

Improve Brain Function in 4 Steps

Before jumping into this month's issue, I want to let you know that next month's newsletter is one you won't want to miss. I have never given a notice like this before, but the breakthrough therapy I'll be discussing undoubtedly ranks up there as some of the most important research I've had the opportunity to share with you. I'm



Dr. David Williams

still studying the available information, interviewing people, chasing leads, and verifying data to complete the story. Whatever you do, don't miss it. It's a game changer.

Now on to this month's topic...

Lately, it seems like the television and radio airwaves are filled with commercials hawking products to improve brain function and memory. The ads certainly hit a hotspot with the aging population (a group in which I include myself). However, I wouldn't place much hope in some miracle pill promising to instantly reverse lapses in memory and return you to your quick-witted teenage years.

New research, however, has shown that certain habits are directly related to accelerated brain aging.

In the largest known brain imaging study, researchers evaluated 62,454 SPECT brain scans performed on 31,227 individuals from 9 months old to 105 years of age. Two scans were performed on each participant—one while they were at rest and one while concentrating.

After evaluating blood flow to 128 specific regions, the researchers predicted the age of each person. Then after comparing each participant's predicted age to their actual chronological age, along with their health and social habits, researchers were able to determine specific brain disorders and behaviors that accelerated aging of the brain.

The brains of those individuals with schizophrenia showed an average of four years of premature aging, bipolar disorder showed 1.6 years of accelerated aging, and ADHD showed 1.4 years of accelerated aging. Alcohol abuse resulted in 0.6 years of accelerated aging to the brain. But there didn't seem to be any escalated aging associated with depression. ([*J Alzheimers Dis* 2018;65\(4\):1087-92](#))

It was also interesting that cannabis abuse was linked to 2.8 years of accelerated brain aging. Cannabis use is becoming more and more widespread. In our current culture, marijuana is touted as a harmless substance. Based on this study, that assessment may come back to bite a lot of people as they get older.

SPECT scans utilize a radioactive tracer to see, in real time, how the blood flows to different regions of the brain during activity. It's a method of showing the brain at work, i.e., which areas of the brain are healthy, overactive, or underactive.

Just like other organs, blood flow is essential for brain function. Poor blood flow in other parts of the body is easily recognized by most people simply because the signs and symptoms are typically obvious. Decreased blood flow to the heart can trigger angina pain or a heart attack. Poor blood flow to the penis can result in erectile dysfunction. Poor blood flow to the lower legs results in numbness, swelling, and aches. For some reason, though, we don't usually associate poor blood flow in the brain with memory problems and decreased cognitive ability.

Another concept that many don't grasp is that circulation issues are generally not confined to just one part of the body. This is particularly true with atherosclerosis (clogged arteries).

Blockages can form when the body tries to repair areas where a blood vessel is damaged from toxins, physical stress like high blood pressure, or other factors. Blockages are also common in the smaller, microscopic arterioles and capillaries. The brain is particularly loaded with these small blood vessels that can end up blocked. The point is, if you have known blockages and poor circulation in one area of the body, it's very likely you have blockages in the brain as well. It's just that the symptoms associated with brain blockages aren't pain, numbness, or muscle spasms, they are poor memory and concentration, lack of energy/motivation, and a loss of cognitive function.

Improve Brain Function

Therapies and supplements that improve overall circulation can also help with brain function. Here are four things you can do.

Exercise

Any form of exercise that increases blood flow is helpful. Exercise with oxygen therapy is

even better, but it involves utilizing an oxygen generator.

Reduce Inflammation

As we age, immune cells in the brain called microglia become chronically inflamed. One of the detrimental effects of this inflammation is the production of chemicals that impair cognitive and motor function, resulting in poor memory.

Butyrate—the short-chain fatty acid produced by beneficial bacteria through the fermentation of soluble fiber—has been shown to inhibit the production of these chemicals.

In the simplest terms:
Increased beneficial gut bacteria +
A diet rich in soluble fiber =
Less brain inflammation and better
brain function.

Take Niacinamide

Niacinamide (the amide form of vitamin B3) is readily available, very inexpensive, and one of the most underutilized vitamins when it comes to improving blood flow to the brain.

Niacinamide is essential to the development, survival, and function of the central nervous system. It can freely cross the blood-brain barrier in either direction and can restore blood and oxygen to damaged nerves.

Niacinamide helps protect the brain and nerves from traumatic injuries, decreased blood flow, and stroke, and can play a key role in the prevention of Alzheimer's, Huntington's and Parkinson's diseases. Deficiencies of niacinamide and niacin have been linked to dementia.

Niacinamide can be found in eggs, meat, fish, and mushrooms. However, it would be difficult to obtain therapeutic doses strictly from food.

Niacinamide supplementation is very safe, with studies showing no adverse events with dosages of 1,500 milligrams twice a day. Only small quantities are stored in the liver, and even high doses don't typically lead to adverse effects. For best results, I recommend 250 milligrams every two to three waking hours.

Also keep in mind that all of the B vitamins work in conjunction with one another. So if you use higher doses of niacinamide, also take a good multivitamin containing a broad balance of the other B vitamins.

Take Low-Dose Lithium

Although it doesn't work by improving blood flow in the brain, lithium is one mineral that I believe is essential for maintaining proper brain function.

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You've probably heard of lithium. It may even conjure up a host of negative ideas since its use has long been associated with mental illness. I'll admit, at the high doses that have been prescribed in these cases, careful monitoring is needed to check for toxicity and other issues.

However, I'm talking about very low doses, ranging from 1 to 20 milligrams of elemental lithium in the form of lithium orotate or aspartate. This works out to only 1–2 percent of what is given as prescription medication. (In fact, pharmaceutical lithium has been used at an average of 600–1,200 milligrams daily.)

At lower doses, not only is lithium safe, it has been shown to provide amazing protection to the brain. Many people have been taking low-dose lithium for decades with no reports of any problems whatsoever. I take it myself every day and have for years.

Studies show that dementia rates among the elderly are significantly lower in communities where the drinking water contains higher—yet still micro—amounts of lithium. The results have been so profound that many scientists have suggested adding sub-therapeutic amounts of lithium to public drinking water.

There have been numerous other long-term studies documenting the positive effects of low-dose lithium.

One recent Danish study followed 800,000 people and their medical records for over 40 years. It also examined drinking water samples from 151 water sources that supplied water to 42 percent of the entire Danish population.

The data showed the prevalence of dementia in the population decreased as lifetime exposure to lithium in drinking water increased. ([*JAMA Psychiatry* 2017 Oct 1;74\(10\):1005–10](#))

Other studies have found that micro-dose lithium can put the brakes on amyotrophic lateral sclerosis (ALS, also known as Lou Gehrig's disease). It is also protective against Alzheimer's, Parkinson's, and depression.

With the above conditions, and brain aging in general, many associated symptoms stem from a buildup of older, poorly functioning nerve cells and waste material. Research has shown that lithium increases autophagy—the natural and regulated process where cells disassemble unnecessary and non-functional components for recycling or removal. It's a way the body cleans out the old and regenerates itself.

Lithium also protects nerve cells from both internal and external toxins. One of these toxins is aluminum, which has been linked to Alzheimer's disease. Lithium disrupts the activity of the key enzyme responsible for the development of amyloid plaques—a hallmark of Alzheimer's.

Lithium helps in the regeneration of axons, the “branches” on nerve cells that actually link the nervous system together. And if all that wasn't enough, lithium has been shown to increase the actual number of brain cells—something we used to believe couldn't happen.

James Greenblatt, MD, and Kayla Grossman, RN, summed up the importance of low-dose lithium best, in an article they wrote in the

December 2015 issue of *The Neuropsychotherapist*:

“Lithium is the single most proven substance to keep neurons alive, and yet it continues to be viewed in the public mind as a dangerous and scary drug. Lithium is found readily in our environment, food, water, and each and every cell in the human body. It's time we change the conversation around one of nature's most effective and powerful neuroprotective remedies.”

Currently, more than 35 million people worldwide suffer from dementia, and that number keeps growing. The World Health Organization has projected the number of dementia cases will double in the next 10 years and triple by the year 2050. The most common form of dementia is Alzheimer's disease, which is now the sixth leading cause of death.

Low-dose lithium (10–20 milligrams per day, in divided doses from lithium aspartate or lithium orotate) is safe, readily available, inexpensive, and currently one of your best bets for avoiding the nightmare of dementia.

The sooner you start taking it, the better. The characteristic plaques of Alzheimer's begin to develop as much as 40 years prior to the onset of any symptoms. At age 50, 10 percent already have amyloid plaques. Lithium, along with the other things I've mentioned, have been shown to slow, stop, and possibly help reverse these changes.

Mainstream medicine continues to ignore these effective therapies. I hope you don't. ■

NEWS TO USE *from around the world*

Honey for Treating Cystic Fibrosis

UNITED KINGDOM—Cystic fibrosis is a horrendous, inherited disease for which there is no known cure. It affects the pancreas, sweat glands, and the respiratory system. The pancreas is involved in about 80 percent of all cases, but it's the damage to the lungs that typically lowers life expectancy. Thick secretions form in the lungs and start to obstruct air passageways, leading to infections, bronchitis, and emphysema.

Fish oil has been shown to slow the progression of cystic fibrosis and in some animal studies, vitamin E and curcumin (equivalent to roughly 3 grams per 150 pounds in humans) also produced some positive effects. However, it is still incurable.

One of the problems is the recurring lung infections that have been traced to the *Pseudomonas aeruginosa* bacterium. Roughly 80 percent of cystic fibrosis patients will acquire pulmonary *P. aeruginosa* infections. This bacterium is difficult to control because many strains are resistant to medications, and it creates a durable, mucus biofilm to surround and protect itself. The mucus biofilm that forms in the nasal cavity and upper respiratory tract acts as a reservoir for bacteria, which continue to trigger infections.

In an unusual experiment, researchers from two universities, Cardiff and Swansea, decided to pit manuka honey against this form of bacteria. Manuka honey has been used for decades to treat wounds that don't respond to antibiotics and other therapies. I've talked before about a

company called Medihoney that produces medical grade manuka honey bandages. In this study, the researchers used a Medihoney product. ([Front Microbiol 24 April 2019, https://doi.org/10.3389/fmicb.2019.00869](https://doi.org/10.3389/fmicb.2019.00869))

The researchers compared the ability of manuka honey vs. several widely used antibiotics (ciprofloxacin, ceftazidime, and tobramycin), both alone and in combination, in inhibiting the growth of *P. aeruginosa*. Both the honey and antibiotics were tested on infected tissue. They found that manuka honey worked, even when high concentrations of antibiotics didn't. In many cases, even a low concentration of manuka honey inhibited strains of this bacterium, which was resistant to all the tested antibiotics.

A solution of 64 percent manuka honey was found to be effective. However, using manuka honey directly in the sinuses and upper respiratory tract would be a challenge, and it would be difficult to get such a solution to the lungs. But scientists felt concentrations of 40 percent honey incorporated into a nasal rinse would be able to reach the sinuses.

Years ago, I broke the story about a xylitol-based nasal wash product called Xlear (pronounced Clear). I spoke with the developer of Xlear at that time, and they had some preliminary results showing that the use of Xlear exhibited some positive effects on individuals with cystic fibrosis.

The xylitol in Xlear is ingested by bacteria in the nasal and sinus cavities. The bacteria try to utilize xylitol in the production of energy just as they would sugar. However, they are unable to

metabolize xylitol and gradually begin to die off. This is why Xlear has been effective at treating/eliminating chronic nasal/sinus and upper respiratory infections, colds/flu, and allergies.

Using Xlear or a xylitol rinse along with manuka honey could be a safe and effective stop-gap measure to clear the sinus/nasal cavity infection reservoirs. Clearing these areas could help prevent the migration of bacteria from the upper airways into the lungs. One would have to experiment with the amount of honey in the solution. And I'm not sure a typical nasal spray inhaler would work without clogging. It might be better to use a neti pot.

If you would like to try this therapy (if you have cystic fibrosis, it is definitely something you should consider), I suggest using the medical-grade manuka honey from [Medihoney](#), which is sterilized to eliminate bacteria, fungi, and other organisms that can live in honey.

When manuka and other honey is used topically, I haven't seen instances where these organisms create a problem. But you do not want to risk introducing any potential pathogens to your body if you're already dealing with cystic fibrosis or some other lung problem.

Medihoney makes several honey-infused bandages, along with a gel and paste. The gel comes in a tube like an ointment and it contains a gelling agent to make it thicker. The paste, on the other hand, has no additives and is composed of 100 percent honey and thinner. The paste would be my recommendation for creating a diluted nasal/sinus rinse. ■



Alternatives MAILBOX

Nursing Home Precautions

Question: *I recently had to put my mother in a nursing home. In one of your past newsletters, you talked about the importance of including a probiotic supplement and live fermented food in the diet of nursing home residents. We have her on a probiotic, and I bring a good yogurt with live cultures to her on a regular basis. Do you think she also needs to take a multivitamin or any other supplements? I discussed this with the staff and they assured me that the residents' diet is nutritionally complete and a multivitamin really isn't necessary. I'm pretty sure you wouldn't agree, but I wanted to ask. — Diane T., Fort Wayne, IN*

Answer: It would be hard to comment on their specific menu and just how nutritionally complete it is without actually seeing it. But I do think giving her the probiotic and yogurt is a very wise move. And personally, I believe a multivitamin/mineral complex is also warranted.

The elderly, particularly those in nursing homes, are notorious for being deficient in most of the B vitamins (particularly B6, B1, and B12), vitamin D, omega-3 fatty acids, calcium, magnesium, and zinc.

Nursing homes and assisted living facilities are most often utilized when an elderly individual is no longer able to take care of him/herself. One very common reason for this loss of independence is suffering a fall and subsequent hip fracture. In cases such as these, the patient likely had nutrient deficiencies before falling and ending up in the nursing home.

My point is, I would evaluate any of the health problems your mother might have had prior to entering the nursing home and see if they might be related to nutritional deficiencies.

Zinc deficiencies, in particular, seem to get overlooked in nursing home residents. Studies have shown that at least 30 percent of those in nursing homes are deficient in zinc. This mineral plays a key role in the immune system, and low

levels are routinely associated with respiratory-related deaths in both the elderly and in children. Research shows nursing home patients who have normal levels of zinc have a much lower incidence of pneumonia, use 50 percent fewer antibiotics, and if they do contract pneumonia, they have a shorter duration of illness than those with low zinc levels. In fact, having normal zinc levels is associated with decreased all-cause mortality.

Vitamin E can also lessen the incidence of colds, but when it comes to preventing pneumonia, it seems zinc is king.

Checking blood levels of each and every vitamin and mineral can get expensive and may require several tests. (That's one reason why I think taking a high-quality multivitamin/mineral supplement is "cheap insurance.")

If that's not an option, then at least ask the doctor to check your mother's zinc status. Pneumonia and respiratory tract infections are the leading cause of death among nursing home residents, so you want to prevent those as well as you possibly can—and zinc is a good place to start.

Resolve Inflammatory Bowel Disease

Question: *I have inflammatory bowel disease (IBD) that causes severe, recurring diarrhea. I've followed many of your suggestions (probiotics, digestive enzymes, soluble fiber, and even a fecal transplant) and the problem seems to resolve, only to return again after a few weeks. Is there something I'm missing? — Anonymous*

Answer: To start, I hope you have a good doctor to monitor your case. If you don't, please find one.

Everyone's situation is different due to other extenuating health issues, diet, medications, age, and host of other factors. However, there are a couple of underlying factors that seem to make recurring problems like yours more and more prevalent. I'll address those first. Then, I'll cover some very new research that highlights some other tools that can be helpful in bringing IBD under control and/or eliminating it.

Drug-Polluted Waterways

One of the most obvious issues to address is the overuse of, and the over-exposure to, antibiotics.

It's always been the elephant in the room and isn't really a new problem. Increased antibiotic use is one of the primary reasons that patients admitted to hospitals have much greater odds of coming down with a hospital-acquired *Clostridium difficile* (*C. diff*) infection.

A new and growing problem is just how ubiquitous antibiotics have become in our environment, particularly in our water. A study by the University of York found the world's rivers are loaded with antibiotics. Alistair Boxall, an environmental scientist, shared his study results at the annual meeting of the Society of Environmental Toxicology and Chemistry in Helsinki, Finland last month.

Boxall's research team tested for 14 common antibiotics at 711 sites in 72 countries and found antibiotics in 65 percent of them. In 111 of the sites, the antibiotic levels exceeded what is considered safe. Some sites tested over 300 times the safe limit.

The Danube in Austria, Europe's second largest river, was the continent's most polluted. It contained seven antibiotics. One—clarithromycin, which is used to treat respiratory tract infections—was four times the level considered safe.

The Thames, considered one of Europe's cleanest rivers, had a mixture of five antibiotics. Ciprofloxacin, used to treat skin and urinary tract infections, was over three times the safe limit. It surpassed the safety threshold in 51 locations.

The study found that about 7 percent of the rivers in Europe had antibiotic levels that exceeded safe levels, while 15 percent of the rivers in North America did.

Antibiotic concentration in the waterways was the worst in the lower-income continents of Africa and Asia. This is, in part, due to substandard or a complete lack of sewage treatment facilities. For example, in Bangladesh, the antibiotic metronidazole was found to be over 300 times the safe level. And some waterways in Kenya had antibiotic concentrations over 100 times the safe level. In some areas, the high antibiotic levels completely wiped out the fish population.

Many of these antibiotics come from agricultural runoff. These medications are used in animals to promote weight gain and prevent/treat infections. Additionally, many of the antibiotics discovered in this study came from individuals either flushing unused

medications down the toilet or from antibiotic-laced urine. Between 25–50 percent of most drugs taken are not metabolized in the body and are subsequently passed out of the body in the urine.

This doesn't just apply to antibiotics. We're also talking about drugs to treat diabetes, cancer, cholesterol, pain, allergies, acid reflux, heart disease, high blood pressure, hormone issues, asthma, epilepsy, and every other prescription and over-the-counter drug you can imagine.

Around 60 percent of the American population takes one or more prescription drugs. At least 25 percent of the women in this country are now taking some type of psychoactive medication or antidepressant. And let's not forget about all of the illegal drugs like cocaine, heroin, and opioids. All end up in our water supply.

Research has shown that antibiotic pollution is one of the primary methods through which bacteria develop resistance to life-saving antibiotics, rendering them useless. Many of the resistance genes we now see in human pathogens originated from environmental bacteria. Even at very low concentrations, antibiotics can initiate the evolution of resistance and increase the odds that resistance genes transfer to human pathogens. ([Chemosphere 2006 Oct;65\(5\):725–59](#))

While some may argue that the concentration of these drugs in our drinking water may not equate to a therapeutic dose, they still have an effect, particularly if ingested on a regular basis. Besides, no one fully knows the health ramifications of taking a daily cocktail of dozens of these drugs every day. Many are known to be especially dangerous to pregnant women or children, whose developing bodies are extremely vulnerable.

So even if you haven't been taking antibiotics, you'll want to make sure your water supply doesn't contain them, and that's not always easy to determine. The amount of antibiotics and other drugs in the local water supply will vary from one part of the country to another. It depends on local drug usage, agricultural runoff, the water source (wells, river, or surface water), treatment facilities, and other factors.

Keep in mind that our water treatment facilities were never designed to deal with these kinds of contaminants, and they aren't capable of testing

or removing the thousands of various drugs and chemicals.

In a 2013 study, the EPA looked at samples from 50 large-sized wastewater treatment plants nationwide and tested for 56 drugs, including oxycodone, blood pressure medications, and over-the-counter medicines like acetaminophen and ibuprofen. Over half the samples tested positive for at least 25 of these drugs. Blood pressure drugs were found in the water at every location.

I've been warning about the dangers of drugs and chemicals in our drinking water for decades. Unless you know the quality of your particular drinking water, I still believe the safest bet is distilled water that has been carbon filtered.

If this is too expensive of an option, I suggest at the very least investing in a water filter from a company like Big Berkey. Their filters are very effective at removing all types of drugs, chemicals, and contaminants. Visit bigberkeywaterfilters.com to learn more and to see a full list of substances these filters can eliminate from water.

Widespread Use of Trehalose

Another IBD trigger that often gets overlooked is the consumption of the sweetener trehalose, which is a natural form of glucose found in mushrooms, lobster, shrimp, and some seaweed.

In 1994, a Japanese firm discovered how to inexpensively extract trehalose from cornstarch, and food manufacturers subsequently started using it as a "natural flavoring." Around the time we started to see a more widespread use of trehalose, we also began to see an epidemic of serious *C. diff* infections. This isn't a coincidence.

Researchers have found that ingesting trehalose makes two strains of *C. diff* hypervirulent, increasing their pathogenic activity more than 500-fold. The *C. diff* bacteria are able to "fuel up" on trehalose at very low concentrations, allowing them to outcompete other strains of bacteria and produce far stronger toxins. In some individuals, trehalose creates even more deadly superbugs that make patients sicker and the infection much harder to deal with.

Although trehalose is a type of sugar, it's only half as sweet as refined sugar, so it isn't used as a sweetener. Instead it is used to increase shelf life, improve the texture of baked goods and the texture and juiciness in protein-containing products, reduce

freeze-thaw damage in meats, sauces, and frozen desserts, and enhance the flavor and aroma in various foods and drinks.

The FDA has recognized trehalose as safe for food and beverage use despite its effects on *C. diff*. And last year, they announced that food and beverage companies that use TREHA (the trade name for trehalose) could call it "natural flavor" and not have to list trehalose specifically on the label. This will make it even harder to spot.

However, here are few products where I know it is being used: Taco Bell adds it to beef to improve taste. It is typically a component of the fake crab meat called surimi. It's often used in sushi rice to retain moisture and keep the "just prepared" freshness. You'll find it in some sports drinks, fruit juices, ice creams, pastas, nutrition bars, fruit fillings, jams, rice, white chocolate, sugar coatings, bakery cream, processed seafood, and candy. "NewSweet" is a mixture of trehalose and stevia.

The research on trehalose is still ongoing. There have been some studies extolling its possible health benefits. But with chronic intestinal problems, it's probably something you should avoid.

Natural Ways to Ease IBD

IBD is a chronic disease that is marked by periods of remission followed by flareups. Researchers at Harvard and MIT just released a study that gave a detailed snapshot of several things that occur during flareups. ([Nature 2019;569:655-62](https://doi.org/10.1016/j.nature.2019.05.022))

- 1) There were fewer beneficial chemicals naturally produced by friendly bacteria. This was attributed to fewer friendly bacteria present, poor nutrient absorption, and more frequent bowel movements.
- 2) There were higher levels of polyunsaturated fatty acids, as opposed to the beneficial short-chain fatty acids like butyrate that intestinal cells need for energy production and repair.
- 3) Levels of vitamins B3 and B5 were significantly depleted.
- 4) Bile acids were disrupted.

Fortunately, there are natural methods to address each of these issues.

Addressing the first point would necessitate including a wider variety of beneficial bacteria both through the use of a quality probiotic and

a diversity of live, fermented foods. Foods such as kefir, homemade sauerkraut, kimchi, and homemade or high-quality yogurt that contains live cultures are particularly beneficial.

In reference to the next point, reread the May 2018 *Alternatives* issue for a complete article on how to increase butyrate levels. I won't repeat everything here, but in a nutshell, butyrate is produced by bacterial fermentation of soluble fiber in the colon.

You can boost levels by taking butyrate supplements and also by gradually including more soluble fiber in your diet. Some good foods to eat are beans, bananas, apples, strawberries, raspberries, avocados, carrots, eggplant, okra, oranges, peanuts, squash, flaxseed, chia seed, peas, nuts, and seeds.

Supplementing with vitamins B3 and B5 is easy and expensive. Both of these vitamins are required cofactors for the metabolism of fats. In your case, I would recommend the amide form of B3, niacinamide.

Finally, we come to bile acids. Bile is produced in the liver and stored in the gallbladder. Bile neutralizes stomach acid and emulsifies fats (breaks them down into small droplets), which aids in their absorption. Under normal circumstances, about 95 percent of the bile acids are reabsorbed and recycled back to the liver. This keeps the liver from having to synthesize large amounts.

With IBD, though, diarrhea moves food (and bile) through the intestines so quickly that the body doesn't have time to

reabsorb it. This results in a bile deficiency; acidic stomach content not being neutralized when it reaches the small intestine; and poor fat digestion.

Bile is also a strong antimicrobial agent. It is one of the body components used to protect the intestines from invasive, pathogenic organisms. Without adequate bile, it is easier for harmful bacteria, fungi, viruses, and other pathogens to set up house and prolong disease in the colon and elsewhere.

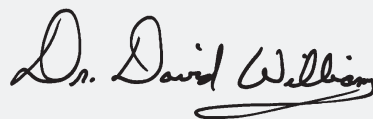
Until your IBD is under control, you can increase bile levels with ox bile supplements. I've said it before many times: I think inadequate amounts of bile and other digestive enzymes are two of the most overlooked and underrated health issues today.

If you've had your gallbladder removed, you should be taking bile salts with every meal. It can change your life.

IBD is frustrating to say the least, but it can be controlled. It just takes some detective work to determine the underlying causes that need to be addressed.

IBD now affects an estimated 3.5 million people worldwide, and it's a growing problem in this country. As such, I will continue to monitor the research and share my insight and any tools and techniques I find to help correct it.

Until next month,



This Month Online



Visit my website at **drwilliams.com**, where you'll find information and recommendations for many of your top health conditions, including:

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- *Hiatal Hernia, GERD, and other Digestive Concerns*
- *Cognition and Brain Health*
- *Joint Health*

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You can also read more at my website, which covers a variety of topics. Here are just a few recent additions:

- [*Dehydration: A Hidden Cause of Joint Pain*](#)
- [*Estrogen Dominance: A Growing Problem*](#)
- [*How to Remedy a Bad Gallbladder*](#)

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