people ignore small changes, such as a decline in memory, energy, concentration, or other aspects of wellbeing, and simply persevere. "It's my schedule." "I'm getting older." There are many ways of explaining away a somewhat bothersome symptom that doesn't seem serious enough to prompt a doctor's visit.

Studies show that when people get less sleep than they need, their mental performance suffers, 1 and brain scans show visible changes.² However, they can adapt to a point where being habitually sleepdeprived becomes a new "normal."

It's important to recognize that if you don't feel on top of your game, you don't have to resign yourself to "getting old." Instead, see it as a sign that it's time to take a new approach.

What Lights the Brain on Fire

When you have a cold, you probably don't feel as mentally sharp as usual. There's some degree of inflammation in the brain and other parts of your body, but it isn't cause for alarm. It's a sign that your immune system is doing

How Inflammation Changes the Brain

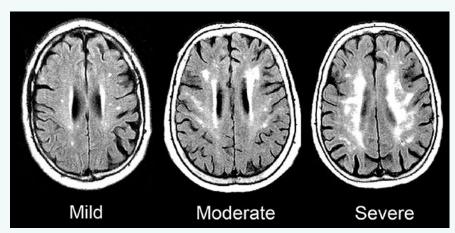


Photo courtesy of the Gottesman Lab at Johns Hopkins Medicine

These brain scans show changes in the brain with mild, moderate, and severe levels of chronic inflammation among people in their 70s. The white areas near the center of each image, which look like overexposed parts of a photograph, indicate damaged white matter in the brain.

White matter is the part of the brain responsible for transmitting messages. The bigger the white area in the image, the greater the damage in the brain.

This is what each of these images represents:

Mild: A small amount of damage to the brain's white matter, found among people with low levels of chronic inflammation.

Moderate: A moderate amount of damaged white matter, found among people with moderate levels of inflammation.

Severe: Among those with severe levels of chronic inflammation, there is much more damage to white matter.

The Story Behind the Brain Scans

These brain scans are part of a 21-year study of more than 1,500 people in Maryland, North Carolina, Minnesota, and Mississippi. Led by Johns Hopkins Medicine, researchers looked at levels of chronic inflammation and changes in brain structure and integrity. They used blood tests to measure levels of inflammation at three stages of life.6

At the time of the first inflammation test, study participants were in their 50s. The second test was done 7 years later, and a third one was done 21 years later, when the average age of participants was 76. Brain imaging was done at the same time as the final inflammation test.

Although it has been known for some time that chronic inflammation correlates with brain damage, this was the first study to look at inflammation levels over such a long period of time, and their connection to brain changes that occur in neurological diseases. The researchers estimate that rising levels of chronic inflammation speed up brain aging by about 16 years.

its job by fighting off a cold virus. In a few days or so, the battle is over and the inflammation is gone. But harmful, chronic inflammation is like a war that never ends — the immune system is fighting but not defeating the enemy.

If you're experiencing any of the *Common Symptoms of Brain Inflammation* below, the next question is: What's triggering the inflammation? The answer may take some detective work, but I've found that these are the most common triggers:

- A diet that promotes inflammation
- Specific foods that trigge gut inflammation
- Dental infections
- Other chronic infections

Food that Calms Brain Inflammation

Disbelief is often the biggest barrier to recognizing and solving the problem. Please keep this in mind as you read the next paragraph.

The most basic way to prevent brain inflammation is to avoid inflammatory fats and excessive sugar and starch. Instead, eat more anti-inflammatory fats.³ In some cases, this may do the trick. In others, it's a start, but more steps are needed.

Basic Food Rules

To keep things simple, here's my recommendation for sugars and starches: Count the "total carbohydrates" in foods from this list: all types of foods made with grains (including corn), desserts, fruit and juices, milk, soda, alcoholic drinks, potatoes, beans, candy, and desserts. From these foods only, eat no more than 60 grams of carbohydrates per day, and no more than 30 grams in one meal or snack. Don't count carbs in other foods.

In the category of fats, the ones to avoid are oils that are industrially produced, with high heat and chemicals, as they increase inflammation. These include soybean, corn, vegetable, and canola oils. Major sources include restaurant and bottled salad dressings, and most packaged and fast foods.

Oils you *should* eat include olive, avocado, and coconut oils, produced without heat or chemicals. If you limit sugar and starch as I'm suggesting, and stick to the healthy oils, there's no need to limit fats from real, freshly prepared food, such as fatty fish, seafood, and different cuts of meat, including liver and other organs. As you might suspect, I also recommend plenty of non-starchy plant foods.

Common Symptoms of Brain Inflammation

- Anxiety
- Bipolar Disorder
- Brain Fog
- Depression
- Exhaustion
- Extradoctor
- Fatigue
- Inflammatory Diseases
- Irritability
- Joint Pain or Irritation
- Memory Problems
- Mood Swings
- Obsessive-Compulsive Disorder
- Phobias
- Poor Concentration
- Strange Nerve Sensations

What Gut Inflammation Does

Our individual responses to food vary and for some people, specific foods trigger gut inflammation. And then, the gut inflammation triggers brain inflammation.

You might already know that certain foods give you a stomachache. But the connection to a food may not be obvious, and can be difficult to identify.

When one of my patients first saw me, she was suffering from

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Primal Health, LP 710 Century Parkway, Allen, TX 75013 terrible pain in all her joints, had trouble sleeping despite taking a sleeping pill, and felt very foggy mentally. In addition to the basic diet I described, I recommended cutting out all gluten, dairy, and eggs, because these are the top three foods (in that order) that cause inflammatory problems.

A month later, she was a profoundly changed person. After meticulously following my recommendations, she was nearly pain-free, sleeping well with only half the dose of the sleeping pill, and her brain fog had completely cleared up. She was amazed.

How to Deal with Problematic Foods

The human body is complex, and if you eat a food your system can't tolerate, the reactions can vary a great deal, from brain fog to skin problems, pain, and others. There is no way to codify every possible reaction to problematic foods.

This is the only surefire way to tell: Eliminate the suspected problem foods completely, long enough to allow inflammation and symptoms to subside — ideally for 100 days. Some people experience relief much more quickly.

If you truly eliminate certain foods, with no cheating, yet get no relief, the problem lies somewhere else. If the symptoms disappeared, gradually re-introduce one food and see how you feel. If all is well, try re-introducing another food.

Reactions to food can change over time. For example, after eliminating gluten, eating a small amount of bread, occasionally, may not cause a problem. But eating two slices of toast every day may cause your symptoms to reappear.

Anti-Inflammatory Supplements

While they are not a substitute for an anti-inflammatory diet, these supplements can be a useful addition to help lower chronic inflammation.

Fish Oil

This is a concentrated source of omega-3 fatty acids, which are the building blocks of anti-inflammatory omega-3 fat. Look for quantities of two specific components in a fish oil supplement: EPA (short for eicosapentaenoic acid) and DHA (short for docosahexaenoic acid). They may be listed on the front label of a pill bottle or only in the Supplement Facts section on the back.

The concentration of EPA and DHA in different fish oil products varies. For example, a capsule that contains 1 gram of fish oil may contain about 180 mg of EPA and 120 mg of DHA, for a total of 300 mg of EPA plus DHA. Each of these is listed separately, so you need to do a little math. However, some supplements contain a higher concentration of EPA and DHA, which means you will need to take fewer pills. If you don't like taking pills, there are liquid fish oil supplements that are flavored, so they don't have a fishy taste.

Amount to take: Enough fish oil to get approximately 1,000 mg (1 gram) of EPA plus DHA daily.

Zinc

The mineral helps to reduce levels of inflammation and enhances resistance to infection.⁷

Amount to take: 30 mg daily.

Multivitamin

It guards against nutritional deficiencies. Look for a product with essential vitamins and minerals.

Amount to take: Daily serving, per product directions.

Turmeric

Many studies have found that turmeric, the spice that gives curry its bright yellow color, reduces inflammation and development of brain plaques. Turmeric root is available as a powder that can be added to foods and beverages and works well as an ingredient in bone broth. It's also available in capsules.

Some studies have found that one component of turmeric, curcumin, enhances memory and mood, and protects the brain. In Western medicine and research, there is a perpetual search for isolated substances that resolve health conditions. While curcumin extracts have been found to be beneficial, there may be additional benefits from the multiple components of whole turmeric root. Ultimately, the best choice is the one that is most effective for you.

Amount to take: 1 gram of turmeric root in foods or beverages. For curcumin supplements, follow product directions, as daily servings vary among different extracts.

Gluten Pitfalls to Avoid

Found in wheat and other grains, gluten can inflame the brain without any digestive symptoms.4 There is no definitive test for gluten intolerance, so it often gets overlooked as a trigger.

Baked and packaged foods labeled "gluten-free" aren't necessarily good choices because they tend to be high in starch. which contributes to inflammation. If you eliminate gluten, choose fresh foods that are naturally gluten-free. Although grains are the only natural source of gluten, it's added to many canned and packaged foods, such as soups and sauces. Read labels carefully.

The Danger of Dental **Infections**

Aside from dietary issues, dental infections are a leading trigger of brain and overall chronic inflammation. So many of my

new patients suffer from dental problems that I routinely look for them. Where they exist, I insist on the patient seeing a dentist and getting any needed treatment, as this is the only way to calm that source of inflammation.

Many people know they have "bad teeth" but don't see a dentist. Even if that doesn't describe you, these are some dental symptoms that should never be ignored:

- Bad breath
- Bleeding gums when you brush your teeth
- Pain or discomfort in your mouth that goes away and occasionally returns

No one likes to visit the dentist, so it's easy to put off. But the consequences can be drastic.

Gum disease, also known as periodontal disease, is a chronic inflammatory disease that damages gums and the bone that supports

the teeth. It affects half of American adults over age 30, and 7 in 10 after age 65.5 It's the leading cause of tooth loss and a risk factor for heart disease. And, it's a chronic infection that is very close to the brain. Decayed, cracked, or infected teeth can also generate brain inflammation.

Unfortunately, too many people learn to live with seemingly minor but lingering discomfort. Often, when they realize that there are more debilitating consequences, they're less reluctant to see a dentist.

Root Canal Hazards

Root canals are done when there is an infection in the root of a tooth. as an alternative to extraction. During the procedure, the infected root or roots under a tooth are removed, the space is filled, and a crown is placed on the tooth.

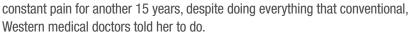
Unfortunately, infection can linger in treated roots. It may not cause any problems for a while, but then starts to fester. There may not be any discomfort in the mouth, but inflammation generated by that infection can cause fatigue, brain fog, and any of the other symptoms listed on page 3.

Regular x-rays won't show this type of infection. Only a special type of x-ray — dental cone beam computed tomography (CT) — can detect it. Dentists don't typically have the equipment but can send you to an imaging lab. If infection exists, the tooth needs to be extracted. A dental implant can replace it without the risks of a root canal.

Not all root canals develop infection. However, I've seen so many of these that when I'm trying

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, TM 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.

to find what might be causing mysterious symptoms, I routinely ask patients if they've had any root canal treatment.

Other Common Infections

Sinus infections — more often than once every couple of years — and frequent bladder or urinary tract infections are other common triggers of chronic inflammation. Post-nasal drip, where mucus accumulates in the back of the throat, can be a sign of sinus trouble. It can force you to keep clearing your throat or make you cough to get rid of the mucus. It can even make your voice sound hoarse.

If these types of infections keep recurring, despite the usual medical treatment, there's some reason why your body is so susceptible. A poor diet and reactions to specific foods can undermine the ability of the immune system to resist infection.

Steps to Take

The most important first step depends on your situation. If you have "bad teeth," a single tooth that's bothersome but "goes away," or haven't had your teeth cleaned in years, it's time to visit the dentist. Getting these things taken care of can dramatically improve your health and outlook on life. I've seen it with so many patients.

Naturally, your diet also needs to be addressed, but if you'd rather do one thing at a time, deal with any dental infection first. If you suspect other infections, see a doctor. Get a CRP test. It's probably covered by your health insurance and only requires a blood draw on your part.

If you know you're susceptible to infections and your doctor doesn't see a need for any other treatment, start looking at your diet. If what you are eating and drinking every day is provoking

chronic inflammation, it's time for some changes.

The connection between foods and symptoms may not be obvious, until you try an anti-inflammatory diet. If that doesn't make you feel better, eliminate potentially disruptive foods. Keep in mind the top 3: gluten, dairy, and eggs.

You can try eliminating only one of these to see if things improve. This way, it takes longer to find what you're reacting to, but it can still work. For faster progress, eliminate all three. And, if you know that other foods upset your digestion, try eliminating those as well, ideally for about 100 days. Once your symptoms are gone, try re-introducing one food at a time, see what happens, and learn what works best for you.

Any chronic disease will increase inflammation, but the triggers I've talked about are the most common ones that are overlooked in today's healthcare system. And, addressing them will help your body deal with other health situations.

Testing for Inflammation

Your symptoms may tell you that chronic inflammation is a problem. You can also be tested for hidden inflammation or to establish a baseline before starting an anti-inflammatory regimen and to monitor its effectiveness. The most common one is a CRP test, short for C-reactive protein.

CRP, a substance made by the liver in response to inflammation, can be measured in the blood. Any doctor can perform a CRP test, technically called "high-sensitivity CRP."

The test is most often used to look for damage to heart tissue or blood vessels, risk for a second heart attack. an infection or inflammatory disease, or to see if a patient is responding to anti-inflammatory medication. However, it has broader use as a tool to detect risk for brain and other diseases, even if there are no obvious symptoms.

A CRP test does not identify the cause of inflammation, only the level. If it's elevated, the cause then needs to be determined.

In the Johns Hopkins study described on page 2, inflammation was considered low if CRP was below 3 mg/L (milligrams per liter). However, this isn't the same thing as an optimum level, which is under 1 mg/L.

There are many pathways of inflammation in the human body. CRP is the most widely-used test, but other tests may be necessary in some cases.

¹ Alhola, P., et al. "Sleep deprivation: Impact on cognitive performance." Neuropsychiatr Dis Treat. 2007 Oct; 3(5): 553–567. 2 Dai, X., et al. "Plasticity and Susceptibility of Brain Morphometry Alterations to Insufficient Sleep." Front Psychiatry.

³ Sears, B., et al. "Anti-Inflammatory Nutrition as a Pharmacological Approach to Treat Obesity." J Obes. 2011; 2011:

⁴ Hadjivassiliou, M., et al. "Gluten sensitivity as a neurological illness." J Neurol Neurosurg Psychiatry. 2002 May;72(5):560-3. 5 CDC: Half of American Adults Have Periodontal Disease. www.perio.org/consumer/cdc-study.htm. Accessed August 23, 2018.

⁶ Walker, K.A., et al. "The association of mid-to late-life systemic inflammation with white matter structure in older adults: The Atherosclerosis Risk in Communities Study." Neurobiol Aging. 2018 Aug;68:26-33.

⁷ Prasad, A.S. "Zinc is an Antioxidant and Anti-Inflammatory Agent: Its Role in Human Health." Front Nutr. 2014; 1: 14.

Ahmed, T., et al. "Therapeutic potential of turmeric in Alzheimer's disease: curcumin or curcuminoids?" Phytother Res. 2014 Apr;28(4):517-25.

⁹ Small, G. W., et al. "Memory and Brain Amyloid and Tau Effects of a Bioavailable Form of Curcumin in Non-Demented Adults: A Double-Blind, Placebo-Controlled 18-Month Trial." Am J Geriatr Psychiatry. 2018 Mar;26(3):266-277.

Magnesium: 30 Reasons You May Be Deficient

Magnesium is essential for more than 300 enzyme functions in the human body, so a shortfall can affect you in many ways. Health problems from lack of magnesium can include muscle cramps, osteoporosis, irritability, anxiety, muscle weakness, and tinnitus, and increased risk for weight gain, heart disease, diabetes, infections, high blood pressure, irregular heartbeat, depression, hearing loss, tremors, and migraines or other types of headaches.

Did You Know?

If you're easily startled, magnesium can calm you down.

Simple tests can only measure levels of magnesium in the blood, but 90 percent of your magnesium resides in bones and muscles, and blood tests can't detect those levels. If blood levels fall, magnesium may be pulled from bones and muscles into the blood.

Bottom line, your blood level could be normal while muscles or bones are starved of the mineral. If your magnesium blood level is low, it's already depleted from bones and muscles.

Why Magnesium Is Scarce

The processed food that makes up so much of the American diet is not a source of magnesium. At the same time, calcium — but not magnesium — is added to many food products, and this creates a greater magnesium shortage. These two minerals work together and when there is an imbalance, with too much calcium, more magnesium is excreted.

In addition, industrial farming has depleted soil of minerals. Even fresh foods contain less magnesium than they used to.

How to Get Enough

Evidence suggests that most diets fall short by about 50 to 75 mg, amounts you can get by eating a half-cup of cooked spinach or Swiss chard, just under 2 tablespoons of pumpkin seeds, or 1 ounce of almonds.



Compared to food, magnesium is not as easily absorbed from supplements. Based on studies, it's estimated that taking at least 300 mg of magnesium daily, in supplements, may provide enough. However, individual requirements vary.

If your magnesium levels are low, it may take several months of supplementation to restore healthy levels in your bones and muscles. Some forms of magnesium, such as magnesium oxide, are not well absorbed and can cause loose stools or diarrhea. If that happens, try a different form of magnesium, or use a topical form in a cream, gel, or spray, or take baths in Epsom salts. Magnesium is well absorbed through the skin.

Why You're Low in Magnesium

Here are some reasons why you may need more magnesium.¹

If your diet is:

- · High in fat
- High in sugar
- High in processed food
- · Low in salt
- Low in selenium
- Low in vitamin B6
- Too low or too high in vitamin D
- · High in calcium

If you routinely drink:

- Alcohol
- Caffeine
- Soda

If you routinely do:

- Fasting
- Intense exercise

If you have:

- An overactive thyroid
- An underactive thyroid
- Bariatric surgery
- Cancer
- Celiac disease

- Chronic stress
- Diabetes
- Diarrhea
- · Heart disease
- · Heart failure
- · High risk for diabetes
- · Kidney disease
- · Low stomach acid

If you take:

- Antacids
- · Diuretic medications
- Estrogen
- Heartburn drugs

1 DiNicolantonio, J.J., et al. "Subclinical magnesium deficiency: a principal driver of cardiovascular disease and a public health crisis." Open Heart. 2018 Jan 13;5(1):e000668. doi: 10.1136/openhrt-2017-000668.

3 Exercise Myths Busted

No matter what your age or physical condition, life will be better if you're physically active. But beware of some common myths that can dissuade you from getting off the couch or continuing a fitness routine.



Myth #1: No Pain = No Gain

Although challenging your muscles will make them stronger, pain and suffering are not requirements. A study of sedentary men found that lifting a weight that made them

feel good, or fairly good, was an effective way to improve fitness.1 Naturally, feeling good from exercise can turn it into an activity you look forward to, rather than one you dread and prefer to avoid.

Myth #2: You Must Be **Healthy to Exercise**

If you have any kind of medical condition, you should check with your doctor before starting an exercise program and follow any medical advice. But then, be active. Research shows that physical activity will help you.

For example, a recent study tested a 12-week exercise program on people with chronic kidney disease who did not require dialysis. By doing a regular exercise routine, three times per week, these patients experienced less fatigue, shortness of breath, impotence,

itching, muscle spasms, stiffness, restless legs, and feelings of weakness.2 A combination of aerobic and weight training was most effective. Research with heart patients has also found that exercise improves their lives.

Myth #3: Walking Is Always the Best Place to Start

Walking is something most people can do, so it's a good place to start. But resistance training can also get and keep you going. A study of healthy men and women, between the ages of 65 and 75, found that starting to do resistance training improved fitness and motivated them to become more physically active in many ways in their lives.³

Resistance training can be as simple as doing push-ups against a wall, and gradually working your way to doing them on the floor. Another simple exercise is doing squats over a chair, as though you're going to sit down but not touching the chair.

Can Wearing a Tie **Hurt Your Brain?**

There are many designs of ties long, short, wide, narrow, and bow ties — and there's a good reason why men tend to loosen them at the end of a workday or after a special event. Ties are constricting and can be uncomfortable. But can they harm you?

To answer that question, researchers in Germany scanned the brains of 30 men, while

half were wearing ties and the other half were without ties. On average, ties reduced the flow of blood to the brain by 7.5 percent.4

This amount of constriction is probably inconsequential for most people, but for a few, it could be the straw that breaks the camel's back. Ties put pressure on arteries that carry oxygenated blood, glucose, and other nutrients to the brain. Where there's atherosclerosis, plaque makes the walls of the arteries thicker, leaving less room for

blood to flow through, and the added blockage from a tie could be harmful.

What to Do

One obvious thing to do is wear shirt collars and ties that aren't uncomfortably tight. Most of all, whether you wear ties or not, do take steps to reduce your risk of atherosclerosis by eating real, rather than processed, food, avoiding too much sugar and starch (see Basic Food Rules on page 3), and being physically active.

1. Elsangedy, H.M., et al. "Let the Pleasure Guide Your Resistance Training Intensity." Med Sci Sports Exerc. 2018 Jul;50(7):1472-1479. 2. Wilkinson, T.J., et al. "Twelve weeks of supervised exercise improves self-reported symptom burden and fatigue in chronic kidney disease: a secondary analysis of the 'EXTra CKD' trial." Clinical Kidney Journal. 13 August 2018. 3. Kekäläinen, T., et al. "Motivational characteristics and resistance training in older adults: A randomized controlled trial and 1-year follow-up." Scandinavian Journal of Medicine & Science in Sports. Scand J Med Sci Sports. 2018 Jun 7. doi: 10.1111/sms.13236. [Epub ahead of print] 4. Lüddecke, R., et al. "Should you stop wearing neckties? Wearing a tight necktie reduces cerebral blood flow." Neuroradiology. 2018 Aug;60(8):861-864.

A New Clue to Low Vitamin D

If you haven't had your vitamin D level tested and wonder if it's low, here's a simple clue: Levels are lower in both men and women with belly fat, meaning a large waist. It's been known for some time that levels of the vitamin tend to be lower in people who are overweight, but a new study has shed more light on the subject.

European researchers compared levels of vitamin D among men and women, between the ages of 45 and 65, with overall excess body fat and with belly fat. They found that the more belly fat a person has, the lower the level of the vitamin. This held true in both women and men. Overall excess body fat was linked to low vitamin D only in women.1

This new information doesn't mean you shouldn't get tested if you're in the svelte minority — you definitely should. But if your weight or waist shows that you're likely to lack vitamin D, take it as a sign to get the test. It's a simple blood test that can be done by any doctor. An optimum level is around 50 ng/mL (nanograms per milliliter).

Try the Portion Size Trick

If you're struggling with weight, try serving yourself smaller portions. This may seem too obvious to mention, but a recent study found that a "normal" portion is the size

that we've become accustomed to.² Supersized fast food has given us an exaggerated sense of "normal," so it takes some re-education to get back to a true normal.

Eat Organic to Protect Your Thyroid

Low thyroid is becoming more common, one major reason being pesticides and herbicides in our food. Studies have found that farm workers who apply pesticides are more likely to suffer from low thyroid,³ and continued exposure to these in your food can harm you, too. Choosing organic foods helps to protect your thyroid and other organs, and eating real, rather than processed, foods provides more nutrients that support your body's natural detoxification systems.



Ginger Fights **Bad Breath**

German researchers recently found that ginger eliminates bad breath by increasing levels of an odorneutralizing enzyme in saliva.4 I don't recommend ginger candies because of their sugar content. Instead, steep 1 to 2 teaspoons of

fresh ginger root in a cup of hot water for about 10 minutes. Strain and sweeten it with stevia, if you like, or drink it straight.

Top 10 Vegetable Sources of Vitamin C

If I were to ask you for a good food source of vitamin C, you probably wouldn't think of bell peppers, broccoli, or Brussels sprouts. However, one cup of any of these contains more vitamin C than a cup of orange pieces. which has about 96 milligrams. But compared to the orange, each of these vegetables contains about one-quarter the amount of carbohydrates, or less.

I'm not suggesting that you never eat oranges. However, if you're trying to control the amount of sugar and carbohydrates in your diet, it's something to consider.

Milligrams of Vitamin C in 1Cup **Bell Peppers** 117 Broccoli 101 **Brussels Sprouts** 97 Cauliflower 55 Kale 53 Cabbage 52 **Bok Choy** 44 **Turnip Greens** 39 **Beet Greens** 36 Mustard or 35 Collard Greens

^{1.} Rachida, R., et al, "Associations of different body fat deposits with serum 25-hydroxyvitamin D concentrations." Endocrine Abstracts (2018) 56 OC6.5. 2. Robinson, E., et al. "Portion size and later food intake: evidence on the "normalizing" effect of reducing food portion sizes." Am J Clin Nutr. 2018 Apr 1;107(4):640-646. 3. Lerro, C.C., et al. "Occupational pesticide exposure and subclinical hypothyroidism among male pesticide applicators." Occup Environ Med. 2018 Feb;75(2):79-89. 4. Bader, M., et al. "Chemosensate-Induced Modulation of the Salivary Proteome and Metabolome Alters the Sensory Perception of Salt Taste and Odor-Active Thiols." J Agric Food Chem. 2018 Jul 25;66(29):7740-7749.

Q&A

Q: I've been living on fresh, organic food for decades, and even bake my own bread. I rarely eat much sugar. I'm very healthy and felt great until I was diagnosed with high blood pressure and put on two drugs. My blood pressure is still high when the doctor checks it, and the drugs make me feel terrible. Once, when I was in the hospital, my blood pressure would shoot up whenever a nurse or doctor came in the room. Do you have any advice?

— *Міті С.*



A: It sounds like you have "white coat hypertension." It's what happened when a doctor walked into your hospital room and your blood pressure went up. Stress raises blood pressure, and many people find it stressful to see a doctor or have their blood pressure checked.

I recommend that you get a blood pressure monitor to use at home. Get one with a cuff that goes around your upper arm and learn to use it correctly. Someone at your doctor's office can help you figure it out, if you need help.

At home, check your blood pressure at least three times a day. Each time, do it three times in a row, a few minutes apart. Do this for about a week, or until you're confident that you can check your blood pressure without feeling stressed. Some people get nervous when checking blood pressure at home but once the stress is gone, I've seen numbers drop by 40 points within a few minutes.

Make sure to keep track of your numbers. Some blood pressure monitors will record and store them for you, or you can write them down, with the date and time.

Share your numbers with your doctor. If it turns out you really do have high blood pressure, ask if your medications can be adjusted to reduce side effects. And, see if your diet is too high in carbohydrates (see *Basic Food Rules* on page 3).

Q: I've been a home wine maker for about 30 years. Therefore, I am a wine drinker. My doctor has limited me to one glass a day, and I follow that advice. All things in moderation. Can you explain what makes alcohol bad for you? — Dan W.

A: Alcohol puts some stress on your system, because it's a toxin. When you drink it, your liver makes it a priority to break down the alcohol, and tends to put aside other functions, such as processing nutrients and filtering chemicals and waste products from your body.

Whether or not this has a major impact on your system depends upon your overall health, if your diet is nutritious, and how much alcohol you're consuming. If you drink a small



amount, such as one glass of wine, you aren't nutritionally deficient, and your overall health is good, it shouldn't be a problem. However, if your usual diet is low in nutrients and high in sugar, starch, unhealthy fats, and chemical food additives, your liver may already be struggling to keep up. Even one daily drink may be adding insult to injury.

I'm not ruling out wine. But if your blood sugar is elevated, or if you need to lose weight, it's important to be aware of the effect of alcohol. As with many health issues, the best choice isn't the same for every individual.

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.