

## Ditch the Antacids: Real Solutions for Dyspepsia

**H**ardly a day goes by that I don't hear someone complaining about functional dyspepsia. However, no one uses that particular term to describe the problem. Instead, they refer to it as heartburn, gas, bloating, indigestion, belching, abdominal

pain, sour stomach, reflux, or nausea/vomiting.



*Dr. David Williams*  
Doctors use "functional dyspepsia" as a catchall to describe impaired digestion that isn't caused by an ulcer. It's a way to give a diagnosis to something when they often don't have a clue about the cause of the problem.

There aren't any accurate statistics on how many people suffer from dyspepsia, but it's very common. Official estimates say 20–40 percent of the entire adult population has some form of it. But since most people self-treat with over-the-counter remedies or just live with it, no one knows for sure.

Those who get medical treatment are most often prescribed proton pump inhibitors (PPIs) to suppress stomach acid production, drugs to speed up gut motility, or antidepressants. But all of

these drugs are saddled with side effects. At best, you end up taking the medications permanently to treat symptoms of an underlying problem that never gets corrected. At worst, you end up with even more health issues.

If you suffer from dyspepsia, you need to take a closer look at some of the underlying causes and take the right steps to correct them naturally. However, before doing that, keep in mind that dyspepsia can be associated with other issues that may need to be corrected, such as an imbalance of proper bacterial flora in the gastrointestinal tract. Diabetes and hypothyroidism can also impair digestive function. Learn more on how to deal with all of these issues by visiting [drwilliams.com](http://drwilliams.com) or referring to past issues of my newsletter.

### First Step: Chewing

The first step of the digestive process is chewing. Proper chewing does two things.

First, it triggers the release of additional saliva, which contains enzymes like amylase. Amylase starts the digestion of carbohydrates and starches into simple sugars. Roughly 30 percent of starch digestion takes place in the mouth, and then it continues

in the small intestine with the release of pancreatic enzymes.

Second, chewing breaks up food into smaller particles, which increases the surface area of the food. This ensures that a greater amount of food comes in contact with digestive enzymes, which greatly improve digestion. These enzymes can be particularly beneficial with protein-rich foods like meat, which are harder to digest, especially as we age and the stomach naturally produces less acid and fewer enzymes.

I'm routinely shocked at how quickly some people eat these days. They practically inhale their food. It reminds me of how our bulldog Reggie eats. But making a conscious effort to chew food longer so that it breaks down more is the simplest way to solve many cases of dyspepsia.

Ideally, mealtime should be a relaxing period filled with pleasant conversation, feelings of thankfulness, and hopefully a little laughter. Extending mealtime by eating more slowly would benefit everyone. Maybe that's why even the Bible makes references to consuming a little wine for "thy stomach's sake."

Not only can a glass of wine promote conversation and slow down the pace of the meal, fermented beverages like wine,

champagne, sherry, and beer have been found to stimulate production of gastric acid by as much as 57–97 percent, and the amount of gastrin by 500 percent. Gastrin is the hormone that aids in gastric motility—the movement of the digestive tract needed to allow food to pass within it. (For the record, this only happens with fermented beverages, not with distilled alcohols like whiskey, rum, or cognac.)

Since we're on the topic of wine...I'm sure you've heard that red wine should be enjoyed with red meat and white wine goes best with fish. There's actually scientific and health benefits for following this suggestion. (You can impress your friends and family by sharing the following tidbit at your next dinner party.)

Tannins are polyphenol compounds that naturally occur in plants, seeds, leaves, and fruit skins. Polyphenols are antioxidants that give foods like blueberries and other fruits, vegetables, and nuts their anti-inflammatory powers.

During the wine-making process, tannins from the grape skins end up in red wine, adding bitterness, astringency, and complexity. Researchers have found that tannins also soften the fat in red meat, releasing its flavor. At the same time, the fat in meat melts and counteracts the wine's

astringency, allowing more of the fruit flavors come through. That's why higher tannin red wines go well with red meats.

Researchers have also discovered that tannins in red wine help neutralize the toxic byproducts of oxidized fats called malondialdehydes (MDA). The polyphenols in the wine protect the gastrointestinal tract and destroy compounds like MDA, which originate when food is processed or fried.

In one study, when rats were fed a red meat meal and water, MDA levels increased 50 percent after 90 minutes. However, after a red meat meal with the addition of red wine concentrate, not only did the red wine prevent any increase in MDA blood levels, pre-meal levels dropped by 34 percent and other harmful oxidized fat byproducts were three times lower. It should be noted that the beneficial effects came from the polyphenols, not the alcohol. It may be possible to experience similar benefits by consuming other polyphenol-rich fruits and vegetables.

According to the researchers, the bottom line was that diets high in fat and red meat constitute a health risk factor, but consuming polyphenol-rich foods or red wine lowers this risk and provides protective health benefits. (*J Agric Food Chem* 2008

*Jul;56(13):5002–7) (FASEB J 2008 Jan;22(1):41–6)*

In comparison, white wines typically aren't fermented with the seeds and skins of the grapes. Not only do they have far fewer tannins, they are more acidic than red wines. The smell of fish comes from low-molecular weight alkaline molecules. When the acidic white wine is combined with alkaline molecules, they are neutralized, which results in a less fishy smell and lighter and fresher taste. Squeezing acidic lemon juice on fish works in much the same way, by reducing the smell.

Compared to white wines, red wines also contain higher amounts of iron, which can overpower the delicate flavors of fish and cause a metallic taste.

## Carbohydrates & GERD

Aside from improper chewing, many people experience dyspepsia as a result of excessive intake of refined carbohydrates, particularly high fructose corn syrup (HFCS).

As I'm sure you know, our food supply is loaded with HFCS. You have to look hard these days to find any processed food that doesn't contain it. Unfortunately, a large segment of the population has a problem completely absorbing fructose in the small intestine (a condition called fructose

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Dr. Williams works with Healthy Directions, LLC to develop his unique formulations that supply many of the hard-to-find nutrients he recommends. Dr. Williams is compensated on the sales of these nutritional supplements and health products, which allows him to continue devoting his life to worldwide research and the development of innovative, effective health solutions.

malabsorption). It's even more unfortunate that they don't realize they have this problem.

The design of our gastrointestinal tract is absolutely amazing. Rather than have all the digestive work performed by compounds like stomach acid and enzymes, it makes use of numerous forms of bacteria, which can live and constantly reproduce in various areas of the gut.

One of the most prominent forms of bacteria residing in the small intestine is *Lactobacillus*. Gastric acid, bile, and pancreatic secretions create a very harsh environment in the small intestine, and compared to the large intestine (colon), very few microorganisms are able to inhabit this part of the gastrointestinal tract. But *Lactobacillus* bacteria thrive in this environment.

*Lactobacillus* bacteria are needed in the small intestine to help digest carbohydrates and starches. While the enzymes in the saliva start the breakdown of carbohydrates in the mouth, their primary digestion takes place in the small intestine. Very little carbohydrate digestion occurs in the stomach.

After food leaves the small intestine, there are trillions of bacteria in the more hospitable large intestine. By the time the mostly liquefied food reaches the large intestine, it is pretty much devoid of oxygen. So, unlike the bacteria in the small intestine, almost all of the bacteria in the colon are anaerobic. In other words, they have to be able to survive by fermentation and not rely on oxygen.

Fermentation produces the gas that leads to flatulence, or the funniest word in the English language:

farts. (Whenever I meet someone who finds that word too crude, I'm reminded of an elderly Spanish instructor I once had. When using the Spanish word for fart—*pado*—she told me the English translation was, “wind from the bowels.”)

When the “wind” exits the rectum, it may not be socially acceptable (except among teenagers who consider it a competitive sport), but at least it's usually not painful. On the other hand, when the intestinal gas gets released through the throat, it can lead to GERD, which is uncomfortable.

The acid-loving *Lactobacillus* bacteria in the small intestine don't produce gas, and with adequate numbers in that region, they keep gas-producing bacteria in check. However, whenever the upper area of the small intestine isn't acidic enough, gas-producing bacteria that would normally reside further down the intestinal tract start to flourish and produce gas. The growth of these gas-producing bacteria that utilize fermentation is further encouraged by the abundance of starches and carbohydrates in the diet that, like fructose, aren't being absorbed. These misplaced bacteria inflame the walls of the small intestine, which further disrupts carbohydrate absorption and perpetuates the process.

These bacteria produce enormous amounts of gas. For example, the amount of carbohydrates in one slice of bread (15 grams) will result in the formation of 1.5 gallons of gas. (And a slice of cheese pizza, a soda, a candy bar, and even a banana all have twice this amount of carbs.) As this gas exits the small intestine and moves up through the stomach, it can force acid out of the stomach and into the throat,

resulting in GERD. Most doctors don't explain this to their patients, probably because they don't understand it themselves. In fact, most are making the problem worse by the way they treat GERD.

The medical answer to GERD is drugs that either neutralize stomach acids or stop the stomach from producing acid in the first place. This might temporarily stop the symptoms, but it never cures the problem. Once you stop the drug, the problem rebounds with a vengeance. This sucks for GERD sufferers, but it's the perfect scenario for companies hoping to create lifetime customers.

Think about it. When you cut off or neutralize stomach acid, it allows more potentially harmful bacteria to survive the journey through the stomach. Is it any wonder we're now seeing increased incidence of food poisoning and *C. difficile* infections? When tens of millions of people are regularly taking antacids and PPIs to reduce their stomach acid, it's to be expected. Harmful bacteria can slip past the stomach and out-compete the protective *Lactobacillus* bacteria. They then set up shop in the small intestine, creating inflammation, impeding carbohydrate digestion, and traveling to create havoc throughout the intestinal tract. And if all of that wasn't bad enough, the use of PPIs increases the risk of community-acquired pneumonia.

Researchers have documented that pneumonia-causing bacteria that would normally be vulnerable to the acidic gastric contents aren't killed in those individuals using PPIs. These bacteria colonize in the upper small intestine and, as gas is released through the mouth,



bacteria are inhaled and colonize in the lungs.

In one study, researchers reviewed the records of 364,683 patients, of which 5,551 were taking either PPIs (such as Nexium, Prevacid, or Prilosec) or acid-reducing drugs (such as Tagamet or Pepcid). Those who regularly used PPIs and acid-reducing drugs were 89 percent and 63 percent more likely to develop pneumonia, respectively.

Several studies have found that when hospital patients were given acid-suppressing medications, their risk of contracting hospital-acquired pneumonia increased by 30 percent when compared patients not on those drugs. Some hospitals routinely give stroke patients acid-suppressive therapy as a preventive measure when they are admitted, even though there is no evidence to support this and doing it more than doubles the risk of contracting pneumonia. (*JAMA* 2004 Oct;292(16):1955–60) (*JAMA* 2009 May;301(20):2120–8) (*Ann Neurol* 2014 Nov;76(5):712–8)

It's important to keep in mind that blocking stomach acid also makes it more difficult to digest protein. It can lead to an iron deficiency. Iron assimilation requires an acidic environment. It also influences calcium and magnesium absorption and has been linked to an increased risk of hip, wrist, and spinal fractures. Taking PPIs for more than a year results in a 44 percent greater hip fracture risk. (*JAMA* 2006 Dec;296(24):2947–53)

Stomach acid also triggers the release of “intrinsic factor,” which is necessary for B12 absorption. Acid blocking can result in a B12 deficiency. One study found that 75

percent of PPI users were deficient in B12 compared to 11 percent of nonusers. (*Curr Gastroenterol Rep* 2010 Dec;12(6):448–57)

### A Surprising Solution: Vinegar

Based on what I've just told you, it shouldn't come as a surprise that in the large majority of dyspepsia cases, there's an underlying deficiency of acids from the stomach, digestive enzymes, or both. Fortunately, there are some general guidelines and approaches that you can use to help deal with these issues.

Although you wouldn't believe it if you watched my morning intake, I'm always looking for ways to minimize the number of supplements I take. I think most people want to simplify their routines and reduce expenses when possible. In this day and age, I believe supplements have become a necessary part of our food costs if we expect to remain healthy. Whenever possible, though, I like to incorporate common foods or condiments in place of a supplement. Dyspepsia is one such situation. In fact, for many people in need digestive enzyme support, plain old vinegar works wonders.

Believe it or not, vinegar has an extremely long history as a digestive aid. A teaspoon of unrefined apple cider vinegar added to a small glass of water is often a simple, inexpensive, and effective remedy for dealing with low stomach acid. Raw apple cider vinegar contains around 5 percent acetic acid, which is created during the fermentation process. Acetic

acid helps promote digestion in the stomach.

Honestly, any form of vinegar will work, but if you use a brand that is unfiltered and unpasteurized, like Bragg, it will contain “the mother,” which is a colony of beneficial bacteria for your gut. “The mother” is what forms much of the murkiness of the vinegar. The mother of unfiltered, unpasteurized, homemade vinegar will often develop into a white floating blob. In the past, this mother was continually transferred and used to start the next batch of vinegar, hence the term “mother.”

I've discussed research in the past that showed consuming a tablespoon or two of vinegar in water prior to a meal slows the breakdown of carbohydrates, preventing their rapid absorption into the bloodstream; slows gastric emptying; significantly improves the insulin sensitivity of cells; helps curb appetite; and increases the use of body fat for fuel. In many ways, vinegar works similar to the popular diabetes drug metformin (Glucophage), without the side effects.

Additionally, vinegar has been shown to trigger the release of nitric oxide (NO) from the endothelial cells that line the blood vessels. NO relaxes arteries and improves blood flow throughout the body. It can be particularly beneficial to the heart and in alleviating problems like erectile dysfunction.

I'm not sure there's another folk remedy that has been written or talked about more than apple cider vinegar. While the research may not yet support all the reported benefits, when

it comes to aiding in digestion, vinegar is the real deal. (*J Diabetes Res* 2015;2015:175204) (*Lipids Health Dis* 2013 Nov;12:163) (*Euro J Clin Nutr* 2015 Jun;69(6):734–9)

## Pineapple & Papaya

Another natural way to add digestive enzymes is by consuming pineapple or papaya toward or at the end of your meal. Fresh pineapple contains the protein-digesting enzyme bromelain. Keep in mind that heating pineapple destroys bromelain and the highest concentration of bromelain is in the core, which most people discard.

Like pineapple, papaya also contains specific proteolytic enzymes that are particularly beneficial for digesting meals that include meat or other concentrated forms of protein. Papaya contains papain, chymopapain, and other digestive enzymes that are so effective they're often used in commercial meat tenderizers.

Numerous companies sell papain and bromelain either separately or combined in tablets as digestive aids, if you prefer to go that route. They are a relatively inexpensive way to improve digestion, rather than impede it with antacids.

If vinegar, pineapple, and/or papaya aren't enough to help calm your dyspepsia, then the next step would be to add either a supplement to increase hydrochloric acid in the stomach or a quality digestive enzyme supplement.

Research has shown that by age 50, the stomach releases only 15 percent of the amount of hydrochloric acid that it released at age 25. That's probably why most teenagers seem to have a cast-iron

## Do Probiotics Make You Feel Worse?

When you first start taking a probiotic or eating fermented food, it's not unusual to feel worse before you start to feel better.

The normal pH of the colon should be somewhere between 6.7 and 6.9. Remember that 7.0 is neutral; anything below that is acidic and anything above that is alkaline. To inhibit pathogenic bacteria and at the same time encourage beneficial bacteria, the colon should be slightly acidic.

Using antibiotics and other drugs, drinking chlorinated water, consuming sugar, and a host of other factors tend to alkalize the colon over time. Restoring more of the beneficial bacteria in the colon with probiotics will start to change the pH back to a slightly acidic state. As this shift in bacterial flora is occurring, it's not uncommon to feel more rumblings, gas, and possibly looser stools. In almost all cases, this is temporary, unless there's a situation where there is a deficiency in stomach acid and digestive enzymes that has allowed lower intestinal bacteria to move higher into the small intestine.

In these cases, increasing beneficial bacteria in the colon with probiotics could enable even more gas-forming bacteria to enter the small intestine, causing a more extreme reaction. In these rare circumstances, the lack of stomach acid and digestive enzymes must be addressed and corrected before adding probiotics.

This scenario can also occur when using poorly designed probiotic supplements. Probiotic supplements should be designed so that the live, beneficial bacteria can survive and not be released until they reach the colon. If released prematurely in the small intestine of someone with low levels of stomach acid and digestive enzymes, it leads to the discomfort I've described. A quality, well-designed probiotic is necessary if you want to achieve the best results possible.

stomach and can devour whatever they want.

Several companies sell betaine hydrochloride supplements. My favorite is by Standard Process Laboratories, but it's often easier to find similar products by Now Foods, Nature's Life, and other easily accessible brands. Typically the recommended dosage is one or two tablets before each meal.

Based on the extremely high incidence of dyspepsia in our society, it's clear that a large percentage of the adult population is deficient in various digestive enzymes. Another

contributing factor is gastrointestinal surgeries that alter enzyme levels—procedures such as stomach stapling, gastric sleeves, gastric bypass, and removal of the gallbladder. Having any of these procedures would most likely require the use of digestive enzymes for life.

Make sure any digestive enzyme you use not only contains the various proteases and lipases for digesting protein and fats, but also ox bile. Bile is an ingredient you won't find in many digestive enzyme products, but it's a crucial enzyme and necessary to emulsify fat during digestion. I think bile

is so important that I've made sure to include it, along with the other digestive enzymes, in my multivitamin and digestive enzyme formulas.

Vegetarians are often hesitant to consume even the tiniest amounts of ox bile, which is unfortunate since it is specifically those people who frequently have issues with fat digestion.

Beets are often cited as a vegetarian substitute, but while helpful, beets can't provide anywhere near the benefits of ox bile. However, beets do contain betaine (trimethylglycine or TMG), which improves liver cell function and helps protect the liver and bile ducts. But it's not a bile substitute.

### Artichoke Extract

If someone has an issue with consuming small amounts of ox bile, they might first want to try improving existing bile flow. Bile often becomes thickened and sluggish. To a degree, beet juice will help this, but one of the best products to improve bile flow is artichoke extract.

It's not an extract of the heart of the flower bud, which is the part of the plant most of us are familiar with eating. Rather, the long serrated basal leaves of the plant have the highest concentration of biologically active compounds. One of the first compounds to be isolated was cynarin, which is only found in trace amounts in the fresh leaves.

It's interesting to note that more cynarin is formed as the leaves dry and extracts are created. Cynarin was first isolated in the 1930s and thought to be the primary active component, but we now know

there are dozens of complex components that contribute to the numerous beneficial effects of artichoke leaf extract.

I think it's fascinating that artichokes have been mentioned and used as both medicine and food as far back as 400 BC. But only recently have researchers discovered that the extract improves digestion by relaxing bile ducts and increasing bile flow.

One study showed that 30 minutes after a single dose of artichoke extract (roughly 2 grams), bile secretion increased by 127 percent. After 60 minutes, it increased 151 percent and after another 60 minutes, 94 percent. (*Phytomedicine* 1994 Sep;1(2):107-15)

We know that increased bile secretion helps accelerate transit time in the gastrointestinal tract, which alleviates bloating, fullness, and spasms.

Another study found that within a week of taking artichoke extract, patients often began to experience significant improvement in symptoms like fullness, flatulence, nausea, vomiting, and stomach/intestinal pain.

Within six weeks of treatment, 553 patients reported the following percentages of improvement: vomiting/nausea 83 percent, abdominal pain 76 percent, loss of appetite 72 percent, constipation 71 percent, flatulence 68 percent, and fat intolerance 59 percent. (*Aliment Pharmacol Ther* 2003;18:1099-105)

Many of the studies on artichoke extract have been performed in Europe, mainly Germany, where it has been approved for the

treatment of dyspepsia. The dosage in the last study I mentioned was two 320 mg tablets three times a day (for a total of six tablets a day).

That particular extract was standardized to contain 3 percent caffeoylquinic acid. The various artichoke extracts in this country are typically more potent and would require taking less. Most in the US range from 5 percent (Nature's Way, Jarrow Formulas, Now Foods, and others) to as high as 13-18 percent (Enzymatic Therapy) caffeoylquinic acid.

Artichoke extract (5 percent cynarin) is also available as a bulk powder. Just make sure you're buying the extract and not just the leaf powder. I've been purchasing from a company called Powder City ([powdercity.com](http://powdercity.com)) lately and have been very pleased with their products, prices, and service.

There are other problems for which artichoke extract might be helpful, and they are all related to the positive effects associated with increasing bile flow. The study results in these areas are often mixed.

This is somewhat understandable since we're talking about a natural product that's been around for centuries and can't be patented. Few people want to invest the money for large, well-controlled studies when there's no chance of a return on their investment.

Some of these studies indicate that artichoke extract can lower harmful forms of cholesterol, improve blood vessel integrity, provide liver protection from toxins and drugs like acetaminophen, potentially help with mesothelioma, aid in weight loss and

fat utilization, and ameliorate the symptoms of irritable bowel syndrome.

I have never found, nor do I know of, a viable substitute for bile salts. And they are absolutely essential for anyone who has had their gallbladder removed. While the liver may continue to produce bile at the rate of around one quart a day, without the gallbladder for storage, it just continually “leaks” into the small intestine rather than release in a timely manner in relation to the amount of fat being consumed. For additional information on the gallbladder and bile, please refer to the May 2011 and March 2013 issues of *Alternatives*, and to the article “You’ve (Hopefully) Got Some Gall” on my website.

While we typically think of bile as strictly a digestive enzyme, that’s not the total story. Researchers have found that bile acids are the necessary trigger that allows the liver to regenerate damaged areas. This is particularly disturbing when you consider the increase we’ve started to see in liver problems (such as elevated liver enzymes, fatty liver, and cirrhosis).

While elevated liver enzymes are linked to obesity and alcohol, I suspect the elephant in the room no one wants to talk about is cholesterol-lowering statin medication. These drugs are known to cause elevated liver enzymes, even though the pharmaceutical companies say they only “rarely” damage the liver.

It’s important to keep in mind that bile salts are made of cholesterol. When you interfere with cholesterol production, you interfere with bile production. It’s no surprise that individuals with low

cholesterol have trouble digesting fats and fat-soluble vitamins.

Bile is also a major detoxifier. The liver is constantly being assaulted by excess hormones and toxic compounds from the environment, food, bowel, etc. It uses bile as the carrier to move them out of the intestines. Bile also promotes peristalsis (movement of the intestinal tract). A lack of bile and digestive enzymes can contribute to “tired gut syndrome” or, as it’s known medically, gastroparesis.

Gastroparesis occurs when the digestive tract moves too slowly and the stomach holds the food too long. Oftentimes food is still in the stomach when a second meal is eaten later the same day.

When the stomach finally empties, the slow-moving food tends to accumulate throughout the small intestine, creating pressure and painful gas. Movement in the small intestine is practically paralyzed and starches and carbohydrates aren’t broken down properly into glucose. This disrupts the body’s ability to control blood sugar. Blood sugar levels start to fall, which stimulates appetite even though the stomach and small intestine are still full. As the scenario repeats itself, we have the perfect storm for metabolic syndrome (insulin resistance, fatigue, dizziness, abdominal weight gain/obesity, and sugar/stimulant cravings), which can progress to type 2 diabetes and damage the 10th cranial nerve (Vagus) that controls digestive tract movement.

The slow trek continues until the entire intestinal tract is clogged from the stomach all the way to the constipated large intestine. Additional toxins are created in the

stagnant colon and released into the bloodstream, overloading the liver and creating chronic fatigue, depression, headaches, and digestive issues. (This is yet another instance where fermented foods and a quality probiotic supplement are needed.)

It’s nerves, particularly the 10th cranial nerve, that influence digestive tract movement. As such, anything that “deadens” nerves can be a contributing factor to gastroparesis. This includes drugs like painkillers and antidepressants. Rarely are patients informed that their GERD may be a result of taking these kinds of medications. Instead they are simply given more drugs to treat the GERD symptoms. In fact, if someone continues to use these types of medications, many of the remedies I’ve outlined would most likely be a waste of time. This should be obvious considering the nerve that has control over gastrointestinal movement is paralyzed.

Another commonly overlooked factor linked to tired gut syndrome is soy. I’ve discussed soy products at length in past issues and suffice it to say, unless the soy is fermented, I’m not a huge fan. I won’t delve into all the details again, but anyone with gut issues such as gastroparesis needs to be aware that soy is often a contributing factor and may need to be eliminated.

## Melatonin

Melatonin is another supplement that has helped a lot of people who suffer from dyspepsia.

In a study, people with dyspepsia were given either melatonin or a placebo at bedtime for a 12-week period. Over half of those taking the melatonin experienced



a complete resolution of their problems. An additional 30 percent reported partial improvement. Only two patients in the placebo group reported any degree of improvement. (*J Clin Gastroenterol* 2007 Mar;41(3):270-4)

It seems like no one has made the connection between nightshift work, melatonin, and dyspepsia. It has been shown that 75 percent of nightshift workers suffer from gastrointestinal problems, and peptic ulcers are five times more frequent in this group compared to the general population.

One study found that 37 percent of nightshift workers took antacids several times a month. Shift workers also just happen to report using the following several times a month: pain relievers, cold and allergy medicine, stimulants, and depressants.

Staying awake at night reduces melatonin production. I've reported for years how exposure to even dim artificial light suppresses melatonin production. One study found that exposure to normal room light during the usual hours of sleep delayed the onset of melatonin in 99 percent of individuals, reduced melatonin levels by 50 percent, and shortened the duration of melatonin's effects by 90 minutes. The takeaway from these findings is that everyone needs to avoid bright light exposure for a couple of hours before bedtime and sleep in complete darkness. (*J Clin Endocrinol Metab* 2011 Mar;96(3):E463-72)

We know that disrupting melatonin production not only impacts sleep, it has been shown to negatively impact metabolism,

blood pressure, hormone levels, and blood sugar regulation.

Melatonin is also one of the most important compounds in the prevention of most breast, ovarian, endometrial, prostate, testicular, colorectal, and brain cancers. One study of 3,137 male nightshift workers showed they had triple the rate of prostate cancer, double the rate of bowel cancer, a 79 percent increase in lung cancer, and a 70 percent increase in bladder cancer. (*Am J Epidemiol* 2012 Nov;176(9):751-9)

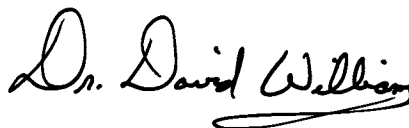
Along with all these other diseases, you can now add dyspepsia and GERD to the list of problems linked to a disruption of melatonin levels and poor sleep habits. I would venture to guess, very few individuals have any idea these could be the underlying cause of their chronic gastrointestinal problems.

Typical recommended doses for melatonin range from 0.2 to 20 mg, since effective doses can vary from person to person. Normally 2-3 mg taken about an hour before bedtime works for most people.

I'd love to hear how these natural solutions to dyspepsia help you. Please send me an email and let me know. I would also love to hear your other home remedies.

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Until next month,



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