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Natural Health Response
WITH DR. RICHARD GERHAUSER M.D.

Your Body's #1 Antioxidant Offers POWERFUL Protection for Your Brain

And How to Make It Work for You

Richard Gerhauser, M.D.
Editor, *Natural Health Response*

I'm a voracious reader.

I like to stay on the cutting edge of science and technology. To do that, I can't just depend on what health organizations dole out as fact because they're years—sometimes **decades**—behind the science.

I read, I research, and (most importantly) *I use my brain*.

So, when I read about a **newly discovered health nemesis** that's been connected to everything from heart disease, metabolic syndrome, and non-alcoholic fatty liver disease, to kidney failure, stroke, overall mortality, and more… I had to find out more.

What I found is that this so-called threat is your body's **most powerful antioxidant** that offers powerful *protection for your brain*.

That's a pretty big contradiction.

WHAT'S INSIDE

Uric acid helps protect your brain from free radical assault that could pave the way for cognitive decline and neurological diseases.

Today, I'll show you how to make sure you're benefitting from all this controversial antioxidant has to offer… while avoiding its potential risks.

Uric Acid: Friend or Foe?

Uric acid is a metabolite that circulates in your bloodstream. You may be familiar with high levels of uric acid in the context of gout and kidney stones.

I've had my own battles with gout, and I can tell you, I wouldn't wish that kind of pain on my worst enemy.

But in his latest book, called *Drop Acid*, five-time *New York Times* best-selling author and neurologist, David Perlmutter says that when it comes to uric acid, *gout is the least of your problems*.

He details the abundant research correlating **elevated** uric acid with dozens of life-threatening diseases ranging from heart disease to diabetes.

His solution is to take **immediate**

action to lower your uric acid levels through diet, lifestyle changes, and medications.

To that I say… *not so fast*.

There's more to the uric acid story… **a lot more**.

So, before you take drastic steps to eliminate the uric acid boogey man, I want to show you another side of the story.

More Antioxidant Power Than Vitamin C!

Did you know that humans and primate animals have up to **10 times higher levels of uric acid** than non-primate animals?

There are two key factors that work to keep uric acid levels so high.

The first is the loss of the functional enzyme that breaks down uric acid, called *uricase*. Mutations in the gene coding for uricase have rendered it *nonfunctional* over the past 15 million years. Loss of this enzyme prevents uric acid from being broken down by the body.

The second factor that keeps uric acid levels so much higher in humans is that 90 percent of the uric acid excreted by the kidney is **reabsorbed**.

It's obvious that the kidney thinks uric acid is something valuable that needs to be *preserved*—rather than a waste product that needs to be *excreted*.

Why would the body work so hard to maintain levels of uric acid?

It turns out, uric acid is one of the most abundant antioxidants in your body.

It is reported to contribute to greater than 50 percent of the antioxidant capacity of our blood. *That's higher than vitamin C!*

This is important because this feature makes **uric acid especially beneficial for your brain**.

Your Brain's Biggest Ally

Humans have exceptionally large brains. It is the single most energy dependent organ in the body, which means it requires boatloads of oxygen.

The problem is that while oxygen gives us energy and is required for life itself, it also is the source of highly reactive oxygen species, otherwise known as **free radicals**.

The brain is full of unsaturated fatty acids and other molecules that are highly vulnerable to oxidative stress from free radicals.

As a powerful *antioxidant*, uric acid helps protect your brain from this free radical assault that could pave the way for cognitive decline and neurological diseases.

In fact, there is increasing evidence that uric acid has **protective** effects against various neurological diseases, such as:

- Multiple sclerosis,
- Parkinson's disease,
- Alzheimer's disease, and
- ALS (Lou Gehrig's disease).

> Uric acid is reported to contribute to greater than 50 percent of the antioxidant capacity of our blood. That's higher than vitamin C!

Studies have shown that people with these diseases have LOWER levels of uric acid. There's even been a proposal to *increase* uric acid as a treatment for these diseases.

Consider this:

In **Parkinson's disease**, LOW uric acid levels are associated with freezing of gait.

Uric acid has been shown to protect the brain in the event of a stroke and other hypoxic (reduced oxygen) damage.

An animal model of **traumatic brain injury** showed that HIGHER levels of uric acid protect the brain.

An animal study showed that uric acid enhanced lifespan and protected the brain from damage caused by a stroke.

There are even studies suggesting that **high** uric acid levels might contribute to the longevity of humans compared to other animals.

And I find it interesting that there have been NO reported cases of **multiple sclerosis** accompanied by gout. Could the high uric acid levels causing the gout ALSO be protecting the brain from this condition?

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Your Body's Red Flag

Clearly, having adequate amounts of uric acid offers critical protection for your brain. If something is damaging your brain, uric acid will ramp up to defend you from the assault.

That's why—and this is really important—if your uric acid levels are too high, I consider it a valuable **warning sign** that something is causing harm to your body.

Instead of attempting to lower uric acid levels *directly* (through medications like allopurinol and febuxostat), you should be asking *why they are so high to begin with*.

In other words, **what is the uric acid working to protect you from?**

The answer will SHOCK you.

The #1 Assault on Your Brain

One of the biggest threats to your brain is your **cell phone**.

Cell phone exposure has been found to significantly increase uric acid and other oxidation-fighting factors (like superoxide dismutase and glutathione).

Why? Because it's protecting you from the radio frequencies that could be destructive to tissues and enzyme function.

One study clearly showed that long-term cell phone exposure caused harmful effects on blood parameters and cell structures… which led to significant *increases* in uric acid.

To see how this plays out in real life, let's look at the case of a patient of mine named William.

William had bouts of gout each year, which he treated with anti-inflammatory drugs like ibuprofen and corticosteroid injections. (He didn't tolerate the usual drug to lower uric acid, which is allopurinol.)

Cell phone exposure has been found to significantly increase uric acid and other oxidation-fighting factors.

Besides the gout, he also had low energy, had a new onset resting tremor, poor balance, poor sleep, weight gain, brain fog, ringing in the ears, and depression and anxiety.

His bloodwork showed nothing of note except for one thing: His uric acid level was elevated at **8.6 mg/dl**. (Normal range is 3.5-7.2 mg/dL.)

When I questioned him about his environment, his answers showed that it was off-the-wall brutal.

Most notably, he was on a computer and cell phone constantly, and he kept his cell phone on his nightstand at night.

Research by Martin Paul, PhD, has shown that non-native electromagnetic fields (nn-EMF)—such as cell phone and other wireless devices—activate the voltage-gated calcium channels on cell membranes.

This results in the release of nitric oxide free radical, which combines with superoxide free radical to create the super free radical **peroxynitrite**.

Uric acid indirectly lowers peroxynitrite.

In my experience, I have found that high **nn-EMF exposure leads to high uric acid** because the cells use it to protect themselves from the damaging effects of the peroxynitrite free radical attack.

Making matters worse, William lived in a high-rise apartment, he only spent one day outdoors each week, and he often slept late because of poor sleep at night.

The excessive blue light exposure was creating oxidative damage to photoreceptors and was destroying his circadian mechanism—another contributor to high uric acid.

The Solution

After seeing this picture, I said to myself, "No wonder his uric acid is high!"

The answer to William's symptoms was to address the root issues that were causing the elevated uric acid—*and not just address the high uric acid*, which may have been his body's way to trying to protect him.

It was not an easy solution.

He reduced exposure to nn-EMFs by establishing wired Internet access, buying an EMF-blocking case for his cell phone, and keeping his cell phone out of

the bedroom.

He fixed his circadian rhythm by purchasing a low blue light/low flicker computer monitor (such as the BENQ EL2870U) and using a blue light filter on his cell phone. He also began observing the sunrise daily and used blue blocking glasses after sunset.

He overhauled his diet by reducing his consumption of refined sugars/alcohol, eating an organic, whole food diet, and practicing time-restricted eating—all of which help reduce levels of uric acid.

He also started a gratitude journal, daily meditation, and daily light exercise.

It was a lot to implement, but he was highly motivated because the stakes were so high.

Not only did William's uric acid levels come down, but ALL of the symptoms he had been experiencing **disappeared**.

William got a new lease on life and now is a spokesperson for reconnecting with nature.

Balance Is Key

I don't disparage the connection between HIGH levels of uric acid and disease, but we have to be careful to label uric acid itself as the bad guy.

It's not unlike **inflammation**. Inflammation helps *protect* your body and speeds the healing process. But too much inflammation—for too long—turns one of your body's greatest allies into one of its greatest enemies.

As you know, chronic inflammation is a key underlying cause of aging and disease.

The same is true of uric acid.

Its tremendous antioxidant status makes it a key defense for the part of your body most vulnerable to the most damage from free radicals (your brain).

But if uric acid remains too high—for too long—it is connected to aging and disease.

Instead of taking drastic action to lower your uric acid, the key is to walk the fine line between ***optimal*** levels of uric acid and **elevated** levels.

The best way to do that is to manage your environment.

In addition to nn-EMFs from cell phones, computers, and other devices, other lifestyle factors that lead to elevated uric acid include:

- Processed food (especially sugar, fructose, alcohol)
- Poor sleep
- Lack of exercise
- Certain medication
- Excess salt intake
- Purine-rich foods

This Ingredient RAISES Your Risk of Heart Disease, Cancer, and Aging

Simple Steps to Limit Your Consumption

If I had to name **one single factor** that's destroying the health of people all around the world, it wouldn't be red meat, pollution, or even cigarettes.

It would be **sugar**.

For years, people have been fed the *LIE* that **dietary fat** is Public Enemy #1. Especially when it comes to heart health and other metabolic conditions.

The reality is that **SUGAR causes far more harm than FAT ever will!**

Overconsumption of this one ingredient contributes to obesity, insulin resistance, high blood pressure, non-alcoholic fatty liver disease, and more.

All of these conditions pave the way for the biggest killers in our society, like heart disease, type 2 diabetes, and cancer.

Here's the real kicker: **No matter how healthy you *think* your diet is, you're likely consuming FAR MORE sugar than you realize.**

It's hiding in everything from salad dressing to pasta sauce, and manufacturers cleverly disguise it on

Sugar hides in a disguise of seemingly harmless items.

ingredient labels by calling it **more than 50 different names.**

Today, I'll sift through the misinformation and tell you how to *safely* consume sugar for optimal health.

How Sugar Hides in Plain Sight

Most of us naturally have a sweet tooth—*and there's nothing wrong with that.*

The cravings for sweets helped our hunter gatherer ancestors survive. The sweet taste, versus bitter, guided us toward calorie-dense fruits and honey, and away from bitter foods that might be poisonous.

The right type of sugar is actually the main source of energy for your body's cells!

You get it from carbohydrates like breads and grains, beans and peas, milk and yogurt, and fruit like apples and melons.

The problem is that sugar hides in a disguise of seemingly harmless items. Things like ketchup, pasta sauce, salad dressings, cereals, protein powders, and fruit drinks.

In an attempt to fool you, manufacturers hide sugar in plain sight on their ingredient labels by using **more than 56 different names for sugar.**

As a result, you're likely consuming far more sugar than you realize.

The latest government dietary recommendations advised that men limit their daily added sugar intake to nine teaspoons per day, and that women consume only six teaspoons.

> Manufacturers hide sugar in plain sight on their ingredient labels by using *more than 56 different names for sugar.*

Yet the average American consumes nearly DOUBLE that, at 17 grams per day.

It's easy to do.

Just one 12-ounce can of soda pop can have eight teaspoons of added sugar. Add a few teaspoons to your coffee, pour some salad dressing on your salad, and eat spaghetti for dinner, and you're already well over the limit.

Or take, for example, a Supreme Court ruling in Ireland said that Subway could not call its bread "bread" **because the sugar content was closer to that of cake.**

You see, when it comes to sugar, you're bombarded with it without even realizing it—*but your body is still paying the price.*

Not All Sugar is Created Equal

Sugar entered the American diet in a big way in the 1970s in the form of **high fructose corn syrup** (HFCS).

Until then, the type of sugar that had traditionally been used as added sugar was **sucrose**. Also known as table sugar, sucrose can be derived from various sources such as sugarcane and sugar beets.

Sucrose is a disaccharide that has one molecule of glucose attached to one molecule of fructose, so it is 50 percent fructose and 50 percent glucose.

Glucose is processed throughout the entire body, where it fuels your cells.

However, fructose is metabolized by your liver, where it gets converted into glucose. This means it needs to go through an extra step before your body can utilize it.

HFCS became dominant with the food manufacturers because it is cheaper than sucrose (corn is a government subsidized crop in the USA), has a longer shelf life, maintains moisture in industrial bakery products, and is sweeter than most other sugars.

Since fructose has a lower glycemic index than sucrose, it was initially thought that high fructose corn syrup might be better for blood sugar levels and preventing metabolic syndrome.

The Best Time to Eat Sugar

But what about fruit?

I get this question a lot, and it's understandable.

After all, the kind of sugar found in fruit is fructose, the same kind of sugar I've been warning you about this entire article.

But in general, fruit doesn't pose a problem because the sugar found naturally in fruits and vegetables is in a lower quantity, while also containing fiber, water, and nutrients that help to counteract any potential negative effects.

Still, to reduce the potential negative impact even more, the best time to eat fruit is in the summertime, when it's in season.

Because sugar is processed at cytochrome I, it causes a free radical boost that is a stimulus for mitochondrial biogenesis.

This process does not happen at cytochrome II, where fats are turned into ATP.

Fortunately, the same strong sun exposure that causes the fruit to ripen also helps your body limit the damage caused by the free radicals.

In other words, a seasonal diet (eating what is currently in season where you are located) will automatically induce more energy-generating mitochondria while limiting the damage of free radicals.

Isn't it amazing how our bodies were designed to work in perfect harmony with nature?

Boy was that wrong.

Fructose Wrecks Your Metabolism

Researchers have since discovered that fructose wreaks metabolic havoc on your body.

You see, fructose is metabolized in the liver, where the enzyme *fructokinase* requires energy in the form of adenosine triphosphate (ATP) to break it down.

This causes the ATP level to fall in the liver, creating a transient block in protein synthesis, an increase in oxidative stress, and mitochondrial dysfunction—all of which play a role in fructose mediated effects.

And that's just the beginning.

Fructose is unique in that the cells don't regulate the production of triglycerides, while glucose has tight controls over the same process.

In fact, studies show that fructose ingestion can increase triglycerides by 11 percent *in just the first 24 hours*.

Because this is all happening in your liver, studies show that fructose intake is likely a major risk factor for non-alcoholic fatty liver disease (NAFLD).

And if you wonder why eating fructose packs on the pounds, it's because it **stimulates fat production**, glucose production, and insulin resistance—while simultaneously *shutting off fat burning*.

Fructose intake increases uric acid levels, which can exacerbate gout and kidney stones.

It has also been shown to alter the gut microbiome, which favors the development NAFLD and leaky gut syndrome.

It's hardly surprising, then, that between the 1970s and the 2000s, added sugar intake increased in parallel with an increase in the percent of the population being overweight or obese, which is about 67 percent.

The added sugar also paralleled increases in metabolic syndrome, diabetes, heart disease, fatty liver disease, and kidney disease.

Data from the National Health and Nutrition Examination Survey (NHANES) from 2009 to 2016 showed that only 12 percent of Americans were metabolically healthy, meaning 88 percent of Americans have markers of metabolic syndrome and related disorders.

How Sugar AGEs You

Think of high levels of sugar intake as the initial domino in the domino effect of aging and disease.

It starts by causing the accumulation of **advanced glycation end products** (AGEs), molecules that have sugar inappropriately attached to proteins and fats.

Damage from AGEs is common in diabetic neuropathy, Alzheimer's disease, high blood pressure, stroke, atherosclerosis, osteopenia, and in the generation of epithelial cancers.

AGEs activate the **receptor for advanced glycation end products** (RAGE), which results in the activation of *nuclear factor kappa beta* (this is essentially the 911 system in the cell).

This triggers the production of pro-inflammatory cytokines, the mechanism for how many diseases start and progress.

Then after a meal, the increase in triglycerides and glucose stimulate the activation of neutrophils that leads to an increase in the pro-inflammatory cytokines such as IL-6 and TNF alpha, which are associated with chronic disease.

Skip the "Diet" Products

Some patients at this point will tell me "I'm going to switch to Diet Coke".

Talk about going from bad to worse.

"Diet" products might not contain sugar, but in its place are artificial sweeteners like aspartame and sucralose.

A study recently published looking at the 10-year NHANES data (National Health and Nutritional Examination Survey) showed a correlation between artificial sweetener intake and an increased risk of stroke and dementia.

The kicker is that while most people switch for the supposed weight-loss benefits, studies show that the use of artificial sweeteners does not help people lose weight.

Opt for Whole Foods

The best way to reduce the risks of added sugar is to reduce (better yet—eliminate) processed food.

Here's what to watch out for.

The government dietary guidelines show that 70 percent of added sugar intake comes from five food categories:

1. Sweetened beverages
2. Desserts and sweet snacks
3. Coffee and tea (with their additions)
4. Candy and sugars
5. Breakfast cereals and bars

Instead, opt for a natural, whole-foods diet.

If you're eating REAL food, you don't have to worry about sugar hiding under a pseudonym on a package label.

The ROOT CAUSE of Chronic Health Problems?

And My Go-To Test for an Accurate Diagnosis

What do joint pain, skin rashes, headaches, and brain fog all have in common?

They can all be caused by **food sensitivities**.

Identifying problem foods—and eliminating them from your diet—can improve chronic symptoms ranging from migraine headaches and joint pain, to skin rashes, brain fog, and even fatigue and fibromyalgia.

The only problem?

Most people—and their doctors—don't consider food sensitivities as a root cause of their chronic health complaints.

And even when they do, the most common test to identify problem foods is **notoriously *inaccurate***.

I'll share with you my **go-to test** for food sensitivities… and more importantly, how to correct them once you finally receive an accurate diagnosis.

The Food Sensitivity Epidemic

A small portion of the population experiences food reactions due to **allergies** (think shellfish and peanuts) and **autoimmune disease** (like celiac or Crohn's). Others have a problem digesting certain foods (like in **lactose intolerance**).

But the vast majority of individuals have something most people have never even heard of: **food sensitivities**.

A food sensitivity means that certain elements in your diet are triggering **inflammation** in your body that leads to a variety of potential symptoms and conditions.

If you're experiencing any of the following symptoms, a food sensitivity could be the reason why:

- Acid reflux
- Anxiety
- Arthritis
- Chronic fatigue syndrome
- Fatigue
- Headaches
- Inflammation
- Joint pain
- Mood swings
- Muscle pain
- Sinus infections
- Weight gain
- Weight loss

I'm guessing most of you checked one or more items on this list—and you'd be in good company.

Food sensitivities affect up to 40 percent of the population—*and they often go undiagnosed*.

Acute symptoms caused by food can be delayed by hours or days, and they can be impacted by the quantity of the food you eat.

Because food sensitivities cause systemic inflammation—and inflammation is at the root of so many health conditions—they are believed to play a primary or secondary role in many major medical conditions, such as:

- Fibromyalgia
- Inflammatory arthritis
- Atopic dermatitis
- Psoriasis
- Chronic fatigue syndrome
- Insomnia
- Restless leg syndrome
- Interstitial cystitis
- Depression

Identifying Your Problem Foods

Gluten is a common trigger food that's related to an autoimmune condition called *celiac* disease. But you don't have to have celiac disease to be sensitive to gluten.

Some estimates show that gluten sensitivity is up to eight times more prevalent than celiac disease.

But in reality, ANY food can trigger an inflammatory reaction—even seemingly healthy, *anti*-inflammatory

Gluten is a common trigger food that's related to an autoimmune condition called celiac disease.

foods like turmeric, ginger, and berries.

Making matters worse, most people have sensitivities to 10-20 different foods!

Ultimately, the best way to identify problem foods is to get a blood test—**but not all tests are created equal**.

One of the most common methods for testing food reactions is to test for IgG antibodies. These tests are widely available and are often used by functional medicine practitioners.

Unfortunately, I've found from personal experience that these tests are not very accurate.

In some cases, the test identified foods as being highly reactive, yet the person would eat that food on a regular basis with no symptoms.

In other cases, a person seemed to be reacting to a food, but the IgG antibody levels were normal.

Ultimately, I discontinued using IgG in my office because of the inconsistency with the results and outcomes for my patients.

Instead, I used a blood test developed over 30 years ago called the **antigen leukocyte antibody test** (ALCAT).

This was invented and patented by immunologist Mark Pasula, PhD.

While the research showing benefits of this testing is limited, I personally found this test to be FAR MORE ACCURATE than IgG testing.

Not only do the results of this blood test list offending foods, *it ranks them according to severity*.

The Most Accurate Food Sensitivity Test Available

More recently, Dr. Pasula developed another blood test that he states is even **more** accurate at identifying food sensitivities called the **mediator release test** (MRT).

This test uses flow cytometry and impedance techniques to measure the subtle volume change in white blood cells (lymphocytes, monocytes, neutrophils, and eosinophils) when they are exposed to offending foods.

In other words, it measures the *degree* of the inflammatory response various foods are causing.

It tests 120 different foods and 30 different chemicals.

The test is available from **Oxford Biomedical**, which is a CLIA (Clinical Laboratory Improvement Amendments) certified lab.

LEAP Into a Better Diet

In addition to their revolutionary testing, Oxford Biomedical has developed a remarkably effective program for overhauling your diet and your health.

It's called LEAP.

LEAP stands for **lifestyle, eating, and performance program**, and it is monitored by a dietitian or nutritional counselor.

What makes this different from an elimination diet is that instead of identifying *problem* foods, the goal is to identify which foods are **safe**.

In other words, it tells you what TO do, instead of what NOT to do.

Oxford Biomedical claims that 50 to 80 percent of a patient's symptoms improve **after just 10 days** of eating foods that are identified as *safe* on the test.

As far as I know, there's no randomized controlled trial evidence that the program is effective. However, there are smaller studies showing it may be beneficial.

One small study showed that LEAP helped with symptoms of irritable bowel syndrome.

Digging Even Deeper

Why would a seemly harmless food incite the kind of inflammatory response that can wreak such havoc on your body?

The most likely possibility is because the immune system is under stress.

And while removing the offending food can improve your symptoms, it is entirely possible that if you don't correct the other issues, the sensitivity may return, or you may develop reactions to other foods.

This means getting to the heart of a healthy lifestyle needs to be in sync with your diet.

For most people this means:

- Fixing sleep issues,
- Reducing stress,
- Optimizing gut microflora (probiotics, prebiotics),
- Mitigating blue light toxicity from artificial lights,
- Adequate sun exposure for vitamin D and setting the circadian rhythm,
- Daily grounding to the earth,
- Reducing non-native electromagnetic fields exposure from tech devices, and
- Switching to an organic, whole-foods diet to reduce exposure to toxins and processed food.

Another study showed that it reduced the blood levels of inflammatory cytokines.

Split tests show a **90 percent reproducibility**, which means it is *highly accurate*.

If you're interested in having the MRT test done to find out if food sensitivities are potentially to blame for any of your health problems, visit www.nowleap.com.

The test typically costs between $50-$75.